The 2\textsuperscript{nd} Kenya National Strategic Plan For control of NEGLECTED TROPICAL DISEASES 2016-2020

Revised Edition
FOREWORD


This document is a multi-year plan of action which outlines the operational framework through which control interventions will be implemented. It builds onto the achievements of the National Multi-Year Strategic Plan for control of Neglected Tropical Diseases 2011-2015, while appreciating the accompanying challenges and laying out strategies to address them. It takes into account the changes in governance of the health sector and the laws of Kenya.

This strategy maintains the vision, mission and goal of the National Multi-Year Strategic Plan for control of Neglected Tropical Diseases 2011-2015. It continues with the spirit of attaining universal access and coverage of NTD interventions. Key changes involve inclusion and magnification of the ‘PHASE” approach, which in addition to preventive chemotherapy, involves provision of health education, access to safe water, sanitation & hygiene and environmental improvements. This revised strategy includes new stakeholders, articulates their roles and responsibilities while introducing a strong coordination mechanism for integrated NTD control activities.

We are positive that the strategies in this document will accelerate movement towards attainment of control, elimination and eradication of NTDs from Kenya. With multi-sectoral collaboration and engagement between stakeholders and partners at County and National levels, we anticipate that we shall be able to fulfil our vision. I therefore urge our partners to put all effort in the implementation of this strategy as we march towards control, elimination and eradication of NTDs.

Cleopa Mailu,
Cabinet Secretary,
Ministry of Health
ACKNOWLEDGEMENTS

This Second Kenya National Strategic Plan for control of Neglected Tropical Diseases 2016-2020 has been developed through an elaborate consultative process involving stakeholders, including development and implementing partners, Civil Society Organizations (CSO) representatives and County health teams. I would like to appreciate the acting Director of Medical Services (DMS) and Head, Department of Preventive and Promotive Health (DPPH) Dr. Jackson Kioko, supported by the Head, Division of Disease Surveillance Epidemic Preparedness and Response (DDSR) Dr. Daniel Lang’at and the Head, Neglected Tropical Diseases (NTD) Unit Dr. Sultani Matendechero for providing stewardship.

The review of the Neglected Tropical Diseases (NTD) strategy received technical support from WHO through the international team of consultants that comprised of Dr. Juliet Ochienghs, Prof. Nicholas Midzi and Dr. Safari Kinunghi. We are also indebted to Dr. Joyce Onsongo, Disease Prevention and Control (DPC) Officer at the Kenya World Health Organization (WHO) Country Office for constant liaison support all through the review process.

Our partners and stakeholders are hereby recognized for their contribution towards development of this strategic plan. Of special mention are WHO, Evidence Action, Christian Blind Mission (CBM) and Nagasaki University Institute of Tropical Medicine (NUITM). We appreciate the participation of the Ministry of Health Units, divisions, agencies and institutes including Health Promotion Unit (HPU), Community Health Services Unit (CHSU), Neonatal Child and Adolescent Health Unit (NCAHU), Ophthalmic Services Unit (OSU), Vector Borne Diseases Control Unit (VBDCU), Monitoring and Evaluation Unit, Health Standards Quality Assurance and Regulatory Services (HSQAR) Unit, Kenya Medical Research Institute (KEMRI), Kenya Medical Supplies Authority (KEMSA).

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Dr. Nicholas Muraguri,
Principal Secretary,
Ministry of Health
EXECUTIVE SUMMARY

The Ministry of Health launched the National Multi-Year Strategic Plan of Action for Control of Neglected Tropical Diseases (2011-2015) in November 2011. The strategic plan prioritized control of soil-transmitted helminthiasis (STH), Schistosomiasis, Lymphatic Filariasis (LF), Trachoma, Leishmaniasis and Cystic Echinococcosis. It addressed how these diseases can be controlled following the WHO recommended strategies for the prevention and control of NTDs. The interventions there in include: Preventive chemotherapy and transmission control and Innovative disease management.

Since 2012, the Ministry of Health and its partners through the Neglected Tropical Diseases (NTD) Unit have implemented the following control activities: In 2013, through the support of WHO, a major mapping exercise was conducted across 19 counties for STH and Schistosomiasis; In partnership with the Neonatal Child and Adolescent Health Unit (NCAHU) and through the National School Based Deworming Programme (NSBDP), a total of 5.9 million school-age children were de-wormed during the financial year 2012/2013. The number of school-age children dewormed rose to 6.4 million in 2013/2014. In 2014/2015, the number stood at 6.1 million. In the second half of 2015, mass treatment of LF was re-started in 17 out of the 23 endemic sub counties of the Kenyan coast. More than 2.3 million people were treated with Diethyl Carbamazine (DEC) and Albendazole during this landmark exercise.

So far, mapping for Trachoma has been completed in 12 Counties. This was followed by Mass Drug Administration (MDA) of Azithromycin and 1% Tetracycline Eye Ointment (TEO) in 8 out of the 12 counties. By 2014, a total of 11,083,382 out of the targeted 13,952,274 people had been treated in the MDA exercise. This represents a national coverage of 79.4%. Training of eye care workers and non-eye care Trachomatous Trichiasis (TT) surgeons has been carried out and will continue. With the support of the Water Sanitation and Hygiene (WASH) sector, various projects have been carried out in Trachoma endemic Counties.

Review of guidelines for diagnosis and management of Leishmaniasis has been concluded. The guidelines introduced the new, safer and more efficacious combination therapy for Visceral Leishmaniasis (VL) with Paromomycin and Sodium Stibogluconate (PSSG), to replace monotherapy with Sodium Stibogluconate (SSG) alone. To help implement the guidelines, over 85 health workers from Leishmaniasis endemic areas have been trained.

Promulgation of the current constitution of Kenya (2010) brought about devolution of health functions. Under this new arrangement, the National Ministry of Health is charged with the responsibility of formulation and implementation of health policy, capacity building and technical assistance to the counties, standards and regulation and management of national referral health facilities. County governments are responsible for implementation of primary healthcare services and management of county health facilities. This implies that implementation
of most NTD control activities will be done at the county level with the National NTD Programme providing policy direction; capacity building and technical assistance to the counties; monitoring and evaluation. In addition, there is a renewed global momentum towards eliminating and eradicating some of the NTDs within given timelines. This momentum is being supported by assurance that there will be a regular supply of quality-assured, cost-effective medicines and support from global partners. This commitment has provided more impetus for the country to re-assess the endemicity of all NTDs to ensure all at risk populations are targeted for intervention.

In 2013 the regional consultative meeting on NTDs in Brazzaville expressed the need to accelerate the elimination of NTDs in the region. In addition, African Ministers of Health, meeting at the African Union (AU) Conference of Ministers of Health, reviewed the AU Continental Framework on the control and elimination of NTDs and resolved to strengthen efforts to tackle NTDs. Similarly, in May, 2013, the 66th World Health Assembly (WHA) adopted the resolution to scale up control of NTDs.

With these developments there is a need to re-focus our goals towards control, elimination and eradication of selected NTDs by 2020 in line with the World Health Organization (WHO) Africa Regional goals. The main strategic approaches during this period will focus on the rapid scale-up of access to interventions, enhanced planning for results, resource mobilization and financial sustainability. Other strategic approaches will be strengthening of advocacy, coordination, national ownership, improved monitoring and evaluation, surveillance and research. The promised donation of sufficient quantities of quality medicines for MDA, availability of safer medicine and diagnostics, new technologies and tools presents new opportunities for accelerating the achievement of these goals by 2020.

These developments have supported the need to review the strategic plan in order to align it with accelerated or scaled up control, elimination and eradication of NTDs in the country. It is our commitment that by 2020, we shall have controlled, eliminated and/or eradicated the targeted NTDs. People living in endemic areas will be relieved of the burden and suffering brought about by these diseases and that will eventually lead to economic productivity and improved health.

Dr. Jackson Kioko,
Ag. Director of Medical Services,
Ministry of Health.
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## ABBREVIATIONS AND ACRONYMS

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<tbody>
<tr>
<td>AIA</td>
<td>Appropriations in Aid</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndrome</td>
</tr>
<tr>
<td>AMREF</td>
<td>African Medical and Research Foundation</td>
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<td>AOP</td>
<td>Annual Operational Plan</td>
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<tr>
<td>ASAL</td>
<td>Arid and Semi-Arid Lands</td>
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<td>AU</td>
<td>African Union</td>
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<td>AWP</td>
<td>Annual Work Plan</td>
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<tr>
<td>BCC</td>
<td>Behaviour Change Communication</td>
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<td>CBM</td>
<td>Christian Blind Mission</td>
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<td>CBO</td>
<td>Community Based Organization</td>
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<td>CE</td>
<td>Cystic Echinococcosis</td>
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<tr>
<td>CHA</td>
<td>Community Health Assistant</td>
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<td>CHMT</td>
<td>County Health Management Team</td>
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<td>CHSP</td>
<td>Community Health Services Personnel</td>
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<td>Community Health Unit</td>
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<tr>
<td>CHV</td>
<td>Community Health Volunteer</td>
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<td>CIFF</td>
<td>Children’s Investment Fund Foundation</td>
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<td>CLTS</td>
<td>Community Led Total Sanitation</td>
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<tr>
<td>CM-NTDs</td>
<td>Case Management (type of) Neglected Tropical Diseases</td>
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<tr>
<td>CS</td>
<td>Cabinet Secretary</td>
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<tr>
<td>CSO</td>
<td>Civil Society Organization</td>
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<tr>
<td>DANIDA</td>
<td>Danish International Development Agency</td>
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<tr>
<td>DDSR</td>
<td>Division of Disease Surveillance Epidemic Preparedness and Response</td>
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<tr>
<td>DEC</td>
<td>Di-Ethyl Carbamazine</td>
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<tr>
<td>DEH</td>
<td>Division of Environmental Health</td>
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<tr>
<td>DFID</td>
<td>Department for International Development</td>
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<tr>
<td>DMS</td>
<td>Director of Medical Services</td>
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<td>DNDi</td>
<td>Drugs for Neglected Diseases initiative</td>
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<tr>
<td>DPC</td>
<td>Disease Prevention and Control (Officer)</td>
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DPPH  Department of Preventive and Promotive Health
DSPHP  Division of Strategic Public Health Programmes
EPI  Expanded Programme on Immunization
ESACIPAC  Eastern and Southern Africa Centre of International Parasite Control
EU  European Union
FBT  Food Borne Trematodiases
GDP  Gross Domestic Product
GoK  Government of Kenya
GPELF  Global Programme to Eliminate Lymphatic Filariasis
GWD  Guinea Worm Disease
HAT  Human African Trypanosomiasis
HIV  Human Immunodeficiency Virus
HMIS  Health Management Information Systems
HPO  Health Promotion Officer
HPU  Health Promotion Unit
HSDP  Health Sector Development Programme
HSQAR  Health Standards, Quality Assurance and Regulatory Services
ICC  Inter-agency Coordinating Committee
IDM  Innovative and Intensified Disease Management
IDSRU  Integrated Disease Surveillance Epidemic Preparedness and Response Unit
IMCI  Integrated Management of Childhood Illnesses
IU  Implementation Unit
IVM  Integrated Vector Management
JICA  Japan International Corporation Agency
KDHS  Kenya Demographic Health Survey
KEMRI  Kenya Medical Research Institute
KEMSA  Kenya Medical Supplies Authority
KEPH  Kenya Essential Package for Health
KHSSP  Kenya Health Sector Strategic Plan
KNPET  Kenya National Plan to Eliminate Trachoma
KTEP  Kenya Trachoma Elimination Programme
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>LF</td>
<td>Lymphatic Filariasis</td>
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<tr>
<td>M&amp;E</td>
<td>Monitoring and Evaluation</td>
</tr>
<tr>
<td>MALF</td>
<td>Ministry of Agriculture, Livestock and Fisheries</td>
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<td>MCU</td>
<td>Malaria Control Unit</td>
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<td>MDA</td>
<td>Mass Drug Administration</td>
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<td>MENR</td>
<td>Ministry of Environment and Natural Resources</td>
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<td>MMR</td>
<td>Maternal Mortality Rate</td>
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<td>MNA</td>
<td>Member of the National Assembly</td>
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<td>MoEST</td>
<td>Ministry of Education Science and Technology</td>
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<td>MoH</td>
<td>Ministry of Health</td>
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<td>MSF</td>
<td>Medecins sans Frontieres</td>
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<td>MWI</td>
<td>Ministry of Water and Irrigation</td>
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<td>NCAHU</td>
<td>National Child and Adolescent Health Unit</td>
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<td>NESSP</td>
<td>National Education Sector Support Programme</td>
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<td>North Eastern University</td>
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<td>NGDO</td>
<td>Non-Governmental Development Organization</td>
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<td>NGO</td>
<td>Non-Governmental Organization</td>
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<tr>
<td>NHSSP</td>
<td>National Health Sector Strategic Plan</td>
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<td>NIND</td>
<td>National Integrated Neglected Tropical Diseases’ Database</td>
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<td>NPBWG</td>
<td>National Prevention of Blindness Working Group</td>
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<tr>
<td>NPELF</td>
<td>National Programme to Eliminate Lymphatic Filariasis</td>
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<td>NPHLS</td>
<td>National Public Health Laboratories</td>
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<td>NQCL</td>
<td>National Quality Control Laboratories</td>
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<tr>
<td>NSBDP</td>
<td>National School Based Deworming Programme</td>
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<tr>
<td>NTD</td>
<td>Neglected Tropical Disease</td>
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<tr>
<td>NTLDP</td>
<td>National Tuberculosis Leprosy and Lung Disease Programme</td>
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<tr>
<td>NUIITM</td>
<td>Nagasaki University Institute of Tropical Medicine</td>
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<tr>
<td>NZD</td>
<td>Neglected Zoonotic Disease</td>
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<tr>
<td>OAU</td>
<td>Operation Eyesight Universal</td>
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<tr>
<td>ODF</td>
<td>Open Defecation Free</td>
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<tr>
<td>OSU</td>
<td>Ophthalmic Services Unit</td>
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PATTEC  Pan-African Tsetse and Trypanosomiasis Eradication Campaign
PC-NTDs  Preventive Chemotherapy (type of) Neglected Tropical Diseases
PCT  Preventive Chemotherapy and Transmission Control
PHASE  Preventive Chemotherapy; Health Education; Access to safe water; Sanitation and hygiene; Environmental improvements.
PHC  Primary Health Care
PHO  Public Health officer
PPB  Pharmacy and Poisons’ Board
PS  Principal Secretary
PSSG  Paromomycin and Sodium Stibogluconate
QEDJTF  Queen Elizabeth Diamond Jubilee Trust Fund
RBM  Roll Back Malaria
RVF  Rift Valley Fever
SAE  Serious Adverse Event
SAFE  Surgery Antibiotics Facial Cleanliness and Environmental Improvements
SCMOH  Sub county Medical Officer of Health
SDG  Sustainable Development Goal
SHNM  School Health Nutrition and Meals
SIDA  Swedish International Development Agency
SOP  Standard Operating Procedure
SSG  Sodium Stibogluconate
SSI  Sight Savers International
SSK  Sight Savers Kenya
STH  Soil-Transmitted Helminthiasis
SWAp  Sector-Wide Approach
TAG  Technical Advisory Group
TAP  Trachoma Action Plan
TAS  Transmission Assessment Survey
TB  Tuberculosis
TECP  Turkana Eye Care Project
TEO  Tetracycline Eye Ointment
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<tr>
<td>TT</td>
<td>Trachomatous Trichiasis</td>
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<tr>
<td>TWG</td>
<td>Technical Working Group</td>
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<tr>
<td>UIG</td>
<td>Ultimate Intervention Goal</td>
</tr>
<tr>
<td>UoN</td>
<td>University of Nairobi</td>
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<tr>
<td>UNFPA</td>
<td>United Nations Fund for Population Activities (United Nations Population Fund)</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children and Educational Fund</td>
</tr>
<tr>
<td>UNITID</td>
<td>University of Nairobi Institute of Tropical and Infectious Diseases</td>
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<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VBDCU</td>
<td>Vector Borne Disease Control Unit</td>
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<tr>
<td>VBV</td>
<td>Village Based Volunteer</td>
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<td>VHC</td>
<td>Village Health Committee</td>
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<td>VL</td>
<td>Visceral Leishmaniasis</td>
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<td>WASH</td>
<td>Water Sanitation and Hygiene</td>
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<tr>
<td>WB</td>
<td>World Bank</td>
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<td>World Health Assembly</td>
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INTRODUCTION

Neglected tropical diseases (NTDs) are a diverse group of communicable diseases that prevail in tropical and subtropical conditions. They affect more a billion people worldwide, mainly populations living in poverty, without adequate sanitation and in close contact with infectious vectors and domestic animals and livestock. These diseases cost developing economies billions of dollars every year and although they have devastating effects on the affected communities, they do not normally draw much attention and effort towards their control.

In Kenya, the NTDs of public health importance include: Soil-Transmitted Helminthiasis (STH), Schistosomiasis, Lymphatic Filariasis (LF), Trachoma, Leishmaniasis, Dengue & Chikungunya, Rabies, Guinea Worm Disease (GWD), Leprosy, Cystic Echinococcosis (CE), Taeniasis, the Food Borne Trematodiases (FBT), Onchocerciasis and Human African Trypanosomiasis (HAT). Although most of the NTDs are not a direct cause of mortality, they are known to cause immense suffering and often life-long disabilities. The diseases are also known to impair growth and development in children. Their distribution is often clearly defined; Such that for example, LF is mainly endemic in the coastal region, Schistosomiasis is distributed in Coastal, Lower Eastern and Lake Victoria regions; while STH is more widely distributed in most parts of the country except the very dry (arid and semi-arid) areas. Trachoma and Leishmaniasis are mainly distributed in the arid and semi-arid regions of the country. Notable from the distribution is a definition of co-endemicity, where several NTDs occur together. In the humid coastal region LF, Schistosomiasis and STH are co-endemic in many places; elsewhere, Schistosomiasis and STHs occur together in parts of Lower Eastern and Lake Victoria region, while Trachoma and Leishmaniasis co-exist in many areas within the arid and semi-arid, nomadic sub-counties.

Although safe and cost-effective interventions for prevention and control of NTDs are available, the diseases have continued to afflict the rural poor due to neglect. Control/prevention of most NTDs is based on preventive chemotherapy using drugs of proven efficacy and safety. Various Mass Drug Administration (MDA) strategies utilising a number of distribution channels can effectively be used to control/eliminate NTDs in endemic communities. In communities where a number of NTDs are co-endemic, MDA activities can be integrated or co-implemented for cost-effective control of all endemic NTDs whose control is based on preventive chemotherapy. It is important to note that there is substantial activity going on in control of various NTDs in Kenya. These activities are often poorly coordinated, small scale, erratic and focused on specific individual diseases.

With support from the Queen Elizabeth Diamond Jubilee Trust Fund (QEDJTF) through Sight Savers Kenya (SSK), activities aimed at control of Trachoma have been implemented: the Surgery, Antibiotics, Facial cleanliness and Environmental improvements (SAFE) strategy has been rolled out in 39 Trachoma endemic implementation districts; With funding from the
Children Investment Fund Foundation (CIFF) and the END Fund through Deworm the World Initiative at Evidence Action, large scale deworming of school-age children in line with the national school health policy and guidelines has been conducted in 111 sub counties. Evidence has shown that populations in these sub counties are at risk of either STH or Schistosomiasis or both. With support from WHO, the NTD Unit has been able to re-start MDA for LF in 17 coastal sub counties. Funding from the END fund is expected to support sustainability of the Kenya National Programme to Eliminate Lymphatic Filariasis (NPELF) activities in the 17 sub counties as well as enable scale up to the remaining 6 sub counties where LF has also been found to be endemic.

Control activities on NTDs implemented vertically result in little, if any control impact. To achieve high impact, an integrated approach to control of NTDs is necessary while putting into consideration the epidemiological overlaps in distribution and similarities in interventions against the co-endemic NTDs. Integration is encouraged where possible to maximize on the scarce resources available to achieve maximum impact.

The primary goal of integrating implementation of NTDs is to prevent, control and reduce the burden of these diseases using cost-effective and synergistic strategies. This leads to the achievement of targets of the individual disease programmes concerned and improvement of wellbeing of targeted populations. In this context four strategic priorities have been outlined in the Strategic Plan to form the basis for future implementation. These strategic priorities are:

1. Strengthen government ownership, advocacy, coordination and partnership
2. Enhance planning for results, resource mobilization and financial sustainability of NTD programmes
3. Scale up access to interventions treatment and system capacity building
4. Enhance monitoring and evaluation (M&E) of NTD control activities, surveillance and operational research

Most programmes, Non-Governmental Organizations (NGOs) and partners interested in NTD control activities are governed by specific disease goals. Therefore, it is necessary to initially set an overall and more unifying national goal to foster integration. The overall goal as stated in this strategic plan is; ‘To reduce morbidity and disability due to NTDs in order to achieve the Sustainable Development Goals and improve the health and socio-economic status of the people of Kenya’. This goal is cognizant of the fact that control of some NTDs in a specific region, sub-county or area will have no impact if other uncontrolled NTDs continue afflicting individuals and communities in the same areas. Such an overriding goal in NTDs control can only be realized if all NTDs occurring in any specific area are all effectively controlled at the same time. This is definitely beyond the reach of any individual disease control programme but realistic in an integrated NTD control framework. Subscription to such a goal will mean that all parties interested in NTD control in any given area will positively come together and operate under the
prescribed NTD coordination structure, plan as a team, and mobilize the needed resources to take on all the endemic NTDs at the same time.

To provide oversight and effective management for the implementation of an integrated NTD control programme, the country has established structures such as the NTD Inter-agency Coordinating Committee (ICC), Technical Advisory Groups (TAG), Technical Working Groups (TWG), Steering Committees for individual programmes/projects, the national NTD forum and other relevant national and regional NTDs structures based on the national healthcare delivery system.
PART I: SITUATION ANALYSIS

Country Profile

1.1 Administrative, demographic and community structures

Kenya is a democratic republic with an elected president who is the head of state and head of the national government. The country is divided into 47 counties (Figure 1). These are further subdivided into a total of 290 sub units. Each of the sub units serve as legislative constituencies as well as provincial administration sub counties. Politically, counties are headed by elected governors, who are the heads of the respective county governments. The legislative constituencies are led by elected Members of the National Assembly (MNAs). Administratively, counties and sub counties are headed by presidential appointees, county commissioners and deputy county commissioners respectively.

The most recent census was conducted in the year 2009, after which a total population of 37,565,589 was declared. The annual population growth rate has been at an average of 2.9 % during the period after the census. The fertility rate stands at 4.6 children per woman. Age structure is typical of a developing country. Those aged 0-48 months are 15.9%, 5-14 years are 28%, and 15-64 years are 55.1% of the total population and only 2.6% are 65 years and over. Women of child bearing age makeup 24% of the population. The overall life expectancy at birth is 57.9 years, being slightly higher in females at 58.2 compared to 57.5 in males. Most of the population (78%) is rural, with only 22% living in urban areas. The population has a Male to Female ratio of 1:1 (Figure 2).

For programmatic interventions, the sub county is the ideal Implementation Unit (IU). This is an important shift from the past, where districts were used as the implementation units. Following the promulgation of the new constitution of Kenya (2010) the previously existing 158 districts were reorganized into the current 290 sub counties. The NTD programme is moving to align itself with the new administrative structures by redefining implementation units along the existing sub counties. Support will be needed to enable achievement of smooth realignment.

Primary school enrolment rate is 80% per annum. Total number of primary school children enrolled in 2013 was estimated to be 8,401,706. Primary school enrolment rate and number of primary schools and health facilities per sub-county is shown in Annex1.
Figure 1: Map of Kenya showing the administrative Units (Counties)

Figure 2: Population structure

Source: U.S. Census Bureau, International Data Base.
2.1 Geographical characteristics

Kenya is located in the eastern part of Africa, lying between latitudes 5°N and 5°S; and longitudes 34°E and 42°E. The country has a total area of 582,650 km\(^2\) and borders the Indian Ocean to the South East, Somalia to the East, Ethiopia to the North, South Sudan to the Northwest, Uganda to the West and Tanzania to the South (Figure 3).

![Figure 3: Map of Kenya showing its geographical location](image)

The terrain is characterized by lowland plains towards the Indian Ocean Coast, rising gradually to the central highlands which are bisected by the Great Rift Valley into the Eastern and Western highlands. The lowest point is the Indian Ocean at 0 meters while the highest point is at the peak of Mt. Kenya at 5,199 meters above sea level.
The country has an altitude modulated tropical climate characterized by hot and humid conditions along the Coast, with daily temperatures ranging between 27 – 31°C with average rainfall ranging between 500 – 1200mm. The inland has temperate climate at higher altitudes, and dry to very dry climate in the Northern and North-eastern regions. The highlands are cool and agriculturally rich. There are two rainy seasons; the long rains from April to June and short rains from October to December. Approximately 80% of the country is arid or semi-arid with only 20% being arable. Humidity ranges from an average of 77.6% in Mombasa to 61.0% in Lodwar.

In Kenya forest cover is 6.99% and is mainly distributed in Central and Western regions. This is considered to be below the 10% forest cover specified as a constitutional requirement. The drainage systems include lakes, rivers and man-made lakes and pools. Only a few rivers are all year round, the majority are seasonal.

### 3.1 Socio-economic status and indicators

Kenya’s principal wealth lies in its diversified agriculture, which provides more than 60% of export income. Intensive agricultural activities occur in rural areas with heavy population densities. The resultant agricultural produce includes coffee, tea, sisal, wheat, maize, horticulture, floriculture and dairy products with extensive livestock breeding. The livestock consist of cattle, sheep, goats and camels. Rice production is practised in some parts of the country. However, rice farming in irrigation schemes and fishing are a risk factor for Schistosomiasis infections and access to portable water is limited, exacerbating the impact of water-borne diseases on the mostly rural populations. Poor sanitation and hygiene are associated with high prevalence of STH. Risk factors for spread of Trachoma include hot dry environment, scarcity of water, poor personal and environmental hygiene. For Leishmaniasis, risk factors include dry areas, type of housing, availability of breeding sites such as ant-hills and nomadism. For LF, risk factors include high humidity and presence of vectors. The risk factors already mentioned with respect to Trachoma and Leishmaniasis also apply for cystic echinococcosis (CE). Some cultural and behavioural practices like keeping of many dogs increase the risk of infection with and transmission of CE.

### Water and sanitation

Water is the most important resource required for both domestic use and agriculture. It is noted that out of the total population, 61% have safe drinking water available to the household with reasonable access. However, there is a great disparity in access to safe water between the rural and urban populations as well as between regions. Distribution of households by sources of drinking water and poverty status is shown in Table 1 while distribution of safe drinking water by region and poverty status is shown in Table 2.
Considering statistics at the national level, 74% of poor households and 90% of non-poor households in urban settings have access to adequate sanitation. However, rural households have less access to adequate sanitation than their urban counterparts with 71% of poor and 87% of non-poor rural households using adequate waste disposal methods.

**Table 1: Distribution of households by sources of drinking water and poverty status**

<table>
<thead>
<tr>
<th>Source of Drinking Water</th>
<th>Rural poor</th>
<th>Urban poor</th>
<th>Rural non-poor</th>
<th>Urban non-poor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piped into dwelling</td>
<td>1.1</td>
<td>3.2</td>
<td>5.7</td>
<td>24.5</td>
</tr>
<tr>
<td>Piped into plot</td>
<td>3.1</td>
<td>23.1</td>
<td>11.4</td>
<td>33.7</td>
</tr>
<tr>
<td>Public tap</td>
<td>8.0</td>
<td>35.9</td>
<td>6.2</td>
<td>19.4</td>
</tr>
<tr>
<td>Well/borehole with tap</td>
<td>7.4</td>
<td>2.2</td>
<td>7.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Protected tap/dug well</td>
<td>7.9</td>
<td>5.6</td>
<td>8.5</td>
<td>3.1</td>
</tr>
<tr>
<td>Protected spring</td>
<td>13.1</td>
<td>3.2</td>
<td>9.7</td>
<td>1.1</td>
</tr>
<tr>
<td>Rain water collection</td>
<td>3.1</td>
<td>1.9</td>
<td>6.5</td>
<td>1.2</td>
</tr>
<tr>
<td>Unprotected dug well</td>
<td>18.9</td>
<td>3.0</td>
<td>14.0</td>
<td>0.7</td>
</tr>
<tr>
<td>Rivers/ponds/streams</td>
<td>31.1</td>
<td>6.0</td>
<td>22.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Tankers/trucks/vendors</td>
<td>1.7</td>
<td>9.7</td>
<td>2.5</td>
<td>10.6</td>
</tr>
<tr>
<td>Bottled water</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>4.2</td>
<td>4.6</td>
<td>4.4</td>
<td>2.1</td>
</tr>
<tr>
<td>Not stated</td>
<td>0.5</td>
<td>1.6</td>
<td>0.2</td>
<td>0.4</td>
</tr>
</tbody>
</table>

**Table 2: Distribution of safe drinking water by region and poverty status**

<table>
<thead>
<tr>
<th>Urban Regions</th>
<th>Safe source</th>
<th>Unsafe source</th>
<th>Safe source</th>
<th>Unsafe source</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>46.3</td>
<td>53</td>
<td>59.8</td>
<td>39.9</td>
</tr>
<tr>
<td>Rural</td>
<td>40.6</td>
<td>58.9</td>
<td>49.5</td>
<td>50.2</td>
</tr>
<tr>
<td>Urban</td>
<td>73.2</td>
<td>25.2</td>
<td>83.9</td>
<td>15.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Geographical Regions</th>
<th>Safe source</th>
<th>Unsafe source</th>
<th>Safe source</th>
<th>Unsafe source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central</td>
<td>37.3</td>
<td>62.1</td>
<td>50.2</td>
<td>49.6</td>
</tr>
<tr>
<td>Coast</td>
<td>52.1</td>
<td>47.1</td>
<td>55.3</td>
<td>44.7</td>
</tr>
<tr>
<td>Eastern</td>
<td>32.5</td>
<td>67.1</td>
<td>46.0</td>
<td>53.2</td>
</tr>
<tr>
<td>North Eastern</td>
<td>30.6</td>
<td>68.0</td>
<td>29.5</td>
<td>70.5</td>
</tr>
<tr>
<td>Nyanza</td>
<td>48.1</td>
<td>51.9</td>
<td>41.1</td>
<td>58.9</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>32.0</td>
<td>67.1</td>
<td>51.2</td>
<td>48.8</td>
</tr>
<tr>
<td>Western</td>
<td>56.7</td>
<td>43.0</td>
<td>62.2</td>
<td>37.3</td>
</tr>
</tbody>
</table>

**Socio economic indicators**

Kenya’s economy grew from relative stagnation in 2002 to a rate of 7.0 % in 2007, slipped in 2008 to 5.7 % and then to 5.3% in 2014. Industrial manufacturing contributed 9.7% of the country’s Gross Domestic Product (GDP), while tourism contributed approximately 12%. Improved economic growth enabled an increase in recurrent and development funding for health services from 7% in 2003/04 to 7.9% in 2006/07.
The policies that the government has pursued over the years have had a direct impact on improving the health status of Kenyans. Despite a decline in economic performance, cumulative gains have been made in the health sector as evidenced by the improvement in the basic health indicators (Table 3). The National health indicators look impressive, in spite of significant geographical disparities which need to be addressed in order to achieve equity such as trends in under-five mortality rate by region.

**Table 3: National Health Indicators**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth rate/1000</td>
<td>31.93</td>
<td>2012</td>
</tr>
<tr>
<td>Death rate/1000</td>
<td>7.26</td>
<td>2012</td>
</tr>
<tr>
<td>Population growth rate</td>
<td>2.44%</td>
<td>2012</td>
</tr>
<tr>
<td>Total fertility rate (children born per women)</td>
<td>3.98</td>
<td>2012</td>
</tr>
<tr>
<td>Infant mortality rate/1000 live births</td>
<td>43.61</td>
<td>2012</td>
</tr>
<tr>
<td>Infant mortality rate/1000</td>
<td>48.7</td>
<td>2012</td>
</tr>
<tr>
<td>Maternal mortality ratio/100,000 live births</td>
<td>360</td>
<td>2012</td>
</tr>
<tr>
<td>Population: % &lt; Age 15</td>
<td>42.3%</td>
<td>2009</td>
</tr>
<tr>
<td>Population: % Age 15 – 64</td>
<td>55.1%</td>
<td>2009</td>
</tr>
<tr>
<td>Population: % Age 65+</td>
<td>2.6%</td>
<td>2009</td>
</tr>
<tr>
<td>Life expectancy at birth male</td>
<td>59.31</td>
<td>2012</td>
</tr>
<tr>
<td>Life expectancy at birth female</td>
<td>62.95</td>
<td>2012</td>
</tr>
<tr>
<td>Stunting children</td>
<td>35%</td>
<td>2005</td>
</tr>
</tbody>
</table>

### 4.1 Transportation and Communication Systems

Kenya is a regional hub for transport and communication. It has a well-developed international and domestic air transport infrastructure, a good National and International road network linking all major towns and also serving as a transit route to a number of landlocked countries in the region. The railway network stretches from the port city of Mombasa to Kampala in Uganda. At the county level, well maintained dry weather (murram) roads and in some cases tarmacked roads join the major towns. However, in remote and hard to reach areas with mainly nomadic communities, the road network is relatively underdeveloped, in poor condition and some communities can hardly be reached, especially during the wet season.

Telecommunication is very well developed, characterized by over 25 million mobile phone subscribers and an advanced internet service connectivity of 3G in most areas, while major urban areas are enjoying 4G internet service. This communication network has the potential of improving health information and data flow systems. The mobile network, however, is weak in some areas or even lacking. In addition, the majority of Kenyan households own radios and/or television sets which can be used to pass information on various disease prevention and control topics.
Health System Situation Analysis

5.1 Health system goals and priorities

The Kenya government aims to provide equitable and affordable health care to her citizens. This is in recognition of the fact that good health and nutrition boosts human capacity to produce thus enhancing economic growth, poverty reduction and realization of social goals.

The Kenya Health Policy Framework (1994) set out the policy agenda for the health sector up to the year 2010. This included strengthening of the central public policy role of the Ministry of Health, adoption of an explicit strategy to reduce the burden of disease, and definition of an essential cost effective health care package. To have this operational, the Health Policy Framework Paper and the first National Health Sector Strategic Plan (NHSSP) I, 1999-2004, were developed in 1994. The strategic plan emphasized the decentralization of health care delivery through redistribution of health services to rural areas. The plan was revised to give the second NHSSP II, 2005-2010, which placed emphasis on promotion of individual and community health. The plan ultimately emphasizes strong community involvement in healthcare. The Kenya Health Sector Strategic and Investment Plan (KHSSP) of 2012 –2017 aims at accelerating attainment of Health Goals.

Health Sector and Kenya 2010 Constitution:

The promulgation of the constitution of Kenya on the 27th of August, 2010 was a major milestone towards the improvement of health standards. The Constitution of Kenya (2010) provides that every citizen has a right to life and the highest attainable standards of health.

Strategic Plan for the Kenya Essential Package for Health (KEPH)

There are six strategies that set the KEPH agenda. These are to;

1. Eliminate communicable conditions
2. Halt, and reverse the rising burden of non-communicable conditions
3. Reduce the burden of violence and injuries
4. Minimize exposure to health risk factors
5. Provide essential health services
6. Strengthen collaboration with health related sectors

The NTDs are well captured in strategic objective 1 that is explained below.

Strategic Objective 1: Eliminate Communicable Conditions

Through this first strategic objective, the sector aims at reducing the burden of communicable diseases, to a level that they are not of major public health concern. In the medium term, the priority strategies include to;
• Increase access of the population to key interventions addressing communicable conditions causing the highest burden of ill health and death.
• Ensure communicable disease prevention interventions directly addressing marginalized and indigent populations
• Enhance comprehensive control of communicable diseases by designing and applying integrated health service provision tools, mechanisms and processes

Efforts at addressing communicable conditions will focus on three strategies: Eradication; elimination, or containment of the diseases.

• **Eradication efforts** will focus on diseases for which the country will work towards complete removal in Kenya during the KHSSP period.
• **Elimination efforts** will focus on diseases for which the sector will work towards reducing the burden to levels not of a public health concern. Malaria, Mother to Child HIV transmission, and Neglected Tropical Conditions (including infestations) will be targeted for elimination
• **Containment efforts** will focus on diseases for which the sector will work towards managing their burden to avoid unnecessary ill health and death. Current investments are not at a level to allow elimination / eradication – this will be the focus for these in subsequent strategic plans as investments, and / or strategies to allow this are attained. These include HIV, Tuberculosis, diarrheal diseases, measles and other immunizable conditions, respiratory diseases, and other diseases of public health concern.

### 6.1 Analysis of the overall health system

**Health services delivery**

Previously, the health system was organized into six levels. This is however progressively transforming into a four tier organization structure by the end of the Kenya health policy 2014-2030. To this end, periodic reviews will be conducted every 5 years in accordance with the norms and standards. (Kenya health policy, 2015) Table 4 below, presents a general picture of the transformation after completion.

**Table 4: Organization of health system**

<table>
<thead>
<tr>
<th>Policy tiers of care</th>
<th>Corresponding levels of care at beginning of policy</th>
<th>Desired levels of care by end of policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1: Community</td>
<td>Level 1: Community</td>
<td>Level 1: Community</td>
</tr>
<tr>
<td>Tier 2: Primary care</td>
<td>Level 2: Dispensary and clinics Level 3: Health centres</td>
<td>Level 2: Primary care facilities</td>
</tr>
<tr>
<td>Tier 3: Secondary referral</td>
<td>Level 4: Primary care hospitals Level 5: Secondary care hospitals</td>
<td>Level 3: County hospitals</td>
</tr>
<tr>
<td>Tier 4: Tertiary referral</td>
<td>Level 6: Tertiary care hospitals</td>
<td>Level 4: National referral hospitals</td>
</tr>
</tbody>
</table>

Tier 1 is aimed at operationalizing a robust community strategy through which effective Primary Health Care (PHC) interventions will be rolled out. Under this strategy, it is appreciated that the
lowest unit of community aggregation is the household. It is estimated that each household has an average of 5 members. 20 such households will be put under a Community Health Volunteer (CHV), who will in turn be supervised by a Community Health Assistant (CHA), such that 1 CHA has between 10-20 CHV under their supervision. The Community Health Units (CHUs) so formed will be linked to the Tier 2 (Primary care) facility within whose catchment area they fall, by the CHA who is a trained health worker. Where CHUs are not yet activated/functional, villages will be used as units of service delivery. Village Health Committees (VHCs) will be formed to serve the purpose of facilitating the process.

**Health workforce**

The fourth schedule of the constitution of Kenya (2010), details the distribution of devolved health functions between the national government and county governments. Under this arrangement, the national government is charged with national referral health facilities, health policy, capacity building and technical assistance to the counties. The county governments are charged with county health services including in particular; county health facilities and pharmacies, ambulance services, promotion of primary health care, licencing and control of undertakings that sell food to the public, veterinary services (excluding regulation of the profession), cemeteries, funeral parlours, crematoria, refuse removal refuse dumps and solid waste disposal. The human resources for delivery of these functions are managed by the level of government where they fall. There is a general shortage of health personnel but the general plan is that both the national and county governments will be able to employ more health workers in an effort to plug the existing gap.

**Health Information**

The Health Management Information System (HMIS) department in the MoH receives routine data on the causes of in-patient morbidity and mortality from government health facilities across the country. Data for STH, Schistosomiasis, GWD and Leprosy is captured at the peripheral facilities level. However, some of the NTDs including LF, Trachoma, Leishmaniasis, Dengue & Chikungunya, Rabies, CE, Taeniasis, FBT, Onchocerciasis and HAT are not incorporated in the health facility register and also in the HMIS. They are either lumped up with other similar conditions or categorised as “others”. There is a need to include all NTDs in the HMIS register in order to capture all cases reported in the country. These HMIS register need to be reviewed to include all NTDs in the country. In addition, the Integrated Disease Surveillance and Response Unit (IDSRU) implements Integrated Disease Surveillance. The Unit carries out surveillance on Diseases of public health importance affecting the Country including the emerging and re-emerging diseases. Efforts will be made to ensure that all relevant NTDs are notifiable on the IDSRU platform.

**Medical products**
In the context of NTD control, medical products include medicines and diagnostic test kits. Procurement is predominantly through donations and (to a lesser extent), purchase. The Kenya Medical Supplies Authority (KEMSA) is charged with the responsibility of managing all medical products intended for public use. The NTD Programme will work closely with KEMSA to ensure proper management of medical products intended for use in NTD control interventions. The NTD Unit will carry out periodic quantification to determine the quantities of medical products required by the country. Furthermore, the Unit will ensure timely placement of annual requests to the World Health Organization (WHO) for donation of medicines according prescribed WHO procedures. Other donated medicines shall be procured in accordance with the existing national guidelines on donation of medicines. Purchase of medical products shall be done at national and county level in accordance with the provisions of the Procurement and Disposal Act of 2005 and Regulations of 2006.

The NTD Programme shall work closely with WHO in ensuring that all documentation is received on time and used to secure import permits, authority for storage at KEMSA and tax waivers as may be necessary for donated medicines. All donated medicines shall be stored at KEMSA awaiting distribution to their point of use. As much as possible, distribution shall be conducted via KEMSA’s distribution service. However, where exceptional circumstances demand for alternative distribution strategies, this shall be done but only where maintenance of high-quality of the medicines is assured. Such circumstances will be reviewed by the TWG on case management before express provisions are made and minuted for future reference. Upon arrival at their destination, County and Sub-county Pharmaceutical Facilitators will coordinate and ensure proper storage conditions for all distributed medicines as they await final distribution to their respective points of use.

All surplus medicines left over from MDA activities shall be handed over to the nearest health facility for continued utilization by communities within the catchment population. Strict inventory management shall be observed through maintenance of necessary records at each step of the product management pipeline.

Safety of medicines will be ensured at all times through collaborative efforts between the NTD programme, the Pharmacy and Poisons’ Board (PPB) and the National Quality Control Laboratories (NQCL). This will involve monitoring and reporting of Serious Adverse Effects (SAEs) and poor quality medicines. The NTD pharmacist will coordinate all management activities for medical products for NTDs. He/she will convene and chair an NTD Drugs Working Group through which all in-country management for donation medicines shall be handled and submitted to the NTD case management TWG for ratification.

Health financing

Increasing demand for health care along with inadequate funding for existing needs support the need for continued increases in financing for health. The country spends approximately 5% of its
GDP on health (equivalent to 42.2 US$ per capita). Over the past 5 years the Government Health Expenditure has been between 4 to 7% of the GDP, which is under half of the Abuja declaration target of 15% and the Economic Recovery Strategy (ERS) target of 12% of total Government allocations. 63.3% of total health expenditure is funded publicly, including external (donor) support and health insurance, the latter being responsible for 11% of total health expenditure. The remaining 36.7% is funded privately, with out of pocket financing at the point of service being predominant. Private health insurance is limited.

Investment in the health sector has steadily increased over the years. Total health expenditure increased from US$33.5 per capita in 2001/02 to US$42.2 in 2009/10. However, these increases are characterized by the following:

- Almost flat (slightly declining) share of government health expenditure of the total health expenditure
- Increasing share of donors out of total health expenditure,
- Declining share of households out of pocket expenditure as a proportion of total health expenditure,

Kenya’s health sector identifies several modes of financing health services:

- Government funding through taxation
- User fees, through out of pocket payments directly by clients
- External sources from bilateral, multilateral, or philanthropic sources
- Health insurance – either social or private insurance mechanisms.

Kenya has made several attempts to introduce healthcare financing reforms to eliminate chronic under-funding of the sector, minimize out of pocket expenditures and ensure universal access to quality healthcare and therefore achieve the Vision 2030 goals on health.

Health Sector funding/financing mechanisms as stipulated in the Health Sector Development Plan (HSDP III) includes three channels of financial resource management:

- Channel I: Pooled and managed by government or earmarked by agencies with direct disbursement
- Channel II: Donor held financing provided directly to sector units or decentralized regional offices to be directly used and accounted for by them
- Channel III: Direct donor programmed funds disbursed by Development Partners to finance specific contributions to HSDP usually through NGOs.

The total budget for the health sector in Kenya includes a substantial contribution from development partners in health. Appropriation in Aid (AIA) which is mainly in form of grants and loans make up to 15% of the total budget for the health sector.
Funding for health services come from a number of sources including households, MoH, donors and international NGOs and the private sector. In the 2006/07 financial year, the national health accounts showed that households contributed 29.1% of the health sector financing while MoH accounted for 35.4%, in the same year donors and international NGOs contributed 20.8% to the health sector resource envelope, while the private sector accounted for only 5.4%.

Disease control, specifically communicable and vector-borne diseases, is allocated up to 3% of the total funding to MoH. The funds allocated are mainly spent on surveillance and response/control of communicable and vector-borne disease; improving capacity to diagnose and treatment of communicable and vector-borne diseases.

**Leadership and Governance**

The Cabinet Secretary (CS) is the head of the Ministry of Health (MoH). He is responsible to the president for the exercise of the power and performance of ministerial functions. The Principal Secretary (PS) is responsible for the day to day operations of the ministry. The Director of Medical services (DMS) is the Head of Technical Services and Technical Advisor to the Cabinet Secretary (CS). The NTD Programme falls under the Division of Disease Surveillance and Epidemic Response (DDSER), which in turn falls under the Department of Preventive and Promotive Health (DPPH). The head, DPPH is in charge of all Divisions and programmes within the department. These include the Neonatal, Child and Adolescent Health Unit (NCAHU), Zoonotic Diseases Unit (ZDU), Integrated Disease Surveillance and Epidemic Response (IDSRU), National Tuberculosis, Leprosy and Lung Disease Programme (NTLDP) and Vector Borne Diseases Control Unit (VBDCU), all of which the NTD Programme works closely in order to achieve her goals and objectives.

The enactment of the current constitution (2010) brought with it changes emerging from the devolution of functions to the county level. Departments of Health at county and sub counties level make their own annual plans depending on their priorities. The system at this level is all-inclusive of the diseases that are priority in the counties and sub counties. The implementation of NTD activities fall within the existing organogram as shown in figures 4 and 5.

The national policy on control of NTDs is currently under development. The development process is at an advanced stage and all indication is that the policy will be launched early within the period of this strategic plan. However, the NTD Unit requires support to finalize development of this important document.

NTD activities have been included in the Health Sector Strategic Plan, with the government pledging to provide funding to carry out some activities. An institutional framework already exists with an Inter-agency coordinating committee (ICC) having been launched in June 2014. This committee is expected to play a major role in accelerating the implementation of NTD
control activities in the country including creation of a platform to engage partners and stakeholders in NTD control.

The NTD program faces challenges in implementing the strategy based on integration/co-implementation of NTDs. The currently supported WHO guide on control of STH and schistosomiasis is focused on school-age children. However, the goal of achieving elimination requires that more effort be put into reaching the rest of the high-risk members of the community who act as a reservoir for sustained transmission to treated school-age children.

**Figure 1: Organogram of the Ministry of Health**
Inter-sectoral collaboration

In order to achieve the set targets, the NTD programme aims at coordinating and fostering integration of the implementation of NTD control activities across projects, programmes, units, divisions, departments, institutions and ministries participating in NTD control. This will promote collaboration which is expected to stimulate synergy towards achieving control goals and targets.

The NTD Programme will endeavour to work closely with the Dengue Project, National Programme to Eliminate Lymphatic Filariasis (NPELF), Kenya Trachoma Elimination Programme (KTEP), National School Based Deworming Programme (NSBDP), Kenya Field Epidemiology and Laboratory Training Programme (FELTP), National Tuberculosis, Leprosy and Lung Disease Programme (NTLD), the Integrated Disease Surveillance and Response Unit (IDSRU), Zoonotic Diseases Unit (ZDU), Vector Borne Disease Control Unit (VBDCU), Malaria Control Unit (MCU), Neonatal Child and Adolescent Health Unit (NCAHU), Ophthalmic Services Unit (OSU), Health Promotion Unit (HPU), Community Health Unit (CHU), Division of National Public Health Laboratory Services (NPHLS), Division of Environmental Health (DEH), Division of Health Informatics Monitoring and Evaluation (HIME), the Kenya Medical Research Institute (KEMRI), Ministry of Education Science and Technology (MoEST), Ministry of Agriculture, Livestock and Fisheries (MALF), Ministry of Environment and Natural Resources (MENR) and the Ministry of Water and Irrigation (MWI).
**Partnership**

The NHSSP provides that partnership is the main vehicle through which the plan’s targets can be achieved as it allows all health sector stakeholders to collaborate and coordinate their actions, recognizing each ones’ specific responsibilities. This has been achieved through strengthening coordination and collaboration, as part of the sector-wide approach (SWAP) to the health sector reform agenda. The NTD Programme will work towards expanding the partnership base and bring more partners on board. The current principal donors and development partners in the health sector are shown in table 5.

**Table 5: Principal donors and development partners in the health sector**

<table>
<thead>
<tr>
<th></th>
<th>NTDs</th>
<th>Infectious disease control (TB &amp; malaria)</th>
<th>HIV/AIDS</th>
<th>Health Sector reform and decentralization</th>
<th>Sub-counties health systems</th>
<th>Health financing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Policy development</td>
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<tr>
<td>WB</td>
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<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>UNFPA</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WHO</td>
<td>X (LF)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>UNAIDS</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EU</td>
<td>X (Trachoma)</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USAID</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
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<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
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<tr>
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<td></td>
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<td>X</td>
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<td></td>
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<td>X</td>
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<td>X</td>
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<td>IPPF</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>NGDO*s (Trachoma)</td>
<td>X</td>
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<td>X</td>
<td></td>
<td></td>
<td>X</td>
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<tr>
<td>DANIDA</td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Current list of NTD partner NGOs/NGDOs**

**STH and Schistosomiasis**

- Children’s’ Investment Fund Foundation (CIFF)
- The END Fund
- Effect Hope
- Deworm the World initiative/Evidence Action
- Porridge and Rice
- Peepoople
- Feed the Children
- Medical Assistance Programmes (MAP) International

**Lymphatic Filariasis**

- Helen Keller International (HKI)
- Medical Assistance Programmes (MAP) International
The END Fund

**Trachoma**
The Queen Elizabeth Diamond Jubilee Trust Fund (QEDJTF)
Sight Savers Kenya
Fred Hollows Foundation
Operation Eyesight
Christian Blind Mission
African Medical and Research Foundation (AMREF)
Lions Clubs International Foundation
Turkana Eye Care Project (TECP)/Spanish doctors

**Leishmaniasis**
Drugs for Neglected Diseases initiative (DNDi)

**Dengue & Chikungunya**
Dengue Vaccine Initiative (DVI)
Neglected Tropical Diseases Situation Analysis

7.1 Epidemiology and burden of disease

Out of the 17 diseases currently listed as NTDs, 14 are either suspected or confirmed to be endemic to Kenya. These are soil-transmitted helminthiasis (STH), Schistosomiasis, Lymphatic Filariasis (LF), Trachoma, Leishmaniasis, Dengue & Chikungunya, Rabies, Guinea Worm Disease (GWD), Leprosy, Cystic Echinococcosis (CE), Taeniasis, the Food Borne Trematodiases (FBT), Onchocerciasis and Human African Trypanosomiasis (HAT). They may occur singly or in combination in certain individuals or communities living in geographical areas where more than 1 NTD is co-endemic. Additionally, 3 other neglected conditions are of interest to the national NTD Programme: These are Mycetoma, Tungiasis and Snake Bites. The programme will continue to support/house control activities for the 3 neglected conditions even as effort are made to establish a definitive platform(s) on which each of them will be comprehensively handled.

**Soil-transmitted helminthiasis**

Soil-transmitted helminthiasis (STH) is confirmed as endemic to Kenya. All three types (roundworms, whipworms and hookworms) are widely distributed across Kenya with more than 16.6 million people believed to be at risk of infection with 1 or more of the 3 types of worms. Figure 6 shows the known geographical distribution of STH in Kenya. The latest mapping information available to the NTD Programme is tabulated as shown in annex 2a.
Schistosomiasis is confirmed as endemic to Kenya. The pattern of occurrence involves some sub counties within the Lake Victoria region, parts of Central Kenya, Lower Eastern and the Coast regions. Approximately 6 million people are estimated to be at risk of infection with Schistosomiasis. The known geographical distribution of Schistosomiasis in Kenya is shown in figure 7. The latest mapping information available to the NTD Programme is tabulated as shown in annex 2b.
Figure 7: Distribution of Schistosomiasis in Kenya

Lymphatic Filariasis

Lymphatic Filariasis (LF) is confirmed as endemic to Kenya. It is believed to occur exclusively within some sub counties of the Coast Region. Approximately 3.7 million people are estimated to be at risk of infection with LF. Figure 8 shows the known geographical distribution of LF in
Kenya. The reported mapping information available to the NTD Programme is tabulated as shown in annex 2c.

**Figure 8: Distribution of Lymphatic Filariasis (LF) in Kenya**

**Trachoma**

Endemicity of Trachoma is currently confirmed to 35 Implementation Units in the arid and semi-arid regions of the country. Approximately 7 million people living in these sub counties are at risk of infection with Trachoma. Figure 9 shows the known geographical distribution of Trachoma in Kenya. Mapping information available to the NTD Programme is shown in tabulated form in annex 2d.
**Other NTDs**

Mapping for other NTDs is generally incomplete hence it is not clear the approximate number of people at risk of infection with the various diseases. Figure 10 shows the known geographical distribution of Leishmaniasis in Kenya. Figure 11 shows the known geographical distribution of the NTDs, including the co-endemicity picture in areas where more than 1 disease is known to co-exist. Annexes 2e, 2f, 2g and 2h show tabulated information currently reported to the NTD Programme on mapping of Leishmaniasis, Dengue, Cystic Echinococcosis (CE) and Onchocerciasis. So far, there is no mapping information available to the NTD Programme for the other NTDs. It is important to note however that case reports have been made for these NTDs. Furthermore, significant amounts of information do exist as a result of work done by individual researchers, private institutions and other government departments, institutes and ministries. These include Rabies, Guinea Worm Disease (GWD), Leprosy, Taeniasis, the Food Borne Trematodiasises (FBT) and Human African Trypanosomiasis (HAT).
The same applies to Mycetoma, Tungiasis and Snake Bites. There is an urgent need to consolidate existing data into a structured NTD database as well as conduct mapping for NTDs where the same is required to determine their distribution.

Figure 10: Distribution of Leishmaniasis in Kenya
**Figure 11**: Co-endemicity map of the Neglected Tropical Diseases (NTDs) in Kenya

**NTD Mapping Status**

Mapping diseases distribution in a country is important in guiding decision making for their control. Countrywide mapping has been done for STH, Schistosomiasis, LF and Trachoma (Table 6). Leishmaniasis, Dengue and CE (Table 7) are either partially mapped or not mapped at all. The mapping activities were conducted when the number of administrative units was still 158 districts. These have since increased to 290 sub counties. The programme has embarked on, and will continue to align information based on the older districts to the new sub counties.
Table 6: NTD mapping status for PCT diseases

<table>
<thead>
<tr>
<th>Name of endemic NTDs</th>
<th>Total number of sub-counties</th>
<th>No of sub-counties suspected to be endemic</th>
<th>No of sub-counties mapped or known endemicity status</th>
<th>No of sub-counties remaining to be mapped</th>
</tr>
</thead>
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<tr>
<td>STHs</td>
<td>158</td>
<td>158</td>
<td>158</td>
<td>0*</td>
</tr>
<tr>
<td>Schistosomiasis</td>
<td>158</td>
<td>158</td>
<td>158</td>
<td>0*</td>
</tr>
<tr>
<td>LF</td>
<td>158</td>
<td>100</td>
<td>100</td>
<td>0*</td>
</tr>
<tr>
<td>Trachoma</td>
<td>158</td>
<td>43</td>
<td>39</td>
<td>4</td>
</tr>
</tbody>
</table>

Table 7: Needs for mapping completion for case management diseases

<table>
<thead>
<tr>
<th>Name of endemic NTDs</th>
<th>No of sub-counties suspected to be endemic (at risk)</th>
<th>No of sub-counties assessed or known endemicity status</th>
<th>No of sub-counties remaining to be assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>LF</td>
<td>13</td>
<td>13</td>
<td>0*</td>
</tr>
<tr>
<td>TT</td>
<td>43</td>
<td>39</td>
<td>0</td>
</tr>
<tr>
<td>Leishmaniasis</td>
<td>30</td>
<td>0</td>
<td>30*</td>
</tr>
<tr>
<td>Dengue</td>
<td>158</td>
<td>158</td>
<td>158</td>
</tr>
<tr>
<td>Guinea worm</td>
<td>9</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>CE</td>
<td>158</td>
<td>3</td>
<td>155</td>
</tr>
</tbody>
</table>

*There is need to validate the current mapping status/needs shown

8.1 Neglected Tropical Diseases Programme implementation

Interventions have been ongoing for the control of some of the NTDs in Kenya. These may be broadly categorized into the Preventive Chemotherapy (PCT) and Case Management (CM) interventions.

Preventive Chemotherapy (PCT) interventions

Several disease specific control programmes have been established to implement various PCT control interventions.

The National Programme to Eliminate Lymphatic Filariasis (NPELF) was established in 2001 to implement control of LF and STH within LF endemic sub counties in the Coast region. Under this programme, mapping was conducted across the whole country, which confirmed endemicity of the disease to the Coast region. Mass Drug Administration (MDA) was instituted in 2002 as shown in table 8. The MDA activities have been inconsistent and ineffective. Implementation is still ongoing as at 2016.

The Kenya National School Based Deworming Programme (NSBDP) was established in 2009 to conduct MDA activities against STH and Schistosomiasis. The programme brings together departments within the Ministry of Health (MoH) and the Ministry of Education (MoEST). It stalled shortly after establishment to be re-launched in 2012 as a 5 year programme. The re-
launched programme is supported by the Children’s Investment Fund Foundation (CIFF) and the END Fund through facilitation of Deworm the World initiative/Evidence Action. Table 8 shows the achievements of the programme which is currently in its fourth year of implementation.

The Kenya National Plan for the Elimination of Trachoma (KNPET) 2008-2015 was launched in 2009. This was reviewed in 2010 leading to development of the Trachoma Action Plan (TAP) 2011-2020 which is reviewed annually. There exists a Trachoma Task Force which is a sub-committee of the National Prevention of Blindness Working Group (NPBWG). The task force currently advises the coordination of Trachoma activities in the country. MDA activities have been implemented since 2007 as shown in table 8.

Research activities have been contributing to intervention albeit at a much smaller scale. The Schistosomiasis Consortium for Operational Research and Evaluation (SCORE) Project in the Lake Victoria region, Tuangamize Minyoo Kenya Imarisha Afya (TUMIKIA) Project in Kwale, Take-Up Project in Western Kenya are just but a few examples of such projects. As much as possible, the NTD programme has tried to engage research projects with the goal of ensuring coordinated implementation of the interventional aspects of the projects. Efforts will be made to continuously improve coordination of research activities for NTDs.

**Case Management (CM) interventions**

In 2010, the NPELF conducted 154 hydrocele surgeries with support from the Medical Assistance Programmes (MAP) International. Table 9 shows a summary of existing information on these interventions.

The Trachomatous Trichiasis (TT) surgery backlog was 41,787 by January 2014. A total of 7,075 surgeries were conducted by October 2014. Kenya currently has 42 certified non-eye care TT surgeons with 22 eye care workers performing TT surgery. The programme plans to increase the number of outreach teams from the current 20 to 28 in a bid to conduct at least 8,303 surgeries per year. This will make it possible for the remaining backlog to be cleared by early 2019. Figure 12 shows the distribution of TT in Kenya while figure 13 shows the number of TT surgeries conducted between 2004 and 2013 in Kenya. Also showing a summary of information available for these interventions is table 9.
Figure 12: Distribution of TT in Kenya

Figure 13: Number of TT surgeries conducted between 2004 and 2013 in Kenya
There is no clear information on the number of cases managed for Leishmaniasis. However, National Leishmaniasis Control Programme (NLCP) has conducted several activities nationally and within known endemic areas to boost access to effective treatment. This has mainly been supported by DNDi and Medecins Sans Frontieres (MSF). Advocacy has been conducted at all levels with special reference being on the World Health Day of 7th April 2014 during which Kenya’s focus was on Visceral Leishmaniasis. In addition, awareness creation campaigns have been conducted within target communities in Isiolo, Wajir, West Pokot, Baringo and Turkana. In addition to establishment of two Visceral Leishmaniasis referral health facilities in Baringo (Kimalel) and West Pokot (Kacheliba), the programme has in collaboration with partners continued to build capacity through training frontline health workers within endemic areas on diagnosis and treatment of Leishmaniasis. The programme has completed review of guidelines on diagnosis and treatment of Visceral Leishmaniasis. These new guidelines introduce the safer and more efficacious combination therapy with Paromomycin and Sodium Stibogluconate (PSSG), which replaces the previously used monotherapy with Sodium Stibogluconate (SSG) alone.

Guinea worm disease (Dracunculiasis) is virtually eliminated in Kenya. However, in two countries bordering Kenya, the disease is still endemic and a major public health concern. These countries are Ethiopia situated to the North of Kenya and South Sudan to the North West of Kenya. Therefore, to be certain that the disease does not get reintroduced into the country; intensive surveillance has to be carried out on the Kenyan border with these two countries. Among the important areas for enhanced surveillance include Turkana, West Pokot and Trans-Nzoia counties.

Guinea worm disease is at eradication stage in Kenya. Twenty-five years ago, there were an estimated 3.5 million cases in 20 countries. The number of cases has been reduced by more than 99% to about 1,800 cases in 4 countries by 2010 namely; Sudan (1,698), Mali (57), Ethiopia (20), Chad (10) and Ghana (8). The last reported indigenous case of Guinea worm in Kenya was in 1994. However, due to its proximity to endemic countries of South Sudan and Ethiopia, the Kenya Guinea worm eradication programme has set up surveillance and coordination systems in the counties neighbouring the two countries to make sure that any rumour or suspected case is reported to the nearest health facility for investigation within 24 hours. The information is then disseminated to the counties and the National office. In Turkana, County Health Management Teams (CHMTs), health care workers, Teachers, CHAs and Village Based Volunteers (VBVs), have been trained on case detection, prevention and control. IEC Materials have been produced and disseminated in these areas. A reward of about Kes 100,000 (US$ 1,000) has been offered for any positive case reported.

9.1 Gaps and Priorities

There is a lot of information on NTD control activities which is not readily available to the NTD Programme. This information needs to be collected from its current location(s). The NTD
Programme has embarked on a data mining exercise which will enable collection of such available information and entry into a National Integrated NTD Database (NIND). The programme will also step up coordination through activating of regular ICC and TWG/TAG meetings. The methods used to map the country for STH, Schistosomiasis and LF were very useful in providing information with which treatment decisions were made. These methods which included desk reviews of individual work, blood in urine tests for Schistosomiasis and informed individual assessments by experienced officers may not have provided accurate maps. Some of the counties/sub counties/districts which were declared ineligible for interventions (Migori and Tana River for Schistosomiasis) have been found to have a very high burden of disease.

Similarly, some of the districts which had been declared free of STH are now being found to have transmission. These have been included in the PCT databank with the effect of inflating the denominator for target interventions in Kenya. The result is a consistently low coverage due to an expanded denominator. Questions have been raised about the distribution of LF especially towards the Western border of the country with Uganda. Uganda maps show a distribution up to its border with Kenya yet a dramatic absence occurs immediately on crossing over to the Kenya side. Such observations have raised doubt over authenticity of the available mapping information hence the need for a carefully executed validation exercise.

The changes in administrative units, following the promulgation of the current constitution of Kenya (2010) have created a new challenge in data for monitoring. An increase from 158 districts to 290 sub counties has made it difficult to align mapping activities to present day interventions. Some of the information used during the desk reviews was very old and out-dated. This could have led to some of the observed inaccuracies.

The programme intends to expand the segments of the population currently reached by ongoing interventions. Women of child bearing age and other at risk populations such as fishermen will be included in routine MDA activities against Schistosomiasis. Plans are also underway to engage the county government with the goal of expanding reach of both STH and Schistosomiasis MDA activities to adults and pre School-Age Children (Pre SACs).

Coordination of various stakeholders implementing vertical NTD control activities has continued to pose a big challenge to integration. The programme will move to step up efforts to enforce integration of NTD control activities. Existing programmes will be strengthened with the view of improving contribution to the over-arching goal of NTD control. Where programmes are not yet in existence, efforts will be made to establish disease specific programmes which are anchored to the NTD Programme. Special attention will be paid to coordination of research activities.

In order to certify Kenya as Guinea worm free country, the following has to be accomplished:

a) Strengthen and supervise surveillance and data flow from at risk sub-counties to report weekly and monthly
b) Have zero reporting from non-endemic sub-counties in IDsR/HMIS

c) Social mobilization and advocacy of the disease in non-endemic sub-counties

d) Produce and disseminate IEC materials to non-endemic sub-counties.

e) Launch Guinea Worm National certification committee

Most of the above conditions have been achieved with the latest being the gazettement and launch of the national Guinea Worm eradication certification committee.

The NTD Programme will continue to pursue closer working arrangements with the ZDU (Schistosomiasis, Rabies, Taeniasis, CE, FBT and HAT), NTLD (Leprosy), VBDCU (LF, Dengue, Guinea Worm, Onchocerciasis and HAT), NCAHU (STH and Schistosomiasis), OSU (Trachoma), MCU (LF, Leishmaniasis and Dengue), NPHLS, KEMRI, MoEST, MALF, MWI, MENR and all other government agencies to ensure that proper coordination of all NTD control activities is achieved, with proper reporting and data sharing for inclusion into the National Integrated NTD Database (NIND).
### Table 8: Summary of intervention information on existing PCT programmes

<table>
<thead>
<tr>
<th>NTDs</th>
<th>Date programme or intervention started</th>
<th>Total number of sub-counties targeted</th>
<th>Number of sub-counties targeted (geographic coverage)</th>
<th>Total population in target sub-counties</th>
<th>No. (%) population covered</th>
<th>Key strategy used</th>
<th>Key partners</th>
</tr>
</thead>
<tbody>
<tr>
<td>STH</td>
<td>2009</td>
<td>94</td>
<td>94</td>
<td>5,700,000</td>
<td>6,405,645 (112%)</td>
<td>MDA</td>
<td>WHO MOEST, MOH CIFF &amp; END Fund, Deworm the World Initiative at Evidence Action</td>
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<td>Schistosomiasis</td>
<td>2012</td>
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<td>41</td>
<td>600,000</td>
<td>890,459 (148%)</td>
<td>MDA</td>
<td>WHO, MoEST, MoH CIFF &amp; END Fund, Deworm the World Initiative at Innovations of Poverty Action</td>
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<td>2002</td>
<td>13</td>
<td>9</td>
<td>2,300,000</td>
<td>3,700,000 (62%)</td>
<td>MDA</td>
<td>Liverpool Centre for LF support, WHO</td>
</tr>
<tr>
<td>Trachoma</td>
<td>2007</td>
<td>39</td>
<td>8</td>
<td>7,000,000</td>
<td>3,198,956 (45.7%)</td>
<td>MDA</td>
<td>WHO, EU, SSI, AMREF, CBM, OEU</td>
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</table>

### Table 9: Summary of Information on existing case management programmes

<table>
<thead>
<tr>
<th>NTDs</th>
<th>Date programme or intervention started</th>
<th>Total number of sub-counties targeted</th>
<th>Number of sub-counties covered (geographic coverage)</th>
<th>(%) covered</th>
<th>Key strategy used</th>
<th>Key partners</th>
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<tbody>
<tr>
<td>LF</td>
<td>2002</td>
<td>13</td>
<td>2</td>
<td>15.4 %</td>
<td>Surgery, lymphoedema management</td>
<td>Liverpool Centre for LF support, WHO</td>
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<td>Trachoma</td>
<td>2004</td>
<td>39</td>
<td>39</td>
<td>100%</td>
<td>TT Surgery</td>
<td>WHO, EU, SSI, AMREF, CBM, OEU, FHEA, LIONS clubs</td>
</tr>
<tr>
<td>Leishmaniasis</td>
<td>N/A</td>
<td>30</td>
<td>0</td>
<td>0.0%</td>
<td>Active and passive case detection and treatment</td>
<td>DNDi, KEMRI, UoN</td>
</tr>
<tr>
<td>Dengue</td>
<td>2008</td>
<td>2</td>
<td>2</td>
<td>100%</td>
<td>Active case finding and health facility treatment</td>
<td>KEMRI, Nagasaki University</td>
</tr>
<tr>
<td>CE</td>
<td>1983</td>
<td>1</td>
<td>1</td>
<td>100%</td>
<td>Active case finding</td>
<td>AMREF</td>
</tr>
</tbody>
</table>

A SWOT analysis carried out on the current status of control of NTDs in the country is presented in Table 10.
### Table 10: SWOT counteracting table

<table>
<thead>
<tr>
<th>No.</th>
<th>Weakness</th>
<th>Strengths Counteracting Weaknesses</th>
<th>Opportunities Counteracting Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lack of policy on NTDs</td>
<td>Availability of reviewed National NTDs Strategic plan</td>
<td>Development of National Policy for NTD</td>
</tr>
<tr>
<td>2</td>
<td>Limited resources for implementation of NTD activities</td>
<td>National and global political commitment for NTD</td>
<td>MOH allocation for NTD programme</td>
</tr>
<tr>
<td>3</td>
<td>Inadequate staff in NTD program</td>
<td>Devolution of the Health sector</td>
<td>Deployment of requisite number of staff</td>
</tr>
<tr>
<td>4</td>
<td>Limited support for some NTDs</td>
<td>Existence of ICC to support NTD coordination</td>
<td>NTD programme to take lead in promoting coordination and integration of NTD interventions while leveraging on the global and local momentum to support NTDs</td>
</tr>
<tr>
<td>5</td>
<td>Inadequate structures at county level for NTD interventions</td>
<td>The existence of County Trachoma Task Forces to oversee implementation within Counties</td>
<td>Other NTDs to establish structures at Counties</td>
</tr>
<tr>
<td>6</td>
<td>NTD not previously prioritized</td>
<td>NTDs are now included in the HSSP</td>
<td>MoH to establish a budgetary line for NTD</td>
</tr>
<tr>
<td>7</td>
<td>Inadequate drugs and supplies and diagnostic kits for CM-NTDs</td>
<td>Existence of KEMSA to coordinate procurement of commodities and supplies and</td>
<td>Inclusion of drugs and diagnostic kits into the essential drug list</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partner commitment for drug donations for NTD elimination</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Case identification challenges for Trachomatous Trichiasis patients</td>
<td>Existence of Community Health services structures</td>
<td>Train CHVs to identify TT patients at household level and make appropriate referrals</td>
</tr>
<tr>
<td>9</td>
<td>Socio-cultural factors hinder uptake of SAFE interventions</td>
<td>The existence of Health Promotion and Community Health services structures in the Counties</td>
<td>Collaboration with Health promotion and Community strategy units to achieve BCC in NTD interventions</td>
</tr>
<tr>
<td>10</td>
<td>Challenges with regard to clearance for donated drugs (Handling and storage charges, Clearance fee, transport to warehouse)</td>
<td>The existence of MOH procurement Unit to guide planning and procurements</td>
<td>Advocacy for Waiver on levies e.g. of Kenya Railway Levy (KRL) on imported drugs</td>
</tr>
<tr>
<td>No.</td>
<td>Threats</td>
<td>Strengths counteracting threats</td>
<td>Opportunities counteracting threats</td>
</tr>
<tr>
<td>-----</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>11</td>
<td>Lack of an elaborate M&amp;E framework for monitoring SAFE interventions</td>
<td>Existence of MOH M&amp;E framework that can be customized for Trachoma elimination</td>
<td>Development of an M&amp;E framework specific for trachoma/NTD</td>
</tr>
<tr>
<td>12</td>
<td>Limited support for PHASE interventions</td>
<td>Existence of the NTD Strategic plan and Trachoma Action Plan for resource mobilization and collaboration with WASH players including Ministry of Environment, Water and Natural Resources (MEWNR), Ministry of Education (MoE), Ministry of Agriculture, Livestock and Fisheries Development and relevant MOH departments</td>
<td>Resource mobilization with the WASH sector to upscale and coordinate PHASE interventions</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>Threats</td>
<td>Strengths counteracting threats</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Inadequate skills for resource mobilization, financial management and planning</td>
<td>Existence of technical staff for programme coordination and implementation</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Sustaining the impact of NTD interventions after end of donor funding</td>
<td>Devolution of Health to Counties with attendant budgetary allocation</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Insecurity within endemic counties interfere with implementation of planned activities</td>
<td>Existence of the Ministry of Interior and coordination of National Government</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Adverse effects from administered drugs</td>
<td>Existence of Health workers and CHAs</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>Hard to reach areas/populations</td>
<td>Existence of alternative means of transport e.g. donkeys and camels</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Poor communication networks within the endemic counties</td>
<td>Existence of alternative means of communication e.g. radio calls, chiefs Barazas</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>Insecurity within endemic counties interfere with implementation of planned activities</td>
<td>Existence of local health workers who can be relied upon</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>Inadequate operational research to inform operationalization of NTD interventions</td>
<td>Existence of HR, Academic and Research institutions</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>Inadequate utilization of data and information for planning</td>
<td>Existence of HR that can be trained to analyse data, Academic and Research institutions that can be consulted</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Limited M&amp;E activities on NTD programme</td>
<td>Established NTD M&amp;E system and</td>
</tr>
<tr>
<td>Availability of trained personnel in M&amp;E</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PART 2: NEGLECTED TROPICAL DISEASES STRATEGIC AGENDA

Overall NTD Programme mission and goals

Mission: To provide effective leadership and participate in the prevention, control, elimination and eradication of NTDs in the country.

Vision: A healthy and productive nation free from NTDs

Strategic Goal: To accelerate the reduction of the disease burden through control, elimination and eradication of targeted NTDs and contribute to poverty alleviation increased productivity and better quality of life of the affected people in the Country.

Guiding Principles and Strategic Priorities

To ensure success, the following guiding principles will underpin the implementation of the Strategic Plan:

Strategic Priority 1: Strengthen government ownership, advocacy, coordination and partnerships:

Efforts have been made to enhance country ownership and leadership of national NTD programmes. This will require the political commitment and financial support of governments.

Strategic Priority 2: Enhance planning for results, resource mobilization and financial sustainability

Strategic Priority 3: Scale up access to interventions, treatment and system capacity (service delivery) building

Strategic Priority 4: Enhance NTD monitoring and evaluation, surveillance and operations research.

The programmes strategic framework summary and strategic objectives are outlined in Table 11 below:
Table 11: Strategic Framework Summary

<table>
<thead>
<tr>
<th>STRATEGIC PRIORITIES</th>
<th>STRATEGIC OBJECTIVES</th>
</tr>
</thead>
</table>
| 1. Strengthen government ownership, advocacy, coordination and partnership | 1. Strengthen coordination mechanisms for NTDs control programme at the national and county level.  
2. Strengthen and foster partnerships for the control, elimination and eradication of targeted NTDs at the national and county level.  
3. Enhance high level reviews of NTDs programme performance and the use of lessons learnt to enhance advocacy awareness and effective implementation of targeted interventions.  
4. Strengthen advocacy, visibility and profile of NTDs control, elimination and eradication interventions at the national and county level. |
| 2. Enhance planning for results, resource mobilization and financial sustainability of NTDs programme | 1. Review integrated multi-year strategic plan and develop annual operational plans for control, elimination and eradication of the all NTDs in the country.  
2. Enhance resource mobilization approaches and strategies at the national and county level for NTDs interventions.  
3. Strengthen the integration and linkages of NTDs programme and financial plans into sector-wide, national and county budgetary and financial mechanism.  
4. Develop and update national NTDs policy and elaborate guidelines and tools to guide effective policy and programme implementation.  
5. Carry out mapping of case management diseases (leishmaniasis and cystic echinococcosis (hydatidosis) to generate data for planning control activities  
6. Conduct transmission assessment surveys for onchocerciasis |
3. **Scale up access to interventions, treatment, system capacity and service delivery building**

1. Scale-up an integrated preventive chemotherapy, including access to LF, schistosomiasis, STHs and Trachoma interventions.
2. Scale-up integrated case-management based disease interventions (Leishmaniasis, LF, Trachoma and cystic echinococcosis (hydatidosis)).
3. Strengthen integrated vector management and PHASE strategy for targeted NTDs.
4. Strengthen capacity at national and county level for NTDs programme management and implementation.

4. **Enhance NTDS monitoring and evaluation, surveillance and operational research**

1. Enhance monitoring and evaluation of national NTDs programme performance and outcome.
2. Strengthen the surveillance, response and control of epidemic prone NTDs.
3. Support operational research, documentation and evidence to guide innovative approaches to NTDs programme interventions.
4. Establish integrated data management systems and support impact assessment for NTDs in the country.

---

**National NTD Programme Goals, Objectives, Strategies and Targets**

The NTD programme brings together a number of diseases. These include LF, schistosomiasis, STH, trachoma, leishmaniasis, cystic echinococcosis, guinea worm, dengue and onchocerciasis. It is essential to maintain the disease-specific goals, objectives and strategies within the context of the overall NTD programme. Integration is promoted as a cost-effective approach that maximizes use of limited resources. These specific goals and objective are as outlined in Table 12.
### Table 12: Summary of NTD diseases specific Goals and Objectives

<table>
<thead>
<tr>
<th>Global goal</th>
<th>National goals</th>
<th>Objectives</th>
<th>Strategies</th>
<th>Delivery channel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soil Transmitted Helminths (STHs) Control</td>
<td>Reduction of morbidity due to STH to levels where they are no longer a public health problem by 2020</td>
<td><strong>Kenya STHs targets:</strong>&lt;br&gt;• To implement 100% MDA coverage in the community by year 2020&lt;br&gt;• To achieve 100% therapeutic coverage by 2020&lt;br&gt;• To eliminate high intensity (morbidity) of STH in endemic communities by 2020&lt;br&gt;• To reduce the prevalence of STH to less than 10% by 2020&lt;br&gt;• To increase access to sanitation in communities living in endemic areas</td>
<td>• Annual MDA of Albendazole in endemic counties&lt;br&gt;• PHASE strategy</td>
<td>• School based MDAs&lt;br&gt;• Community based MDAs&lt;br&gt;• Mass media&lt;br&gt;• Public meetings (baraza)&lt;br&gt;• School based mobilization&lt;br&gt;• IEC materials</td>
</tr>
<tr>
<td>Schistosomiasis control</td>
<td>Elimination of morbidity due to schistosomiasis by 2020</td>
<td><strong>Kenya Schistosomiasis targets:</strong>&lt;br&gt;• To implement MDA to 100% coverage in all endemic communities by 2020&lt;br&gt;• To achieve 100% therapeutic coverage by 2020&lt;br&gt;• To eliminate morbidity due to schistosomiasis in endemic communities by 2020.&lt;br&gt;• To increase access to sanitation in communities living in endemic areas&lt;br&gt;• To interrupt transmission of schistosomiasis by 2020</td>
<td>• Annual MDA of praziquantel in endemic counties&lt;br&gt;• PHASE strategy&lt;br&gt;• Snail vector control</td>
<td>• School based MDAs&lt;br&gt;• Community-based MDA&lt;br&gt;• Mass media&lt;br&gt;• Public meetings (baraza)&lt;br&gt;• School based mobilization&lt;br&gt;• IEC materials</td>
</tr>
<tr>
<td>LF Elimination</td>
<td>Elimination of LF as public health problem by 2020</td>
<td><strong>Kenyan PELF target</strong>&lt;br&gt;• To interrupt transmission of LF by 2020&lt;br&gt;• To reduce the morbidity and disability due to LF by 100% by 2020&lt;br&gt;• To achieve &gt;90% therapeutic coverage during the annual MDA.</td>
<td>• Annual MDA of DEC and albendazole to endemic counties.&lt;br&gt;• Vector control&lt;br&gt;• Hygiene management of lymphedema&lt;br&gt;• Hydrocoele surgery&lt;br&gt;• Health promotion and behaviour change communication.</td>
<td>• Community directed treatment approach/ campaigns based CDDs&lt;br&gt;• National malaria control intervention(LLITNs)</td>
</tr>
<tr>
<td>Trachoma Control</td>
<td>Elimination of blinding trachoma as a public health problem by 2020.</td>
<td><strong>Kenya Trachoma targets:</strong>&lt;br&gt;• To reduce the prevalence of Trachoma Trachiasis (TT) to less than 1/1000 by 2020.&lt;br&gt;• To reduce the prevalence of TF to less than 5% at community level by 2020.&lt;br&gt;• To increase access to safe water in community within endemic counties&lt;br&gt;• Increase proportion of clean faces</td>
<td>Comprehensive SAFE with:&lt;br&gt;• S: Surgery of trichiasis cases&lt;br&gt;• A: MDA with Azithromycin of entire at risk identified communities.&lt;br&gt;• F: Improved water supply for personal hygiene/face washing&lt;br&gt;• E: Health education and promotion of behavioural</td>
<td>• TT outreach camps&lt;br&gt;• Community based MDAs&lt;br&gt;• Mass media&lt;br&gt;• IEC&lt;br&gt;• Public barazas&lt;br&gt;• Health facility based</td>
</tr>
<tr>
<td>Global goal</td>
<td>National goals</td>
<td>Objectives</td>
<td>Strategies</td>
<td>Delivery channel</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Leishmaniasis                  |                                                                                   | among children of 1-9 years to at least 80%  
- To increase access to sanitation by at least 70% of communities within endemic areas    | change                                                                                                                                      | Hospital based  
- LLITNs  
- Indoor residual spraying  
- IEC materials  
- Public barazas  
- Integrated vector management (IVM)                                                                 |                                                                                  |
| **Global goal:** Leishmaniasis |                                                                                   |                                                                                                                                             |                                                                                                                                             |                                                                                  |
|                               | To control morbidity due to leishmaniasis                                         | Reduction of morbidity due to leishmaniasis in endemic areas to a level where it is no longer a public health problem                                                                                       | Early diagnosis and case management  
- Training of healthcare workers  
- Effective disease surveillance  
- Social mobilization and strengthening partnerships  
- Vector control                                                                 |                                                                                  |
| Dengue                         |                                                                                   | Reduction of morbidity due to dengue in endemic areas to a level where it is no longer a public health problem by 2020                                                                                       | Mapping distribution  
- Health promotion  
- Management and control of dengue                                                                 |                                                                                  |
| Guinea Worm (GW)               | Sustenance of surveillance awaiting certification for eradication.                 |                                                                                                                                             | Health promotion and community mobilization  
- Rumours investigations  
- COMBI-Strategy  
- Cash rewards                                                                 |                                                                                  |
| **Eradicate GW by 2020**       |                                                                                   |                                                                                                                                             |                                                                                  | Mass media  
- Meetings with stakeholders  
- IEC materials  
- Community based control                                                                 |                                                                                  |
| Cystic Echinococcosis (CE)     |                                                                                   | Reduction of morbidity due to CE in endemic areas to a level where it is no longer a public health problem by 2020                                                                                       | Mapping distribution  
- Health promotion  
- Dog population management  
- Treatment (surgery and chemotherapy)                                                                 |                                                                                  |
| **Global target**              |                                                                                   |                                                                                                                                             |                                                                                  | Mass screening  
- CHVs, CHEWs and Health facility  
- Schools  
- Veterinary personnel  
- Community  
- County government  
- Partners                                                                 |                                                                                  |
National Milestones
The NTD programme has set targets to be accomplished during the 2015-2020 period for each disease. LF and TT are targeted for elimination by 2020 through scaling up of MDAs and the PHASE strategy. Schistosomiasis and STH are targeted for morbidity elimination by 2020 through scaling up of MDAs and the PHASE strategy. Visceral leishmaniasis is targeted for morbidity control through active and passive case finding. These milestones are presented in Tables 13–18

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1  Completed mapping of STH and determined areas above intervention threshold and the endemic population</td>
<td>158 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2  Begun implementation of school-based/community-based treatments in endemic sub-counties</td>
<td>41 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3  Achieved 100% geographical coverage in STH endemic sub-counties</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4  Conducted 3-5 years of consecutive treatments in all endemic sub-counties with Sub-county coverage more than 75%</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5  Conducted first impact assessment activities in at least 50% of STH endemic sub-counties after at least 3 years of consecutive treatments</td>
<td>0 (0%)</td>
<td>94 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6  Endemic sub-counties achieving moderate morbidity control</td>
<td>41 (30%)</td>
<td>53 (70%)</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td></td>
</tr>
<tr>
<td>7  Endemic sub-counties achieving advanced morbidity control</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>(0%)</td>
<td>94 (100%)</td>
<td>94 (100%)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 14: Elimination milestones for Schistosomiasis 2015 - 2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed mapping of schistosomiasis and determined areas above intervention threshold and the endemic populations</td>
<td>158(100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Begun implementation of school-based/community-based treatments in endemic sub-counties</td>
<td>41(100%)</td>
<td>41(100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved 100% geographical coverage in schistosomiasis endemic sub-counties</td>
<td>10 (16%)</td>
<td>41(100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducted 3-5 years of consecutive treatments in all Endemic sub-counties with sub-counties coverage more than 75%</td>
<td>10 (16%)</td>
<td>41(100%)</td>
<td>41(100%)</td>
<td>41(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducted first impact assessment activities in at least 50% of schistosomiasis endemic sub-counties after at least 3 years of consecutive treatments</td>
<td>0 (0%)</td>
<td>10 (16%)</td>
<td>41(100%)</td>
<td>41(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endemic sub-counties achieving moderate morbidity control</td>
<td>10(16%)</td>
<td></td>
<td>41(100%)</td>
<td>41(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endemic sub-counties achieving advanced morbidity control</td>
<td>0 (%)</td>
<td>10 (16%)</td>
<td>41(100%)</td>
<td>41(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endemic sub-counties achieving elimination of transmission</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>10(16%)</td>
<td>41(100%)</td>
<td>41(100%)</td>
</tr>
</tbody>
</table>
**Table 15: Elimination milestones for lymphatic filariasis 2015-2020**

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Completed mapping of LF and determined LF endemic areas and the population at risk (epidemiological survey in the previously mapped sub county)</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Began implementation of LF MDA in sub county requiring LF MDA.</td>
<td>10 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Achieved 100% geographical coverage in LF endemic sub counties</td>
<td>10(100%)</td>
<td>10 (100%)</td>
<td>10(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Major urban areas with evidence of LF transmission under adequate MDA (sub county coverage more than 65%)</td>
<td>5(100%)</td>
<td>5(100%)</td>
<td>5(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conducted more than five rounds of MDA in all endemic IUs with sub county coverage more than 65% and stopped MDA in at least 50% of LF endemic IUs and WHO criteria</td>
<td>10(100%)</td>
<td>10(100%)</td>
<td>10(100%)</td>
<td>10(100%)</td>
<td>10(100%)</td>
</tr>
<tr>
<td>Conducted first TAS activity in at least 50% of LF endemic IUs after at least 5 rounds of MDA</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>10(100%)</td>
</tr>
<tr>
<td>Conducted and passed at least 2 TAS activities in 75% of IUs</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Started passive surveillance and vector control activities in at least 75% of IUs</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>Present the “dossier” for in-country verification of absence of LF transmission</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>1. Completed mapping of trachoma and determined areas above intervention threshold and the target population</td>
<td>43 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Begun implementation of community-based treatments in target sub-counties</td>
<td>34 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Achieved 100% geographical coverage in trachoma target sub-counties</td>
<td>34 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Conducted 3-5 rounds of treatments in all target sub-counties with coverage of more than 75%</td>
<td>19 (100%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Conducted first impact assessment activities in at least 50% of trachoma target sub-counties after at least 3 rounds of treatments</td>
<td>14 (73.6%)</td>
<td>19 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 16: Elimination milestones for Trachoma 2015 - 2020

<table>
<thead>
<tr>
<th>Proportion and number of IUs where there is fully coverage of morbidity-management services and access to basic care</th>
<th>0(0%)</th>
<th>5(50%)</th>
<th>8(80%)</th>
<th>10(100%)</th>
<th>10(100%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion and number of IUs where 75% of hydrocele cases benefited from appropriate surgery</td>
<td>0(0%)</td>
<td>5(50%)</td>
<td>8(80%)</td>
<td>10(100%)</td>
<td>10(100%)</td>
</tr>
</tbody>
</table>
6. Started passive surveillance in at least 75% of IUs.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 (8.82%)</td>
<td>4 (11.76%)</td>
<td>8 (23.53%)</td>
<td>14 (41.18%)</td>
<td>34 (100%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>

7. Proportion and number of target sub-counties where there is full coverage of case-management services

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>34 (100%)</td>
<td>34 (100%)</td>
<td>34 (100%)</td>
<td>34 (100%)</td>
<td>0 (0%)</td>
<td></td>
</tr>
</tbody>
</table>

8. Target sub-counties achieved elimination of blinding trachoma

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 (8.82%)</td>
<td>4 (11.76%)</td>
<td>8 (23.53%)</td>
<td>14 (41.18%)</td>
<td>34 (100%)</td>
<td>34 (100%)</td>
</tr>
</tbody>
</table>

Table 17: Elimination milestones for visceral leishmaniasis 2015-2020

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Active case detection in 100% of visceral leishmaniasis highly endemic sub-counties</td>
<td>10 (33.3%)</td>
<td>20 (66.7%)</td>
<td>30 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Passive case detection in 100% of other visceral leishmaniasis endemic sub-counties</td>
<td>10 (33.3%)</td>
<td>20 (66.7%)</td>
<td>30 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Manage all patients in peripheral health facilities</td>
<td>10 (33%)</td>
<td>15 (50%)</td>
<td>30 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Refer severe and complicated cases for management at County hospitals and reference centres</td>
<td>30 (100%)</td>
<td>30 (100%)</td>
<td>30 (100%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Achieved 100% treatment coverage of identified visceral leishmaniasis cases</td>
<td>30 (100%)</td>
<td>30 (100%)</td>
<td>30 (100%)</td>
<td>30 (100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Support vector control through integrated vector management (IVM) activities</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>10 (33.3%)</td>
<td>15 (50%)</td>
</tr>
<tr>
<td>---</td>
<td>--------------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>------------</td>
<td>----------</td>
</tr>
<tr>
<td>7</td>
<td>Started passive surveillance in at least 50% of target sub-counties that are implementing IVM activities</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>10 (33%)</td>
<td>15 (50%)</td>
</tr>
<tr>
<td>8</td>
<td>Started sentinel site surveillance in at least 50% of target sub-counties for vectors control activities</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>15 (50%)</td>
</tr>
</tbody>
</table>
Table 18: Elimination milestones for onchocerciasis 2015-2020

<table>
<thead>
<tr>
<th>INDICATORS</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Completed mapping/delineation of onchocerciasis and determined onchocerciasis</td>
<td>0(0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 Begun implementation of onchocerciasis MDA in sub counties requiring MDA including loiasis co-endemic areas</td>
<td>0(0%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 Achieved 100% geographical coverage in onchocerciasis endemic sub counties</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 Conducted more than 10 rounds of MDA in all endemic IUs with sub county coverage more than 65%</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td></td>
</tr>
<tr>
<td>5 Conduct phase 1A epidemiological evaluation activities in at least 50% of onchocerciasis endemic IUs after at least 10 rounds of MDA</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td>0(0%)</td>
<td></td>
</tr>
<tr>
<td>6 Conducted and passed epidemiological and entomological assessment in 50% of IUs</td>
<td>0(0%)</td>
<td>17(100%)</td>
<td>17(100%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 Present the “dossier” for in-country verification of absence of onchocerciasis transmission</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1(100%)</td>
</tr>
<tr>
<td>8 Proportion and number of IUs where treatment has been stopped</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

PART 3: OPERATIONAL FRAMEWORK

This section deals with the operational plan for control of NTDs in Kenya. The operational plan is based on individual disease programme goals, targets/specific objectives and individual disease control strategies. To achieve these programme’s objectives, specific disease objectives and strategies are shown in Table 19 and are implemented in an integrated way. Programme specific
objectives are drawn from the individual disease programme targets/specific objectives as outlined below. It should be noted that each individual disease programme shall remain focused on its goals and objectives in order to ensure that they are achieved within the integrated NTDs control approach and thus contribute to the overall National goal.

Scaling up access to NTD interventions and treatment and service delivery capacity

The key activities for scaling up access to NTD interventions, treatment and service delivery capabilities are shown in Table 19.

*Table 19: Activities for Strategic Priorities*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1: Scale up integrated preventive chemotherapy, including access to LF, STH, schistosomiasis, onchocerciasis and trachoma interventions.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Trachoma</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapping of Trachoma</td>
<td>Mapping of trachoma</td>
<td>2015</td>
<td>Transport and fuel, stationery, allowances</td>
</tr>
<tr>
<td>Conduct MDA for control of Trachoma</td>
<td>Procurement of drugs and commodities</td>
<td>2015-2020</td>
<td>Drugs (Azithromycin Tablets and Paediatric Oral Suspension, Tetracycline Eye Ointment)</td>
</tr>
<tr>
<td></td>
<td>Distribute drugs and consumables</td>
<td>2015-2020</td>
<td>Transport, fuel, allowances</td>
</tr>
<tr>
<td></td>
<td>Training of Health workers &amp; volunteers</td>
<td>2015-2020</td>
<td>Conference facilities, allowances, transport, stationery,</td>
</tr>
<tr>
<td></td>
<td>Development of IEC material</td>
<td>2015-2020</td>
<td>Conference facilities, printing, allowances</td>
</tr>
<tr>
<td></td>
<td>Community mobilization</td>
<td>2015-2020</td>
<td>Transport and fuel, allowances</td>
</tr>
<tr>
<td></td>
<td>Mass drug distribution &amp; supervision</td>
<td>2015-2020</td>
<td>MDA registers, distribution costs (transport, fuel and allowances)</td>
</tr>
<tr>
<td></td>
<td>Mop up of drug balances</td>
<td>2015-2020</td>
<td>Allowances, transport and fuel, stationery</td>
</tr>
<tr>
<td>Activity Description</td>
<td>Time Frame</td>
<td>Expenses</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>------------</td>
<td>----------</td>
<td></td>
</tr>
<tr>
<td>Report writing</td>
<td>2015-2019</td>
<td>Allowance, conference facilities and stationery</td>
<td></td>
</tr>
<tr>
<td>Procurement and storage of drugs &amp; IEC materials</td>
<td>2015-2020</td>
<td>Funds for storage costs, Transport and travel allowances</td>
<td></td>
</tr>
<tr>
<td>Social mobilization</td>
<td>2015-2020</td>
<td>Transportation, mass media costs, allowances</td>
<td></td>
</tr>
<tr>
<td>Production of training, monitoring and IEC materials and tablet poles</td>
<td>2015-2020</td>
<td>Conference facilities, printing costs, production costs</td>
<td></td>
</tr>
<tr>
<td>Distribution of programme materials</td>
<td>2015-2020</td>
<td>Transport, allowances</td>
<td></td>
</tr>
<tr>
<td>Distribution of drugs (donated to MOH through WHO)</td>
<td>2015-2020</td>
<td>Vehicles, fuel and allowances</td>
<td></td>
</tr>
<tr>
<td>Training of County-Based Master Trainers</td>
<td>2015-2020</td>
<td>Conference facilities, stationery, transport, allowances</td>
<td></td>
</tr>
<tr>
<td>Training of sub-counties health and Ministry of Education personnel</td>
<td>2015-2020</td>
<td>Conference facilities, stationery, transport, allowances</td>
<td></td>
</tr>
<tr>
<td>Training of teachers</td>
<td>2015-2020</td>
<td>Conference facilities, stationery, transport, allowances</td>
<td></td>
</tr>
<tr>
<td>Conduct community Health Assistants meetings</td>
<td>2015-2020</td>
<td>Meeting hall, stationery, transport, allowances</td>
<td></td>
</tr>
<tr>
<td>Supervision of MDA</td>
<td>2015-2020</td>
<td>Transport, allowances</td>
<td></td>
</tr>
<tr>
<td>Pre- and post-deworming prevalence surveys</td>
<td>2015-2016/17</td>
<td>Lab consumables, transport, allowance</td>
<td></td>
</tr>
<tr>
<td>Report writing</td>
<td>2015-2020</td>
<td>Allowance, conference facility and stationery</td>
<td></td>
</tr>
</tbody>
</table>

Schistosomiasis & STH

- Conduct MDA campaigns for schistosomiasis & STHS
- Production of training, monitoring and IEC materials and tablet poles
- Distribution of programme materials
- Distribution of drugs (donated to MOH through WHO)
- Training of County-Based Master Trainers
- Training of sub-counties health and Ministry of Education personnel
- Training of teachers
- Conduct community Health Assistants meetings
- Supervision of MDA
- Pre- and post-deworming prevalence surveys
- Report writing
<table>
<thead>
<tr>
<th>Activity</th>
<th>Year</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dissemination of treatment and prevalence survey results</td>
<td>2015 – 2020</td>
<td>Conference facilities, allowances, transport, stationery</td>
</tr>
<tr>
<td>Procurement and storage of drugs &amp; IEC materials</td>
<td>2015-2020</td>
<td>Funds for storage costs, Transport and travel allowances</td>
</tr>
<tr>
<td><strong>LF</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct MDA for LF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advocacy/social mobilization</td>
<td>2015-2020</td>
<td>Transport, allowances, IEC materials</td>
</tr>
<tr>
<td>Procurement and storage of drugs &amp; IEC materials</td>
<td>2015-2020</td>
<td>Funds for storage costs, Transport and travel allowances</td>
</tr>
<tr>
<td>Training of CDD trainers</td>
<td>2015-2020</td>
<td>Allowances, Stationery, Transport, Conference facility, Training materials</td>
</tr>
<tr>
<td>Training of CDDs</td>
<td>2015-2020</td>
<td>Allowances, Stationery, Transport, Conference facility, Training materials</td>
</tr>
<tr>
<td>Training of peripheral health care workers</td>
<td>2015-2020</td>
<td>Conference facilities, Allowances, Transport, transport, training materials</td>
</tr>
<tr>
<td>Procure registers</td>
<td>2015-2020</td>
<td>Funds</td>
</tr>
<tr>
<td>Distribution of drugs &amp; IEC materials to Sub-counties</td>
<td>2015-2020</td>
<td>Allowances, Transport, storage</td>
</tr>
<tr>
<td>CDD register update and drug distribution</td>
<td>2015-2020</td>
<td>Allowances, Stationery, transport</td>
</tr>
<tr>
<td>MDA campaigns</td>
<td>2015-2020</td>
<td>Allowances, Transport</td>
</tr>
<tr>
<td>MDA &amp; Supervision of MDA</td>
<td>2015-2020</td>
<td>Allowances, Transport, stationery, drugs</td>
</tr>
<tr>
<td>Monitoring and management of adverse</td>
<td>2015-2020</td>
<td>Drugs, allowances, Stationery</td>
</tr>
<tr>
<td>Side effects</td>
<td>Post MDA assessment of reported coverage</td>
<td>2015-2020</td>
</tr>
<tr>
<td>--------------</td>
<td>----------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Conduct epidemiological assessment of effects of inconsistent MDAs on interruption of LF transmission</td>
<td>Epidemiological survey in 13 MDA IUs</td>
<td>2015-2018</td>
</tr>
<tr>
<td>Pre-TAS</td>
<td>Conduct a pre Transmission Assessment Survey (TAS) after 3 rounds of MDA in IUs with inconsistent/un consecutive MDAs</td>
<td>2018-2019</td>
</tr>
<tr>
<td>Report writing</td>
<td>2015-2020</td>
<td>Allowances, transport, fuel, stationery</td>
</tr>
</tbody>
</table>

**Strategic Objective 2: Scale up integrated case-management-based diseases interventions**

**LF**

<table>
<thead>
<tr>
<th>Hydrocele surgery</th>
<th>Follow-up clinics to confirm hydroceles</th>
<th>2015-2020</th>
<th>Drugs, consumables, allowances, Transport, stationery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training in hydrocele surgery</td>
<td>2015-2020</td>
<td>Allowances, Transport, Stationery</td>
<td></td>
</tr>
<tr>
<td>Support hydrocele surgery</td>
<td>2015-2020</td>
<td>Surgical kits, Consumables, Allowances, drugs</td>
<td></td>
</tr>
<tr>
<td>Hydrocele surgery</td>
<td>2015-2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lymphodema management</th>
<th>Follow-up clinics to recruit cases</th>
<th>2015-2020</th>
<th>Consumables, Transport, Allowances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training of support groups</td>
<td>2015-2020</td>
<td>Conference facilities, Consumables, Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td>Trachoma</td>
<td>Lymphodema management in support groups</td>
<td>2015-2020</td>
<td>Equipment, Consumables</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>----------------------------------------</td>
<td>-----------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Scale up TT surgeries for control</td>
<td>Procure and distribute surgery equipment, sterilization kits and consumables</td>
<td>2015-2020</td>
<td>Funds, Allowances, Transport</td>
</tr>
<tr>
<td></td>
<td>Training and certifying TT surgeons</td>
<td>2015-2020</td>
<td>Surgical consumables, Stationery, Allowances, Transport, health facility</td>
</tr>
<tr>
<td></td>
<td>Training of TT case finders in identification, referral and counselling skills</td>
<td>2015-2020</td>
<td>Allowances, Transport, Stationery, training materials</td>
</tr>
<tr>
<td></td>
<td>Conduct TT surgery camps</td>
<td>2015-2020</td>
<td>Surgical consumables, Stationery, Allowances, Transport, drugs</td>
</tr>
<tr>
<td></td>
<td>Conduct follow up of operated cases</td>
<td>2015-2020</td>
<td>Consumables, Stationery, Allowances, Transport</td>
</tr>
<tr>
<td>Leishmaniasis</td>
<td>Dissemination of treatment guidelines for visceral leishmaniasis</td>
<td>2015-2018</td>
<td>Allowance, Transport, Stationery</td>
</tr>
<tr>
<td></td>
<td>Procurement, storage and distribution of drugs and test kits</td>
<td>2015-20120</td>
<td>Funding, Transport, storage facilities, allowances</td>
</tr>
<tr>
<td>Mapping of leishmaniasis distribution</td>
<td>Mapping prevalence survey, magnitude and geographical distribution of leishmaniasis</td>
<td>2015-2017</td>
<td>Allowances, Equipment, lab consumables, transport, Stationery</td>
</tr>
<tr>
<td>Disease</td>
<td>Activity</td>
<td>Year</td>
<td>Materials Provided</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>------------</td>
<td>---------------------------------------------------------</td>
</tr>
<tr>
<td>Health education, advocacy and social mobilization for control of leishmaniasis</td>
<td>Developing information, education and communication (IEC) materials</td>
<td>2015-2020</td>
<td>Conference, transport, allowance, stationery</td>
</tr>
<tr>
<td></td>
<td>Community social mobilization for Leishmanias</td>
<td>2015-2020</td>
<td>Transport, stationery, allowance, conference facilities</td>
</tr>
<tr>
<td>Cystic echinococcosis</td>
<td>Mapping of CE</td>
<td>2015-2018</td>
<td>Lab. consumables, Transport, stationery, allowance, equipment,</td>
</tr>
<tr>
<td></td>
<td>Determine geographical distribution (prevalence surveys)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training of health workers on prevention, diagnosis and control</td>
<td>2015-2017</td>
<td>Conference facilities, allowance, Transport, Stationery, training materials</td>
</tr>
<tr>
<td>Health promotion, advocacy and social mobilization</td>
<td>Development and dissemination of IEC materials</td>
<td>2015-2020</td>
<td>Conference facilities, allowance, Transport, Stationery</td>
</tr>
<tr>
<td>Scale up CE surgeries</td>
<td>Conducting surgeries</td>
<td>2015-2020</td>
<td>Surgical consumables, equipment, materials, allowances, transport, drugs</td>
</tr>
<tr>
<td>Strategic Objective 3: Strengthening integrated vector management and environmental measures for targeted NTDs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Improve access to water and basic sanitation for NTDS control in the community</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advocating for increasing coverage of safe water supply and sanitation</td>
<td>2015-2020</td>
<td>Conference facilities, stationery, allowances, transport</td>
<td></td>
</tr>
<tr>
<td>Strengthen inter-sectoral collaboration for water supply and sanitation</td>
<td>2015-2020</td>
<td>Conference facilities, stationery, allowances, transport</td>
<td></td>
</tr>
<tr>
<td><strong>Integrated vector management (IVM)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community training on integrated vector management</td>
<td>2015-2020</td>
<td>Insecticides, ITNs, equipment, conference facilities, allowance, Transport, Stationery</td>
<td></td>
</tr>
<tr>
<td>Mobilizing and supporting community members to undertake IVM measures</td>
<td>2015-2020</td>
<td>Insecticides, ITNs, equipment, conference facilities, allowance, transport, stationery</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategic Objective 4: Strengthen capacity at national level for NTD programme management and implementation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Capacity building</strong></td>
</tr>
<tr>
<td>Identification of training needs on NTDS control among health care workers</td>
</tr>
<tr>
<td>Capacity building of health personnel in NTDS</td>
</tr>
<tr>
<td>Conduct refresher trainings for health care personnel in case management of NTDS and related disabilities</td>
</tr>
<tr>
<td>Training health personnel in management, data management</td>
</tr>
</tbody>
</table>
and monitoring and evaluation

<table>
<thead>
<tr>
<th>To build capacity</th>
<th>Increasing the numbers and diversity of human resources in NTD programme</th>
<th>2015-2020</th>
<th>Funds, office space and equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>To strengthen infrastructure</td>
<td>To acquire appropriate office space</td>
<td>2015-2016</td>
<td>Funds, furniture, computers, office equipment</td>
</tr>
<tr>
<td>To enhance coordination implementation</td>
<td>Acquisition of vehicles</td>
<td>2015-2020</td>
<td>Funds</td>
</tr>
<tr>
<td></td>
<td>Acquisition of appropriate IT software and hardware</td>
<td>2015-2020</td>
<td>Funds</td>
</tr>
<tr>
<td></td>
<td>To enhance coordination of implementation activities</td>
<td>2015-2020</td>
<td>Funds</td>
</tr>
</tbody>
</table>

#### 10.1 Scaling up preventive chemotherapy interventions

The strategies that are being implemented in the integrated (Preventive Chemotherapy Neglected Tropical Diseases PC-NTDs) control and elimination programme include:

(i) Integrated mass drug administration (MDA)

(ii) Transmission control through effective and comprehensive vector control

(iii) The PHASE strategy

(iv) Strengthening morbidity management interventions

The preventive chemotherapy package targets LF, schistosomiasis, STH and trachoma through the use of MDAs. The delivery channel may either be school or community based. In addition, some PC NTD conditions like hydrocoele, lymphoedema and trachoma trichiasis will require to be managed under case management package. Transmission control as well as PHASE strategy will also be applied in order to accelerate reduction of disease burden. The various activities for PC NTDs interventions are outlined in Table 20.
The implementation of MDA is guided by the diseases combination in a particular implementation unit resulting in different types of MDAs. The different types of MDAs also influence the timing for administering different drug combinations. These MDA types and drug timing periods are outlined in Table 21.

Table 20: Activities for scaling up PC NTDs interventions

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Time Frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1: Scale up of integrated preventive chemotherapy, including access to LF, STHS, and Schistosomiasis and Trachoma interventions.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conduct MDA for Trachoma elimination</td>
<td>Procurement of drugs and commodities</td>
<td>2015-2020</td>
<td>Drugs (Zithromax Tabs and POS, TEO), customs clearance, handling, storage ,taxes</td>
</tr>
<tr>
<td></td>
<td>Distribute drugs and consumables</td>
<td>2015-2020</td>
<td>Allowances, Transport, storage</td>
</tr>
<tr>
<td></td>
<td>Training of Health workers and volunteers</td>
<td>2015-2020</td>
<td>Allowances, Transport, Stationery, Conference facilities</td>
</tr>
<tr>
<td></td>
<td>Production of IEC materials, tools</td>
<td>2015-2020</td>
<td>Development, printing, transport</td>
</tr>
<tr>
<td></td>
<td>Community mobilization</td>
<td>2015-2020</td>
<td>Mass media, Public address, own transport, allowances</td>
</tr>
<tr>
<td></td>
<td>Actual MDA events</td>
<td>2015-2020</td>
<td>Allowances, Transport owned/hired, airtime</td>
</tr>
<tr>
<td></td>
<td>Supervision of MDA</td>
<td>2015-2020</td>
<td>Transport, allowances, airtime</td>
</tr>
<tr>
<td></td>
<td>Report writing and dissemination</td>
<td>2015-2020</td>
<td>Stationary, airtime, allowances</td>
</tr>
<tr>
<td></td>
<td>Baseline survey for newly suspected sub-Counties</td>
<td></td>
<td>Planning meetings, Conference facilities, community mobilization, Allowances, Consumables, drugs, transport, Stationery</td>
</tr>
<tr>
<td></td>
<td>Conduct Impact Assessment surveys</td>
<td>2015-2020</td>
<td>Planning meetings, Conference facilities, community mobilization, Allowances, Consumables, drugs, transport, Stationery</td>
</tr>
<tr>
<td></td>
<td><strong>Schistosomiasis and STH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Training in transmission assessment techniques and other skills (new methods for monitoring)</td>
<td>2015-2016</td>
<td>Allowances, Transport, Stationery, conference facilities</td>
</tr>
<tr>
<td></td>
<td>Operational research on emerging tools</td>
<td>2015-2018</td>
<td>Allowances, Transport, Stationery, conference facilities</td>
</tr>
<tr>
<td></td>
<td>Research on breaking the transmission of STH</td>
<td>2015 - 2020</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Conduct MDA campaigns for Schistosomiasis &amp; STH</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social mobilization</td>
<td>2015-2020</td>
<td>Allowances and transport</td>
</tr>
<tr>
<td></td>
<td>Production of IEC materials</td>
<td>2015-2020</td>
<td>Funds</td>
</tr>
<tr>
<td></td>
<td>Training of Master Trainers</td>
<td>2015-2018</td>
<td>Allowances, stationery, transport, conference facilities</td>
</tr>
<tr>
<td></td>
<td>Training of sub-counties health and Ministry of basic education workers</td>
<td>Q3, Q4 2015-2018</td>
<td>Allowances, stationery, transport, conference facilities</td>
</tr>
<tr>
<td></td>
<td>Training of teachers</td>
<td>Q4 2015-2017</td>
<td>Allowances, stationery, transport, conference facilities</td>
</tr>
<tr>
<td></td>
<td>Training of community volunteers</td>
<td>2015-2020</td>
<td>Allowances, stationery, transport, conference facilities</td>
</tr>
<tr>
<td></td>
<td>Procure registers</td>
<td>2015-2020</td>
<td>Funds</td>
</tr>
<tr>
<td>Activity</td>
<td>2015-2020</td>
<td>Funding Sources</td>
<td></td>
</tr>
<tr>
<td>------------------------------------------</td>
<td>----------------------------</td>
<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td>Servicing of vehicles and transport</td>
<td></td>
<td>Funds, Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td>drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation of IEC materials to</td>
<td>2015-2020</td>
<td>Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td>Sub-counties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation of IEC materials to</td>
<td>2015-2020</td>
<td>Allowances, Stationery</td>
<td></td>
</tr>
<tr>
<td>Sub-counties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision of MDA</td>
<td>2015-2020</td>
<td>Allowances, Transport,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Initial social mobilization</td>
<td>2015-2020</td>
<td>Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other advocacy/social mobilization</td>
<td>2015-2020</td>
<td>Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procurement of IEC materials</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of CDD trainers</td>
<td>2015-2020</td>
<td>Allowances, Stationery,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Transport, Conference facility</td>
<td></td>
</tr>
<tr>
<td>Training of CDDs</td>
<td>2015-2020</td>
<td>Allowances, Stationery, Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training of peripheral health care</td>
<td>2015-2020</td>
<td>Conference facilities,</td>
<td></td>
</tr>
<tr>
<td>workers</td>
<td></td>
<td>Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Procure registers</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Servicing of vehicles and transport</td>
<td>2015-2020</td>
<td>Funds, Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td>drugs</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transportation of IEC materials to</td>
<td>2015-2020</td>
<td>Allowances, Transport</td>
<td></td>
</tr>
<tr>
<td>Sub-counties</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CDD register update and drug distribution</td>
<td>2015-2020</td>
<td>Allowances, Stationery</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Supervision of MDA</td>
<td>2015-2020</td>
<td>Allowances, Transport,</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>2015-2020</td>
<td>Drugs, allowances, Stationery</td>
<td></td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Cross cutting MDA Types</th>
<th>Delivery Channels</th>
<th>Timing of Treatment</th>
<th>Disease combination</th>
<th>Target sub-counties</th>
<th>Requirements</th>
<th>Other mass disease control interventions in the sub-counties</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDA 2</td>
<td>Community based/school based</td>
<td>Month 1</td>
<td>LF, Schistosomiasis, STHs (high prevalence)</td>
<td>7</td>
<td>-Training of Health Care Personnel -Training of teachers &amp; community volunteers. -Social Mobilization -Supervision -Production of tools -Logistics for drug distribution and management</td>
<td>School Deworming Programme -Immunization campaigns -Feeding programmes</td>
</tr>
<tr>
<td>T1</td>
<td>School based</td>
<td>Month 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA 2</td>
<td>Community based</td>
<td>Month 1</td>
<td>LF, Schistosomiasis, STHs (low prevalence)</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>School based/community based</td>
<td>Month 6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA 4</td>
<td>Community based</td>
<td>Month 1</td>
<td>Trachoma, Schistosomiasis &amp; STHs (low prevalence)</td>
<td>9</td>
<td>Training of Health Care Personnel -Training of teachers &amp; community volunteers. -Social Mobilization -Supervision -Production of tools -Logistics for drug distribution and management</td>
<td>School Deworming Programme -Immunization campaigns -Feeding programmes</td>
</tr>
<tr>
<td>T1</td>
<td>School based</td>
<td>Month 1 week 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA 4</td>
<td>Community based</td>
<td>Month 1</td>
<td>Trachoma &amp; STHs (low prevalence)</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>School based</td>
<td>Month 1, week 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1</td>
<td>School based</td>
<td>Month 1</td>
<td>Schistosomiasis, STHs (low prev)</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>School based</td>
<td>Month 1</td>
<td>Schistosomiasis alone</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MDA4,</td>
<td>Community-based Facility based</td>
<td>School-based House to house</td>
<td>Annual</td>
<td>Trachoma only</td>
<td>Endemic sub-counties</td>
<td></td>
</tr>
</tbody>
</table>

**Legend**

MDA1 = Ivermectin + Albendazole  
MDA2 = DEC + Albendazole  
T1 = Praziquantel + Albendazole or Praziquantel + mebendazole  
T2 = Praziquantel only  
T3 = Albendazole or mebendazole only  
MDA4 = Azithromycin only
Scaling up/Scaling down plan

Since implementation of NTD control activities in early 2010, success has been noted in reduction of diseases burden especially in PC-NTDs. However, in other areas, this improvement in disease reduction has not been realized. This implies that we need to scale up implementation units that had poor coverage so as to reach our goal of elimination by 2020; while we scale down in areas we had 100% coverage. In case management diseases and conditions, control activities were not well implemented due to constraints in funding. This means we have to scale up all activities in case management diseases. The number of counties and total population to be treated to enable us scale up and scale down implementation activities are shown in Table 22.

Table 22: Scaling up/Scaling down plan

<table>
<thead>
<tr>
<th>NTD</th>
<th>PCT IMPLEMENTATION (MDA)</th>
<th>IDM IMPLEMENTATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total No. Sub-Counties requiring MDA</td>
<td>Total at risk population</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015 No. Sub-Counties and Total population to be treated</td>
</tr>
<tr>
<td>STH</td>
<td>94</td>
<td>94 6m</td>
</tr>
<tr>
<td>Schistosomiasis</td>
<td>41</td>
<td>41 600,000 (4m sac &amp; community)</td>
</tr>
<tr>
<td>LF</td>
<td>13</td>
<td>13(3.7m)</td>
</tr>
<tr>
<td>Trachoma</td>
<td>19</td>
<td>3.3 m</td>
</tr>
<tr>
<td>Onchocerciasis*</td>
<td>0</td>
<td>1.34 m</td>
</tr>
<tr>
<td>LF*</td>
<td>13</td>
<td>3.7</td>
</tr>
<tr>
<td>Trachoma</td>
<td>34</td>
<td>7.0m</td>
</tr>
<tr>
<td>LEISH</td>
<td>30</td>
<td>3.0</td>
</tr>
<tr>
<td>Dengue*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Onchocerciasis * TAS

Trachoma - Population growth rate of 3% p.a taken into account.
To be determined when figures are available (after mapping)

11.1 Scaling up NTD case management interventions

In the same way that treatments for more than one disease are given in MDA, common interventions in the case management of Trachoma Trichiasis (TT), Leishmaniasis, LF disabilities, CE and dengue should be coordinated in areas where they co-exist. However, due to partners’ interest and funding constrains, this package has not been utilised fully. As interventions of these diseases are scaled, some of these challenges will be overcome. The intervention packages for case management disease are outlined in Tables 23 and 24.

**Table 23: Activities for case management interventions**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Timeframe</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydrocoele surgery</td>
<td>Update skills (Training) of clinicians on hydrocelectomy</td>
<td>2015-2020</td>
<td>Surgical kits, allowances, conference facilities, stationery</td>
</tr>
<tr>
<td>Elephantiasis/lymphoedema disability</td>
<td>Training of first-line health/community workers, patients and family members</td>
<td>2015-2020</td>
<td>-Washing kits (bucket, towel, soap, clean water) -Antibiotics/Vaseline creams -Allowances, transport, conference facilities, stationery</td>
</tr>
<tr>
<td>Trichiasis surgery</td>
<td>Training of TT surgeons</td>
<td>2015-2020</td>
<td>Surgery kits and sets, consumables Allowances, transport, conference facilities, stationery</td>
</tr>
<tr>
<td>TT surgical camps in 34 sub-counties</td>
<td></td>
<td>2015-2020</td>
<td>Allowances, Fuel, Lid rotation kits, transport, drugs and disposable supplies</td>
</tr>
<tr>
<td>Support supervision by the programme during surgical camps</td>
<td></td>
<td>2015-2020</td>
<td>Allowance, fuel, stationery, transport</td>
</tr>
<tr>
<td>Leishmaniasis treatment</td>
<td>Training of clinician, laboratory technicians and nurses on leishmaniasis case detection and management</td>
<td>2015-2020</td>
<td>Training modules, conference facilities, transport, allowances and stationery</td>
</tr>
<tr>
<td>Equipping laboratories for case detection</td>
<td>Procurement of laboratory equipment and reagents</td>
<td>2015-2020</td>
<td>Funds for purchasing Rk39 Kits, Microscopes, lab reagents and other supplies</td>
</tr>
<tr>
<td>Provision of drugs</td>
<td>Procurement, storage and distribution of drugs, reagents and kits</td>
<td>2015-2020</td>
<td>Funds for procurement, clearance and storage fees, fuel, transport and allowance</td>
</tr>
<tr>
<td>Category</td>
<td>Activity</td>
<td>Timeline</td>
<td>Funds/Inclusions</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
<td>----------------</td>
<td>---------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Mapping disease distribution</td>
<td>Carrying out surveys</td>
<td>2015-2020</td>
<td>Lab consumables (Rk39 Kits), GPS, Survey maps, transport, allowance, fuel, stationery</td>
</tr>
<tr>
<td>Advocacy</td>
<td>Sensitization meetings with community members and county leaders</td>
<td>2015-2018</td>
<td>Funds, conference facility, allowances, transport, IEC materials, fuel</td>
</tr>
<tr>
<td>Community social mobilization</td>
<td>Development and dissemination of IEC materials</td>
<td>2015-2020</td>
<td>IEC materials, fuel, conference facilities, allowances, transport fuel, funds for mass media messages and communication allowance</td>
</tr>
<tr>
<td>Surveillance of GW</td>
<td>Train surveillance officers</td>
<td>2015-2020</td>
<td>Funds, reporting tools, fuel, conference facilities, allowances, transport, fuel, funds for mass media messages and communication allowance, IEC materials, training materials</td>
</tr>
<tr>
<td>Support supervision</td>
<td>Develop a support supervision tool</td>
<td>2015-2020</td>
<td>Allowances, fuel and vehicles/motorcycles maintenance, supervision tools</td>
</tr>
<tr>
<td>Health promotion</td>
<td>Develop and disseminate IEC materials</td>
<td>2015-2020</td>
<td>Allowances, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances</td>
</tr>
<tr>
<td>Monitoring and evaluation</td>
<td>Develop monitoring and evaluation tools</td>
<td>2015-2020</td>
<td>Allowances, fuel, Training module, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances</td>
</tr>
<tr>
<td>Integrated vector management (IVM)</td>
<td>Carry out community sensitization Training communities on adoption of IVM measures</td>
<td>2015-2020</td>
<td>Allowances, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances</td>
</tr>
<tr>
<td>CE</td>
<td>Determine the geographical distribution of CE (prevalence) Sensitization of the community Orientation of veterinary personnel</td>
<td>2015/16 2015/16 2015/16</td>
<td>Allowances, Equipment, Transport, Lab consumables, transport and stationery</td>
</tr>
<tr>
<td>Health promotion</td>
<td>Development, production and dissemination of IEC materials</td>
<td>2015</td>
<td>Allowances, fuel and vehicles/motorcycles maintenance,</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Category</th>
<th>Activity Details</th>
<th>Year(s)</th>
<th>Budget Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dog population management</td>
<td>Dog registration, Treatment, Elimination of stray dogs</td>
<td>2015/16</td>
<td>Allowances, identification tags, transport, Stationery, Drugs (praziquintel)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Allowances, transport, consumables, Drugs (Stryknin), consumables, allowances, transport, stationery</td>
</tr>
<tr>
<td>Training</td>
<td>Training of TOTs, Training of health cadres (CHVs, CHEWs, Health facility staff), Orientation of local surgeons on CE surgery</td>
<td>2015</td>
<td>Consultancy, allowances, transport and stationery, Consultancy, allowances, transport and stationery, Consultancy, allowances, transport</td>
</tr>
<tr>
<td>Updating government HIS</td>
<td>Incorporate CE in health facility reporting and HIS (CE to become a notifiable disease)</td>
<td>2015-2020</td>
<td>Stationery (production of new health facility registers)</td>
</tr>
<tr>
<td>Scaling up of CE treatment</td>
<td>Chemotherapy, Surgery, Follow up examination for determining the disease progress</td>
<td>2015-2020</td>
<td>Drugs (albendazole), transport, allowances</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Flight costs, consultancy, allowances, transport, consumables, lab consumables, Consultancy, allowances, consumables</td>
</tr>
<tr>
<td>Dengue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapping of Dengue</td>
<td>Determine the geographical distribution of CE (prevalence), Sensitization of the community, Orientation of veterinary personnel</td>
<td>2015/16</td>
<td>Allowances, Equipment, Transport, Lab consumables, transport and stationery</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015/16</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015/16</td>
<td></td>
</tr>
<tr>
<td>Health promotion</td>
<td>Development, production and dissemination of IEC materials</td>
<td>2015</td>
<td>Allowances, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances</td>
</tr>
<tr>
<td>Vector control</td>
<td>Indoor residual spraying, Provision of LLITNs (malaria control unit)</td>
<td>2015-2020</td>
<td>Chemicals, spraying machine, PPE, allowances, transport, Nets, transport, allowances, mosquito repellants</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2015, 2017, 2019</td>
<td></td>
</tr>
</tbody>
</table>
| Training | Training of TOTs  
Training of health cadres (CHVs, CHEWs, Health facility staff)  
Orientation of local surgeons on CE surgery | 2015  
2015, 2016  
2015-2020 | Consultancy, allowances, transport and stationery  
Consultancy, allowances, transport and stationery  
Consultancy, allowances, transport and stationery |
|---|---|---|---|
| Updating government HIS | Incorporate dengue in HIS (dengue to become a notifiable disease)  
Incorporate dengue in the health facility reporting system | 2015-2020  
2015-2020 | Stationery (production of new health facility registers)  
Stationery (production of new health facility registers) |
| Scaling up of dengue treatment | Provision of drugs to health facilities | 2015-2020 | Drugs, transport, allowances, fuel, |
| Support supervision | Develop a support supervision tool  
Facilitate supervision | 2015-2020 | Allowances, fuel and vehicles/motorcycles maintenance, supervision tools |
| Health promotion | Develop and disseminate IEC materials  
Conduct community outreaches/road shows  
Develop and disseminate mass media messages (local languages) | 2015-2020 | Allowances, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances |
| Monitoring and evaluation | Develop monitoring and evaluation tools  
Train CHVs on data collection, management and dissemination  
Conduct mid-term and end-term evaluations | 2015-2020 | Allowances, fuel, Training modules, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances |
| Integrated vector management (IVM) | Carry out community sensitization  
Training communities on adoption of IVM measures | 2015-2020 | Allowances, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances |
| CE | | | |
| Mapping of CE | Determine the geographical distribution of CE (prevalence)  
Sensitization of the community  
Orientation of veterinary personnel | 2015/16  
2015/16  
2015/16 | Allowances, Equipment, Transport, Lab consumables, transport and stationery |
<p>| Health promotion | Development, production and dissemination of IEC materials | 2015 | Allowances, fuel and vehicles/motorcycles maintenance, funds, IEC materials, air time, fuel, allowances |
| Dog population management | Dog registration | 2015/16 | Allowances, identification tags, transport, |</p>
<table>
<thead>
<tr>
<th>Treatment</th>
<th>2015/16</th>
<th>Stationery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elimination of stray dogs</td>
<td>2015/16</td>
<td>Drugs (praziquintel)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Allowances, transport, consumables</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drugs (Stryknin), consumables, allowances, transport, stationery</td>
</tr>
<tr>
<td>Training</td>
<td>2015</td>
<td>Consultancy, allowances, transport and stationery</td>
</tr>
<tr>
<td>Training of TOTs</td>
<td>2015, 2016</td>
<td>Consultancy, allowances, transport and stationery</td>
</tr>
<tr>
<td>Training of health cadres (CHVs, CHEWs, Health facility staff)</td>
<td>2015</td>
<td>Consultancy, allowances, transport and stationery</td>
</tr>
<tr>
<td>Orientation of local surgeons on CE surgery</td>
<td>2015-2020</td>
<td>Consultancy, allowances, transport and stationery</td>
</tr>
<tr>
<td>Updating government HIS</td>
<td>2015.2020</td>
<td>Stationery (production of new health facility registers)</td>
</tr>
<tr>
<td>Incorporate CE in health facility reporting and HIS (CE to become a notifiable disease)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scaling up of CE treatment</td>
<td>2015-2020</td>
<td>Drugs (albendazole), transport, allowances</td>
</tr>
<tr>
<td>Chemotherapy</td>
<td>2015-2020</td>
<td>Flight costs, consultancy, allowances, transport, consumables, lab consumables</td>
</tr>
<tr>
<td>Surgery</td>
<td>2015-2020</td>
<td>Consultancy, allowances, consumables</td>
</tr>
<tr>
<td>Follow up examination for determining the disease progress</td>
<td>2015-2020</td>
<td></td>
</tr>
<tr>
<td>Dengue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mapping of Dengue</td>
<td>2015/16</td>
<td>Allowances, Equipment, Transport, Lab consumables, transport and stationery</td>
</tr>
<tr>
<td>Determine the geographical distribution of CE (prevalence)</td>
<td>2015/16</td>
<td></td>
</tr>
<tr>
<td>Sensitization of the community</td>
<td>2015/16</td>
<td></td>
</tr>
<tr>
<td>Orientation of veterinary personnel</td>
<td>2015/16</td>
<td></td>
</tr>
<tr>
<td>Health promotion</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>Development, production and dissemination of IEC materials</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>Vector control</td>
<td>2015-2020</td>
<td>Chemicals, spraying machine, PPE, allowances, transport, transport, allowances, mosquitrepellants</td>
</tr>
<tr>
<td>Indoor residual spraying</td>
<td>2015-2020</td>
<td></td>
</tr>
<tr>
<td>Provision of LLITNs (malaria control unit)</td>
<td>2015, 2017, 2019</td>
<td></td>
</tr>
</tbody>
</table>
| Training | Training of TOTs  
Training of health cadres (CHVs, CHEWs, Health facility staff)  
Orientation of local surgeons on CE surgery | 2015  
2015, 2016  
2015-2020 | Consultancy, allowances, transport and stationery  
Consultancy, allowances, transport and stationery  
Consultancy, allowances, transport and stationery |  
Consultancy, allowances, transport and stationery |
| --- | --- | --- | --- | --- |
| Updating government HIS | Incorporate dengue in HIS (dengue to become a notifiable disease)  
Incorporate dengue in the health facility reporting system | 2015-2020  
2015-2020 | Stationery (production of new health facility registers)  
Stationery (production of new health facility registers) |  
Stationery (production of new health facility registers) |
| Scaling up of dengue treatment | Provision of drugs to health facilities | 2015-2020 | Drugs, transport, allowances, fuel, |  
Drugs, transport, allowances, fuel,
<table>
<thead>
<tr>
<th>CROSS-CUTTING INTERVENTION</th>
<th>NTDS TARGETED</th>
<th>METHOD OF INTERVENTIONS DELIVERY</th>
<th>REQUIREMENTS</th>
<th>OTHER NON-NTDS OPPORTUNITIES FOR INTEGRATION</th>
</tr>
</thead>
</table>
| Surgery                   | LF (Hydrocoele) | Hydrocoele surgery (hydrocoelectomies) | -Training of Medical Doctors, clinical officers and nurses  
-hospitals facilities or appropriate basic facilities with good surgical facilities  
-Follow up/supervision | Philanthropic groups e.g. Lions & Rotary clubs on surgical activities |
| LF (Lymphoedema)         | Daily hygienic washing of affected limbs. Exercise of affected limbs Application of antibiotic creams to affected limbs Skin care | -Washing kits (bucket, towel, soap, clean water)  
- Antibiotics/Vaseline creams  
- Training of first-line health/community workers, patients and family members  
- Social support clubs/groups  
- Follow up/Supervision | HIV/AIDS social support groups. Diabetes support groups  
Malaria home management, global hygiene and sanitation days etc. |
| Surgery                   | Trachoma       | Trichiasis surgery                 | Training of clinical officers and nurses, health facilities  
-Follow up/supervision | Philanthropic groups e.g. Lions & Rotary clubs on surgical activities |
| Case detection and management (active case finding and treatment in highly endemic areas). Passive case finding &treatment in low or suspected areas) | Leishmaniasis | Hospitalized treatment  
Continuous surveillance | -Specific drugs (SSG+Paromomycin,SSG, ambisone)  
-Hospitalization facilities  
-Close monitoring during treatment  
-Training of medical staff  
-Follow up/ supervisions  
-Monitoring tools | Malaria and HIV/AIDS home based care Women’s associations |
| Guinea worm               | Active surveillance | | | -Polio immunization campaign  
-HIV/AIDS social support groups |
| Echinococcosis           | Active surveillance | Training of health care workers, Teachers, community health workers and village based volunteers  
- Improve regular and accurate documentation and reporting system in non-endemic sub-counties Follow up/Supervision | -Polio immunisation campaign  
-HIV/AIDS social support groups |
12.1 Scaling up NTD transmission control interventions

In essence, transmission control interventions are complementary to preventive chemotherapy and case management hence will be conducted in all NTD endemic areas. Most of the targeted NTDs are vector-borne. Thus, control strategies against one vector may also have impact on other vectors. A good example is the mosquito vector for LF that also transmits malaria. Moreover, provision of clean water supply and sanitation can also contribute greatly in the reduction of some of the NTDs such as trachoma, schistosomiasis and STH. This has been strengthened by the introduction of the PHASE strategy that will be implemented together with MDAs.

The PHASE Strategy

In addition to preventive chemotherapy, other operational interventions to eliminate PC-NTDs constitute the PHASE approach, which necessitates multi-sectoral collaboration. PHASE stands for:

- **P** - Preventive chemotherapy
- **H** - Health education
- **A** - Access to clean water
- **S** - Sanitation
- **E** - Environmental improvement

These interventions are also essential for transmission control and the control of case management NTDs. NTD programme will ensure an integrated implementation of the PHASE package of interventions. Morbidity management is also essential for elimination of LF, schistosomiasis, STH and blinding trachoma. Attention to these important components will play a great role towards elimination of these diseases. Implementation of the PHASE strategy is outlined below:

**Preventive Chemotherapy**

PC activities are ongoing and discussed in the section for ‘Scaling up preventive chemotherapy interventions’.

**Health Education**

Health education is part of health promotion. The mandate of health promotion is under the Health Promotion Unit, which carries out health promotion in all the Counties. To achieve this goal, the Ministry has posted Health Promotion officers (HPO) in all the Counties. The NTD programme will liaise with them at the implementation levels to ensure they include health education on NTDs in their plan of actions. In addition, the NTD programme will involve the HPOs during the campaigns for MDAs. This will ensure continuity after the MDAs are over.

**Access to Clean Water**
Provision of clean water to the people and communities is the mandate of Ministry of Water and Irrigation. However, this is one sector where the Government needs assistance from partners and NGDOs as provision of water requires huge resources which the government may not have. Thus, supply of clean water to communities will require a concerted, multi-sectorial approach by all partners. MoH will advocate to the National and County governments, line Ministries, partners and NGDOs to scale up provision of clean water especially to communities that have been underprivileged for a long time. This will interrupt transmission of waterborne and other diseases including the NTDs and by so doing uplift the living standard of communities.

**Sanitation**

Improvement of personal hygiene and good sanitation in the community is one major method of reducing disease transmission and occurrence. Educating communities to have latrines in their compounds and to wash hands regularly to remove disease-causing microorganisms will contribute enormously in the reduction of the disease infections. The Department of Environmental Health within MoH is mandated to ensure there is proper sanitation and hygiene in all communities in Kenya. The department has posted Public Health Officers (PHOs) in all Counties to ensure that proper sanitation and hygiene is achieved. The NTD programme will continue to plan together with the Environmental Department and the PHOs at all levels of implementations to ensure that proper sanitation and hygiene is achieved in all communities.

**Environmental improvement**

Environmental improvement leads to the reduction of diseases transmission through disruption of breeding sites for diseases vectors. The Ministry of Works and other construction agencies have not been keen in re-filling sites where they scoop building materials. This has contributed to creations of vector breeding sites resulting in an increase in diseases transmission. MoH will advocate to the National and County governments, line Ministries and Environmental agencies to ensure that all construction companies and their agencies are requested and enforced to fill-up quarries, man-holes and trenches they create as they do their work in order to minimize vector breeding sites and hence contribute to the reduction of disease vectors.

Integration of intervention strategies for some of the NTD diseases are shown in Table 25 while the activities are shown in Table 26.
<table>
<thead>
<tr>
<th>CROSS-CUTTING INTERVENTION</th>
<th>NTDS TARGETED</th>
<th>METHOD OF INTERVENTIONS DELIVERY</th>
<th>REQUIREMENTS</th>
<th>OTHER OPPORTUNITIES FOR INTEGRATION</th>
</tr>
</thead>
</table>
| Vector control             | • Schistosomiasis  
• LF  
• Leishmaniasis  
• Dengue fever | • Environment management  
• Snail control-mollusciding  
• Insecticide treated nets  
• Indoor residual spraying  
• Larviciding | • LLIN/ITNs  
• Insecticides (pyrethroids)  
• Molluscides | • Malaria vector control  
• Integrated vector management  
• Community participation |
| Clean water supply and sanitation | • Soil transmitted helminths  
• Schistosomiasis,  
• Trachoma  
• Guinea worm | • Improved sanitations facilities  
• Improved access and quality of water supply.  
• Environmental management  
• Health promotion | • Advocacy for access to safe water  
• I.E.C materials,  
• Health Promotion | • School health and nutrition programmes  
• Development programmes by line ministry (e.g. water & sanitation)  
• |
| Sanitation  
Access to clean water  
Health promotion  
Proper meat inspection  
Dog population management | CE | • Clean water  
• Proper use of latrines  
• Hand washing & general hygiene  
• Training of CHVs, Veterinary, meat inspectors and local administrators  
• IEC Materials | • Bore holes  
• water tanks  
• Latrines  
• IEC materials | • Public and private sector partnerships  
• Collaboration with NGOs and CBOs |
| Health promotion  
Active case detection and treatment  
Surveillance | Onchocerciasis | Capacity build staff | Training | • NGOs  
• Community participation  
• CBOs |
### Table 26: Activities for disease transmission control

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 3: Strengthening transmission control including integrated vector management and environment measures</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vector control</td>
<td>- LLITNs</td>
<td>2015-2020</td>
<td>LLIN/ ITNS, insecticides (pyrethroids), spraying pumps, protection gear (under malaria control) training manuals, IEC materials, allowances, vehicles and fuel</td>
</tr>
<tr>
<td></td>
<td>- IRS</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Larviciding</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Training spray personnel</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Socio-mobilization and health education</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Spraying supervision and monitoring</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Training community members to adapt IVM measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Monitoring the impact of LLINs/IRS measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Snail control</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Environmental manipulation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clean water supply and sanitation (PHASE strategy)</td>
<td>Conduct health promotion for behavioural change</td>
<td>2015-2020</td>
<td>Funds for advocacy and health promotion, transport, conference facilities, allowances, IEC materials, fuel</td>
</tr>
<tr>
<td></td>
<td><strong>Advocacy to government and line ministries for:</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sinking bore-holes</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Quality water supply</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Environmental improvement (Management of dams and canals)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Sanitation improvement (building latrines)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Cross-cutting Interventions in NTDs Programme**

Implementation of NTD activities are mainly integrated where possible. Some of the main cross-cutting activities include community sensitization, advocacy, training, health promotion, drug distribution, surveillance, monitoring and evaluation. The programme will continue to harmonize and streamline these activities to increase efficiency and to avoid fragmentation. These are explained in Table 27.

**Table 27: Cross cutting interventions in the programme**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Schistosomiasis</th>
<th>STH</th>
<th>Leishmaniasis</th>
<th>Trachoma</th>
<th>LF</th>
<th>Hydatid</th>
<th>Guinea worm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community sensitization &amp; Social mobilization</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Training</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Mapping</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health facility based case management</td>
<td></td>
<td></td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Hand &amp; face washing</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Building of latrines</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper use of latrines</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behaviour change communication (hygiene &amp; treatment seeking behaviour)</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Health Promotion</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Drug distribution involvement</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>School based</td>
<td>X</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Community based</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother and Child Health week</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>School feeding</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disability prevention &amp; and management</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnership for safe water supply and sanitation improvement</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Monitoring and Evaluation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveillance</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Integrated Vector Management/Animal Reservoir control</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Operational research</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
</tbody>
</table>

**Pharmacovigilance in NTD control activities**

The NTD Programme will work in collaboration with the Pharmacy and Poisons Board (PPB) and the National Quality Control Laboratories (NQCL) to ensure safety of all medical products used in programme interventions. The NTD pharmacist will coordinate pharmacovigilance activities. A national policy will be developed, to guide roll out of pharmacovigilance activities of NTDs. National guide line of serious adverse events (SAE) will be developed in conformity with WHO guidelines on management of SAEs. Special emphasis will be put on events following MDA interventions for the control of NTDs. The guideline will also conform to existing national guideline on pharmacovigilance.
The main areas of pharmacovigilance in NTD control activities shall be as stated below:

- Enforcement of Good Manufacturing Practices (GMP) requirements
- Registration of medical products
- Enforcement of guidelines on donation of pharmaceutical products
- Management and disposal of pharmaceutical waste
- Post marketing surveillance
- Monitoring and reporting of poor quality medicinal products
- Prevention, effective management, monitoring and reporting of serious adverse events
- Policy and guidelines development/dissemination for pharmacovigilance in NTD interventions.

There already exists a human resource pool of more than 500 hospital based health personnel who have received specific training on pharmacovigilance. Additionally, more than 5,000 health care professionals have been sensitized on pharmacovigilance across the country. These already existing personnel shall be enlisted in carrying out NTD specific pharmacovigilance activities. The NTD programme will also endeavor to build capacity via increasing the numbers of trained personnel and also updating already trained personnel on pharmacovigilance. The PPB already has developed pharmacovigilance tools, including: The Suspected Adverse Drug Reaction reporting form (Yellow form) the Poor Quality Medicinal Products (Pink form) and the Patient Alert Card. These shall be improved for use during pharmacovigilance for NTD control activities. The activities for strengthening pharmacovigilance NTDs Programmes are shown in Table 28.

Table 28: Activities for strengthening pharmacovigilance for NTDs Programmes

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1:</strong> To establish and strengthen coordinated pharmacovigilance in NTD control activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To develop and disseminate pharmacovigilance policy</td>
<td>Development of policy and guidelines on pharmacovigilance in NTD control activities</td>
<td>2015</td>
<td>Hall hire, fuel, stationery, snacks and refreshments</td>
</tr>
<tr>
<td>To establish and strengthen coordinated pharmacovigilance in NTD control activities</td>
<td>Registration and licensing of donated medicine imports</td>
<td>2015 – 2020</td>
<td>Airtime, stationery and fuel</td>
</tr>
<tr>
<td></td>
<td>Conduct desk reviews for previous pharmacovigilance activities</td>
<td>2015</td>
<td>Hall hire, fuel, snacks and refreshments</td>
</tr>
<tr>
<td>To roll out pharmacovigilance interventions</td>
<td>Conduct post marketing surveillance</td>
<td>2015 – 2020</td>
<td>Mini labs, hall hire, fuel, vehicle maintenance, trained personnel, allowances.</td>
</tr>
<tr>
<td></td>
<td>Training for personnel on preventing, managing, monitoring and reporting suspected severe adverse events</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, fuel, stationery and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Sensitization of personnel on monitoring, detection and reporting of poor quality medicinal products</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, fuel, stationery and vehicle maintenance</td>
</tr>
</tbody>
</table>
Strengthening capacity at national level for NTDs programme management and implementation

For NTD Programme to function effectively and efficiently, it will require to be supported in human capacity development both at the national and county levels, capital equipments including office furniture, ICT equipments and softwares, vehicles and general office needs. The activities that will strengthen and support the management of the NTD programme are outlined in Table 29.

Organizational Setup for NTD Programme

The NTD Programme is under the Division of Disease Surveillance and Epidemic Response of the MoH. Its mandate, among others, is to advocate to the higher level Government officials and other partners for resources for NTDs control as well as to guide the implementation of the various control activities. An ICC was launched in June 2014 which is chaired by the Director of Medical Services. In addition, there are existing TWGs with clear terms of reference.

The NTD Programme meets monthly for planning and review of progress during implementation of activities. NTD Programme comprises of the following positions and personnel: Head, NTD Programme, one Pharmacist, four Scientists, one M&E officer, one laboratory technologist, one HPO, accountant cum administrator and support staff.

The Head, NTD Programme oversees the running and management of the day to day activities of the programme, provides guidance to the office of the Division of Disease Surveillance and Epidemic Response concerning NTDs planning and management. The head also provides a link between MOH, donors, partners and NGDOs.

Planning of Activities

On the basis of the outlined activities, an Annual Operational Plan (AOP), extracted from the activities earmarked in the strategic plan 2016-2020, is prepared. The AOP covers the financial year which runs from July to June of the following year.

Financing

Budgets, based on the activities outlined in the strategic plan, are made on an annual basis with a quarterly breakdown. These budgets show required funds for programme implementation and also the source of funding (government and partners). The budget is prepared by the NTD programme staff in consultation with partners and donors.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Frequency or Timing</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1: Strengthen coordination mechanism for the NTDS control programme at national and county levels.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish programme management and coordination structure</td>
<td>Provide office equipment and operational support for national and county levels</td>
<td>2015</td>
<td>Telephone communication, 4x4 vehicles, vehicle insurance, vehicle maintenance, internet connectivity, allowances, postage, fuel and stationery</td>
</tr>
<tr>
<td></td>
<td>Meeting with ICC, secretariat &amp; TWGs for NTDs</td>
<td>2015-2020</td>
<td>Communication allowance, postage, stationery, allowance, refreshments and hall hire</td>
</tr>
<tr>
<td></td>
<td>Office equipment and supplies for the programme at national level</td>
<td>2015-2017</td>
<td>Computers, printers, tonners, stationery, furniture, cabinets</td>
</tr>
<tr>
<td></td>
<td>Programme support costs</td>
<td>2015-2020</td>
<td>Fuel, maintenance of office equipment, postage, transport and logistics (fuel, maintenance and car hire</td>
</tr>
<tr>
<td><strong>Capacity building (infrastructure development) for programme implementation</strong></td>
<td>Improve inpatient services to accommodate leishmaniasis, LF patients in endemic areas</td>
<td>2015-2020</td>
<td>Wards, drugs and beds</td>
</tr>
<tr>
<td></td>
<td>Equip laboratories &amp; other treatment points with modern diagnostic equipment</td>
<td>2015-2020</td>
<td>Microscopes, lab consumables, ultrasound,</td>
</tr>
<tr>
<td></td>
<td>Distribution of laboratory equipment and supplies</td>
<td>2015-2020</td>
<td>Vehicles, fuel and allowances</td>
</tr>
<tr>
<td></td>
<td>Improve storage capacity for drugs and supportive supplies</td>
<td>2015-2020</td>
<td>Storage space, storage equipment, warehousing fees</td>
</tr>
<tr>
<td><strong>Strategic Objective 2: Strengthen and foster partnerships for the control, elimination and eradication of targeted NTDs at national, sub-counties and community levels</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Establish and strengthen Partnerships</td>
<td>Identification of new partners who can support and fund various control activities</td>
<td>2015-2020</td>
<td>Communication allowance, fuel, vehicles, allowance and stationery</td>
</tr>
<tr>
<td></td>
<td>Engaging partners in international advocacy and goodwill ambassador support</td>
<td>2015-2020</td>
<td>Good will ambassador, Air tickets, allowance, transport, fuel</td>
</tr>
<tr>
<td><strong>Capacity building</strong></td>
<td>Developing training manual for CHVs</td>
<td>2015</td>
<td>Training materials, conference facilities, allowances, transport, fuel</td>
</tr>
<tr>
<td></td>
<td>Review of training manual by TWGs</td>
<td>2015-2016</td>
<td>Training manuals, communication allowance, conference facilities, allowances, transport, fuel and stationery</td>
</tr>
<tr>
<td></td>
<td>Training community health workers on disease prevention and control</td>
<td>2015-2018</td>
<td>Training materials, fuel and maintenance, Stationery, allowance, airtme, transport</td>
</tr>
<tr>
<td></td>
<td>Training and supporting community health volunteers on disease prevention, control identification referral and management of NTDS disabilities</td>
<td>2015-2020</td>
<td>Training materials, fuel and maintenance, Stationery, allowance, airtme, transport</td>
</tr>
<tr>
<td></td>
<td>Development, production and dissemination of IEC materials</td>
<td>2015-2020</td>
<td>Conference facilities, printing, Training materials, fuel and maintenance, Stationery, allowance, airtme, transport</td>
</tr>
<tr>
<td></td>
<td>Training communities to adopt IVM strategies</td>
<td>2015-2020</td>
<td>Conference facilities, printing, Training materials, fuel and maintenance, Stationery, allowance, airtme, transport</td>
</tr>
<tr>
<td><strong>Strategic Objective 3: Enhance high level reviews of NTDS programme performance and the use of lessons learnt to enhance advocacy, awareness and effective implementation.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Build and sustain partnership and collaboration for integrated NTDS control</td>
<td>National NTDS steering committee meetings</td>
<td>2015-2020</td>
<td>Conference facilities, air tickets, allowance, stationery</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>National annual review meetings</td>
<td>2015-2020</td>
<td>Conference facilities, allowances, stationery, Transport</td>
<td></td>
</tr>
</tbody>
</table>

**Strategic Objective 4: Strengthen advocacy, visibility and profile of NTDS control, elimination and eradication interventions at all levels.**

<table>
<thead>
<tr>
<th>Advocacy communication and social mobilization</th>
<th>Advocate for government commitment in resource allocation for NTDS control programme</th>
<th>2015-2020</th>
<th>Funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carry out high level advocacy</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td>Carry out targeted advocacy for resource mobilization at county level</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td>Strengthen collaboration with other community based health programmes like RBM, EPI, school feeding programme</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td>Create awareness among the health care workers on disease recognition, prevention and management</td>
<td>2015-2020</td>
<td>Conference facilities, printing, Training materials, fuel and maintenance, Stationery, allowance, airtime, transport, IEC materials</td>
<td></td>
</tr>
<tr>
<td>Development, production and distribution of IEC materials</td>
<td>2015-2020</td>
<td>Conference facilities, printing, Training materials, fuel and maintenance, Stationery, allowance, airtime, transport</td>
<td></td>
</tr>
<tr>
<td>Community mobilization on disease recognition and control</td>
<td>2015-2020</td>
<td>Conference facilities, printing, Training materials, fuel and maintenance, Stationery, allowance, airtime, transport, IEC materials</td>
<td></td>
</tr>
<tr>
<td>Media communication - message airing, documentaries, road shows and drama</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td>Holding special NTDs day</td>
<td>2015-2020</td>
<td>Conference facilities, printing, Training materials, fuel and maintenance, Stationery, allowance, airtime, transport, IEC materials</td>
<td></td>
</tr>
<tr>
<td>Good will ambassador to advocate for control of NTDs</td>
<td>2015-2020</td>
<td>Funds</td>
<td></td>
</tr>
<tr>
<td>Quality control of donated NTD medicines</td>
<td>Conduct pharmacovigilance</td>
<td>2015-2020</td>
<td>Funds, lab consumables, allowances, transport, fuel</td>
</tr>
</tbody>
</table>
Enhancing planning for results, resource mobilization and financial sustainability

The key activities the programme plans to implement in order to enhance planning for results, resource mobilization and financial sustainability are shown in Table 30.

**Table 30: Activities for implementing Priority 2.**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1: Develop integrated multi-year strategic plans and develop gender-sensitive annual operational plans for the control, elimination and eradication of targeted NTDs.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop Annual Work plan for 2015</td>
<td>Holding a retreat</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Develop NTDSs policy and guidelines</td>
<td>Drafting NTDSs Policy and guidelines</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Review of Policy and guidelines by stakeholders</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Dissemination of Policy and guidelines</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Development of advocacy materials</td>
<td>Development, printing and dissemination</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Participate in review of County AWPs for incorporation of NTDs</td>
<td>Hold review meetings</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Hold quarterly NTDS Planning Meetings</td>
<td>Hold meetings</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Review guidelines for NTDS implementation</td>
<td>Hold review meetings</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Macro and micro planning for NTDS activities at county level</td>
<td>Hold planning meetings</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td><strong>Strategic Objective 2: Enhance resource mobilization approaches and strategies at national and sub-county levels for NTD interventions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resource mobilization for NTDSs</td>
<td>Utilise the revised National NTDS Strategic Plan and annual work-plans for resource mobilization</td>
<td>2015-2020</td>
<td>conference facilities, transport, stationery, allowances, fuel</td>
</tr>
<tr>
<td>Conduct advocacy, social mobilization and sensitization for NTD programme implementation</td>
<td>Conduct advocacy, social mobilization and sensitization for NTD programme implementation</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Integration of preventive chemotherapy intervention packages for disease control/elimination</td>
<td>Planning and holding NTDS action days</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances, IEC materials, Mass media</td>
</tr>
<tr>
<td></td>
<td>Development, production &amp; dissemination of guidelines for mass drug administration for use at community level for LF, STH and schistosomiasis trachoma and leishmaniasis</td>
<td>2015-2020</td>
<td>conference facilities, fuel, transport, stationery, allowances, IEC materials, Mass media</td>
</tr>
<tr>
<td></td>
<td>Development, production &amp; dissemination of an integrated community register for MDA</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances, IEC materials, Mass media</td>
</tr>
<tr>
<td><strong>Strategic Objective 3: Strengthen the integration and linkages of NTD programme and financial plans into sector-wide and national budgetary and financing mechanisms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Revise national NTDS Strategic Plan and align it to 2015-2020</td>
<td>Planning and hold a retreat</td>
<td>2015</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td><strong>Strategic Objective 4: Develop and update national NTD policy and elaborate guidelines and tools to guide effective policy and programme implementation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development, production &amp; dissemination of NTD policy and guidelines</td>
<td>Development, production &amp; dissemination of NTDS policy and guidelines</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Review, produce &amp; disseminate NTD guidelines for health workers</td>
<td>Review of the guidelines by the TWGs, production &amp; dissemination</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
</tbody>
</table>
Strengthening government ownership, advocacy, coordination and partnership

The key activities the programme is implementing in order to achieve the strategic objective for strengthening government ownership, advocacy, coordination and partnerships are shown in the Table 31.
<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1: Strengthen coordination mechanism for the NTDs control programme at national and County levels.</strong></td>
<td>Establish programme management and coordination structure</td>
<td>2015-2020</td>
<td>Communication allowance, vehicles, office equipment, Stationery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Set up national task force, ICC, secretariat &amp; TWGs for NTDs at county level</td>
<td>2015</td>
<td>Stationery, Communication allowance, vehicles, office equipment</td>
</tr>
<tr>
<td></td>
<td>Programme support costs</td>
<td>2015-2020</td>
<td>Fuel, maintenance of office equipment, postage, transport and logistics, and car hire</td>
</tr>
<tr>
<td><strong>Capacity building for programme implementation</strong></td>
<td>Improve inpatient services to accommodate leishmaniasis, LF patients in endemic counties</td>
<td>2015-2020</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equip laboratories &amp; other treatment points with modern diagnostic equipment</td>
<td>2015-2020</td>
<td>Microscopes, lab consumables, ultrasound, fridges</td>
</tr>
<tr>
<td><strong>Strategic Objective 2: Strengthen and foster partnerships for the control, elimination and eradication of targeted NTDs at national, sub-counties and community levels</strong></td>
<td>Establish and strengthen Partnerships</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Identification of new and potential partners who can support and fund various control activities</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Engaging partners in international advocacy and goodwill ambassador support</td>
<td>2015-2020</td>
<td>Good will ambassador, Air tickets, Per diem, Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Creating fora to engage partners</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td><strong>Capacity building</strong></td>
<td>Development, production &amp; dissemination of training manual for community health workers</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Training community health workers on disease prevention and control using the existing MOH community strategy</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
</tbody>
</table>
Monitoring and evaluation

The Monitoring and Evaluation (M&E) Unit and the Health Management Information Systems (HMIS) Unit fall under the Division of M&E and Health Research Development. The HMIS Unit is responsible for collection of data and information about all health activities in the country. Another Unit, the Integrated Disease Surveillance and Epidemic Response (IDSR) Unit, collects a wide range of data on a broad spectrum of health programmes. This unit falls under the Division of Disease Surveillance and Epidemic Response. The M&E Unit is responsible for monitoring processes and performance of the activities as well as evaluating their outcomes and impacts. Suitable indicators are selected to measure certain aspects of health programmes, projects and activities.

The NTD Unit will work closely with the M&E Unit to ensure that a representative number and range of indicators are selected for effective inclusion of NTDs in the overall M&E of health programmes. The NTD Unit will also work with the HMIS and IDSR Units to utilize their existing data collection and reporting system to collect and report NTD data. This data will be reported monthly from the peripheral to national level. Additionally, the NTD Unit shall set up and maintain a National Integrated NTD Database (NIND) for all NTD control activities. This tool will allow the NTD programme to maintain a comprehensive database with the capacity to collect, store and use a much wider range of NTD data and information than that collected through the HMIS and IDSR system. The NTD M&E Manager will be responsible for setting up and updating this database. All other departments, stakeholders and partners engaging in NTD control activities will be required to report the accompanying data for inclusion into the (NIND).

The NTD Unit will develop, produce and disseminate forms/data collection tools to be used in a standardised collection of source data for the NIND. The data so collected will be reported to the national NTD office immediately after completion of activities in the peripheral sites. The NTD M&E Manager will also set up and operationalize other data/information management platforms to be used in complementing the role of the NIND. These will include the Tool for Integrated Planning and Costing (TIPAC), the Geographical Information Systems (GIS) for NTDs among others.

The NTD Unit will develop standard indicators to be used in monitoring and evaluating NTD control activities. These will be used to conduct baseline assessments, mid-term evaluation of outcomes and impact assessment of particular control activities depending on the type of disease to be evaluated. A national guideline on monitoring and evaluation of NTD control will be developed to guide the M&E process for all NTDs.

Key activities that will enable the programme achieve the set indicators are as outlined in table 32.
### Table 32: Strategic Priority 4.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic Objective 1: To develop and promote an integrated NTD M&amp;E framework and improve monitoring of NTDs within the context of National health information systems</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To develop an integrated NTD M&amp;E framework</td>
<td>Identify and obtain all existing individual M&amp;E frameworks for all NTD activities</td>
<td>2015 – 2020</td>
<td>Fuel, airtime and courier services</td>
</tr>
<tr>
<td></td>
<td>Develop a draft for integrated NTD M&amp;E framework</td>
<td>2015 – 2020</td>
<td>Stationery, airtime, transport</td>
</tr>
<tr>
<td></td>
<td>Invite stakeholders to a ‘integrated NTD M&amp;E framework development’ meeting</td>
<td>2015 – 2020</td>
<td>Stationery, airtime and courier services</td>
</tr>
<tr>
<td></td>
<td>Hold ‘integrated NTD M&amp;E framework development’ meetings</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Document, produce and disseminate final integrated NTD M&amp;E framework</td>
<td>2015 – 2020</td>
<td>Computer software, airtime and stationery</td>
</tr>
<tr>
<td>To promote an integrated NTD M&amp;E framework</td>
<td>Coordinate and encourage application of final integrated NTD M&amp;E framework</td>
<td>2015 – 2020</td>
<td>Airt ime, vehicles maintenance, fuel and allowances</td>
</tr>
<tr>
<td></td>
<td>Coordinate development of harmonized and standardized tools for use in application of the integrated NTD M&amp;E framework</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Convene and hold progress review meetings on application of integrated NTD M&amp;E framework</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Establish and operationalize a feedback mechanism and action protocol on suitability of the integrated NTD M&amp;E framework</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, stationery, fuel and vehicle maintenance</td>
</tr>
<tr>
<td>To improve monitoring of NTDs through the HMIS and IDSR Units</td>
<td>Inclusion of more NTD indicators in the HMIS</td>
<td>2015 – 2020</td>
<td>Airt ime, fuel and allowances</td>
</tr>
<tr>
<td></td>
<td>Sensitize Health records and information officers (HRIOs) and data managers at all levels of the health care delivery system on NTD data management</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, stationery, airtime, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Establish and strengthen a robust data/information sharing relationship between the NTD Programme and the HMIS and IDSR Units</td>
<td>2015 - 2020</td>
<td>Stationery, airtime, computer software, allowances</td>
</tr>
<tr>
<td><strong>Strategic Objective 2: To establish integrated data management systems and support impact analysis for NTD in the NTD plan</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To establish an integrated data management system</td>
<td>Set up and operationalize a National Integrated NTD Database</td>
<td>2015</td>
<td>Stationery, airtime and computer software</td>
</tr>
<tr>
<td></td>
<td>Sensitize and capacity build implementing partners and other stakeholders on the National Integrated NTD Database</td>
<td>2015 – 2016</td>
<td>Allowance, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Coordinate production of integrated data collection and reporting tools</td>
<td>2015 – 2020</td>
<td>Hall hire, allowance, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Coordinate and support data reporting from all implementing stakeholders and partners</td>
<td>2015 – 2020</td>
<td>Airt ime, stationery vehicle maintenance, fuel and allowances</td>
</tr>
<tr>
<td></td>
<td>Prepare, produce and distribute periodic briefs on reporting status of implementing partners</td>
<td>2015 – 2020</td>
<td>Stationery, airtime and computer software</td>
</tr>
<tr>
<td>To support impact analysis for NTDs</td>
<td>Establish consistent periodic dissemination of NTD impact analysis reports to all stakeholders</td>
<td>2015 -2020</td>
<td>Stationery, airtime and computer software</td>
</tr>
<tr>
<td></td>
<td>Design robust tools and processes for collection and reporting of impact data and information during impact surveys</td>
<td>2015 -2020</td>
<td>Airt ime, allowance,</td>
</tr>
<tr>
<td></td>
<td>Establish an efficient impact data management system</td>
<td>2015 -2020</td>
<td>Computers, software, hardware and accessories</td>
</tr>
<tr>
<td></td>
<td>Train personnel in general data management and specifically, analysis</td>
<td>2015 -2020</td>
<td>Hall hire, allowance, stationery, fuel and vehicle maintenance</td>
</tr>
<tr>
<td><strong>Strategic Objective 3: To strengthen surveillance of NTDs and strengthen response and control of epidemic prone NTDs, in particular Dengue and Leishmaniasis</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>To strengthen surveillance of NTDs</td>
<td>Establish sentinel sites for disease monitoring and evaluation</td>
<td>2015 – 2017</td>
<td>Allowances, airtime, Laboratory equipment and reagents fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Conduct supervision for implementation of early warning systems in epidemic sub-counties</td>
<td>2015 – 2018</td>
<td>Allowances, personnel, checklist, fuel and vehicle maintenance</td>
</tr>
<tr>
<td></td>
<td>Carry out overall programme evaluation</td>
<td>2019</td>
<td>Laboratory equipment and reagents, allowances, fuel and vehicle maintenance</td>
</tr>
<tr>
<td>Cross-border activities</td>
<td>Carry out cross-border advocacy</td>
<td>2015 – 2020</td>
<td>Allowances, venue, IEC materials and fuel</td>
</tr>
</tbody>
</table>
Identify joint sentinel sites for disease surveillance and monitoring 2015 – 2016 Hall hire, allowances, fuel and vehicle maintenance

Conduct joint community training and sensitization 2016 – 2019 Allowances, venue, airtime, stationery and fuel

Conduct joint workshops for information sharing and dissemination 2015 – 2020 Hall hire, airtime, air tickets, allowance, fuel and vehicle maintenance

Initiate joint control activities during epidemic periods 2015 – 2020 Allowances, Laboratory equipment and reagents, drugs, stationery, fuel and vehicle maintenance

Support laboratory network for joint parasite and vector species identification 2015 – 2017 Laboratory equipment and reagents, venue, allowances, fuel and vehicle maintenance

Cross-border surveillance

Develop joint sentinel sites for disease surveillance and monitoring 2016 Hall hire, Laboratory equipment and reagents, air tickets, allowances, fuel and vehicle maintenance

Support cross-border surveillance 2015 - 2020 Allowances, Laboratory equipment and reagents, stationery, fuel and vehicle maintenance

Strategic Objective 4: To support operational research, documentation and evidence to guide innovative approaches to NTD programme interventions

To support operational research

Conduct epidemiological surveys for NTDs distribution and burden 2015 – 2019 Laboratory equipment and reagents, allowances, stationery, fuel and vehicle maintenance

Study the composition, infectivity and distribution of Leishmaniasis vectors 2015 – 2019 Laboratory equipment and reagents, allowances, stationery, fuel and vehicle maintenance

Assess impact of community directed treatment of Schistosomiasis and STH on morbidity 2017 – 2019 Laboratory equipment and reagents, allowances, stationery, fuel and vehicle maintenance

Assess effectiveness and acceptability of existing preventive measures 2017 – 2018 Allowances, Laboratory equipment and reagents, stationery, fuel and vehicle maintenance

Conduct KAP studies on NTDs 2015 – 2018 Allowances, stationery, fuel and vehicle maintenance

Assess environmental and behavioural risk factors that predispose to Leishmaniasis infections 2015 – 2020 Allowances, stationery, fuel and vehicle maintenance

Assess environmental and behavioural risk factors that predispose to Hydatid disease infections 2015 – 2019 Allowances, stationery, fuel and vehicle maintenance

Conduct survey on vectors’ dynamics and incrimination on reservoirs and their distribution 2015 – 2019 Laboratory equipment and reagents, allowances, stationery, fuel and vehicle maintenance

Post intervention surveillance and integration within primary health care

The NTD Strategic Plan of Action (2016-2020) will continue being implemented within the existing health system. At all levels, NTD indicators are monitored and reported using the existing HMIS. NTD programme works closely with all relevant divisions within MoH to ensure successful implementation of the programme. Department of Primary Health Services and Department of Technical Planning and Performance Monitoring exist within MoH and are key in post intervention surveillance. Structures exist up to community level that support implementation of this programme. A community strategy is in place and is currently being implemented in most of the counties.

The Counties and sub-counties health facilities are responsible for providing services and support as well as supervision of the levels that are under their direct responsibility. The Counties Health Management Team (CHMT) plan and co-ordinate the various disease control activities in the
sub-counties. All NTD control activities are implemented at this level and coordinated by the National level. The communities living in NTD endemic areas are the targets and therefore the CHEWs are the primary focal persons. Information flows from the CHAs through the CHEWs to the sub-county and county level.

At all levels, NTDs indicators are monitored and reported using the existing health management information system. NTD programme works closely with all relevant Divisions and Units within the Ministry to ensure successful implementation of the various activities. The main activities that will be carried out to strengthen surveillance and its sustainability are outlined in Table 33.

Table 33: Activities for surveillance and sustainability

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details (Sub-activities)</th>
<th>Time frame</th>
<th>Resources needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Objective: Strengthen the surveillance of NTDs and strengthen the response and control of epidemic-prone NTDs.</td>
<td>Train surveillance officers</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
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<tr>
<td></td>
<td>Develop, produce and disseminate surveillance tools and systems</td>
<td>2015-2016</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td>Strategic Objective: Establish integrated data management systems and support impact analysis for NTDs as part of the global NTDs data management system and Global NTDs Plan.</td>
<td>Develop, produce and disseminate monitoring and evaluation tools</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
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<tr>
<td></td>
<td>Train CHAs on data collection, management and dissemination</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
<tr>
<td></td>
<td>Develop, produce and disseminate integrated tools for reporting NTDs through HMIS</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
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<tr>
<td></td>
<td>Integrated supportive supervision of activities’ implementation at the county level</td>
<td>2015-2020</td>
<td>Conference facilities, fuel, transport, stationery, allowances</td>
</tr>
</tbody>
</table>
The NTD Strategic Plan of Action 2015-2020 is based on four strategic priorities:
1. Strengthen government ownership, advocacy, coordination and partnership
2. Enhance planning for results, resource mobilization and financial sustainability of NTD programme
3. Scale up access to interventions, treatment and system capacity building
4. Enhance NTDs monitoring and evaluation, surveillance and operational research.

The budget for this plan is based on these four priority areas. Each priority area has four objectives to address specific activities.

### Table 34: Five-year cost projections for NTDs control

<table>
<thead>
<tr>
<th>Activity</th>
<th>FY 2015</th>
<th>FY 2016</th>
<th>FY 2017</th>
<th>FY 2018</th>
<th>FY 2019</th>
<th>TOTAL</th>
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<td>464,564,446</td>
<td>499,406,780</td>
<td>536,862,288</td>
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<td>26,927,917</td>
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<td>6,433,376</td>
<td>6,915,880</td>
<td>7,434,570</td>
<td>32,768,362</td>
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<td>4,078,676</td>
<td>4,384,577</td>
<td>4,713,420</td>
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<td>Monitoring and evaluation</td>
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<td>89,662,904</td>
<td>96,387,622</td>
<td>103,616,694</td>
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<td>Drug logistics</td>
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<td>23,650,000</td>
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<td>27,330,531</td>
<td>29,380,321</td>
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<td>Social mobilization</td>
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<td>29,486,308</td>
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<td>MDA drug distribution</td>
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<tr>
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</table>

Note: Kenya FY 2015 | TIPAC generated: 11/12/2014 06:55:56
Inflation rate 7.5% Category: Implementation costs Operational costs

### Strategic Priority 1: Strengthen government ownership, advocacy, coordination and partnership

Government ownership is important in disease control activities and NTDs are some of the diseases that the government is concerned about in reducing their prevalence or eliminating them all together. For the programme to succeed, mechanisms should be put in place to facilitate implementation of activities. These include improved human resource capacity, intensified advocacy for NTDs, efficient communication systems, modern equipment and supplies and formation of functional TWGs.

### Strategic Priority 2: Enhance planning for results, resource mobilization and financial sustainability of NTD Programme

Sustained funding is necessary for the success of control, elimination and eradication of NTDs in the country. For this reason, advocacy at all levels should be sustained throughout the period of implementation. Participation of partners at all levels is highly encouraged. Planning and review meetings involving partners will be conducted periodically. Dissemination of results and lessons learnt will continue to take place both locally and at international fora.
Strategic Priority 3: Scale up access to interventions, treatment and system capacity building

Implementation of control interventions are coordinated to allow for integration of activities where feasible and co-implementation for others. For example, MDA for STH and schistosomiasis take place six months after MDA for LF in areas with high prevalence of STH and schistosomiasis. MDA for trachoma has been synchronized to take place two weeks after the MDA for schistosomiasis and STH.

A common planning platform, advocacy and social mobilization structure will continue to be strengthened. Training of health care personnel in control of NTDs will continue to be integrated. These trainings will be cascaded to community level and will necessitate the development of training manuals and monitoring tools that take all NTDs into account.

Strategic Priority 4: Enhance NTDs monitoring and evaluation, surveillance and operational research

A system to monitor implementation of activities has been put in place; these include field activities as well as financial inputs. For the programme to be functional, the unit requires personnel, office furniture, ICT software, hardware and consumables and other office supplies based on assessment that was conducted on existing inventory.

Pharmacovigilance systems will be strengthened and disease surveillance, including cross border surveillance for diseases such as Trachoma, Leishmaniasis and guinea worm, has been improved.

Operational research is being conducted by various research institutions and universities in collaboration with the NTD programme to support implementation of control activities.
## ANNEXES

### ANNEX 1: DEMOGRAPHIC DISTRIBUTION

<table>
<thead>
<tr>
<th>Counties</th>
<th>Sub-counties</th>
<th>Villages</th>
<th>Total Population</th>
<th>Pre-school age children (under 5s)</th>
<th>School age children (5-14)</th>
<th>No of Primary Schools</th>
<th>Hospitals</th>
<th>Health Centres</th>
<th>Dispensaries</th>
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### ANNEX 2b: KNOWN DISTRIBUTION OF SCHISTOSOMIASIS IN THE COUNTRY

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## ANNEX 2c: KNOWN DISTRIBUTION OF LYMPHATIC FILARIASIS IN THE COUNTRY

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## ANNEX 2d: KNOWN DISTRIBUTION OF TRACHOMA IN THE COUNTRY

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<th>Location/site</th>
<th>Form of Disease</th>
<th>Prevalence (numbers/rate/proportion)</th>
<th>Method used</th>
<th>Year of survey &amp; reference</th>
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<td>Southgate, 1964</td>
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<td>Sericho, Merti</td>
<td>Visceral</td>
<td>Epidemic</td>
<td>Epidemiological/ Entomological survey</td>
<td>Hererro et al 2008 (WHO report), Ngumbi et al 2010</td>
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Madera  Mandera East  Visceral  Epidemic  Hospital cases and survey  Marlet et al 2003

Wajir West  Visceral  904 cases (epidemic)  Hospital cases and survey  Marlet et al 2003, Hererro et al 2008 (WHO report)

Busia  Mt Elgon  Mt.Elgon,  Cutaneous  Entomological survey  Sang et al, 1993; Mutinga, MJ. 1975

Kajianfo  Kajiando  Kekonyoikie  Visceral  3/409 (0.007%)  Epidemiological survey  Johnson et al 1993

Narok  Narok  Transmara  Cutaneous  1 case  survey  Olufemi, A. W. et al., 1991

### ANNEX 2f: SUSPECTED DISTRIBUTION OF DENGUE IN THE COUNTRY

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<th>District/Region/State</th>
<th>Location/ Site/</th>
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<th>Study method</th>
<th>Year of survey and reference</th>
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### ANNEX 2g: SUSPECTED DISTRIBUTION OF CE IN THE COUNTRY (HYDATID)

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*This prevalence was for Turkana North before it was split in many sub-counties

**ANNEX 2h: SUSPECTED DISTRIBUTION OF ONCHOCERCIASIS IN THE COUNTRY**

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## ANNEX 3: NTD CO-ENDEMICITY

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ANNEX 4: MAJOR CITIES AND JOINING DISTANCES
ANNEX 5: TYPES OF MASS DRUG ADMINISTRATION

Legend: MDA2 = DEC + Albendazole, MDA4 = Azithromycin, T = targeted treatment, T1 = ALB + PQZ or MBD + PZQ, T2 = PZQ, T3 = ALB or MBD; STHH = STH High, STHL = STH Low; STH- = STH absent
## ANNEX 6: DRUG ESTIMATES AND LOGISTICS

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