envision
a world free of NTDs

Tanzania Work Plan

FY 2019

Project Year 8

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USAID FROM THE AMERICAN PEOPLE

RTI INTERNATIONAL

IMA World Health

ENVISION is a global project led by RTI International in partnership with CBM International, The Carter Center, Fred Hollows Foundation, Helen Keller International, IMA World Health, Light for the World, Sightsavers, and World Vision. ENVISION is funded by the US Agency for International Development under cooperative agreement No. AID-OAA-A-11-00048. The period of performance for ENVISION is September 30, 2011, through September 30, 2019.

ENVISION Project Overview

The US Agency for International Development (USAID)'s ENVISION project (2011–2019) is designed to support the vision of the World Health Organization (WHO) and its member states by targeting the control and elimination of seven neglected tropical diseases (NTDs), including lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), three soil-transmitted helminths (STH; roundworm, whipworm, and hookworm), and trachoma. ENVISION's goal is to strengthen NTD programming at global and country levels and support ministries of health (MOHs) to achieve their NTD control and elimination goals.

At the global level, ENVISION—in close coordination and collaboration with WHO, USAID, and other stakeholders—contributes to several technical areas in support of global NTD control and elimination goals, including the following:

- Drug and diagnostics procurement, where global donation programs are unavailable
- Capacity strengthening
- Management and implementation of ENVISION's Technical Assistance Facility (TAF)
- Disease mapping
- NTD policy and technical guideline development
- NTD monitoring and evaluation (M&E).

At the country level, ENVISION provides support to national NTD programs by providing strategic technical and financial assistance for a comprehensive package of NTD interventions, including the following:

- Strategic annual and multi-year planning
- Advocacy
- Social mobilization and health education
- Capacity strengthening
- Baseline disease mapping
- Preventive chemotherapy (PC) or mass drug administration (MDA)
- Drug and commodity supply management and procurement
- Program supervision
- M&E, including disease-specific assessments (DSAs) and surveillance.

In Tanzania, ENVISION project activities are implemented by IMA World Health (IMA).

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AE	Adverse Event
AFRO	Africa Regional Office (WHO)
ALB	Albendazole
APOC	African Program for Onchocerciasis Control
BCC	Behavior Change Communication
CCHP	Comprehensive Council Health Plan
CDD	Community Drug Distributor
CDTI	Community-directed Treatment with Ivermectin
CFA	Circulating Filarial Antigen
CHMT	Council Health Management Team
CNTD	Centre for Neglected Tropical Diseases
DBS	Dried Blood Spot
DC	District Council
DFID	United Kingdom Department for International Development
DSA	Disease-specific Assessment
ELISA	Enzyme-linked Immunosorbent Assay
END Fund	End Neglected Tropical Diseases Fund
EU	Evaluation Unit
FLHW	Frontline Health Worker
FTS	Filariasis Test Strip
FY	Fiscal Year
GIZ	*Deutsche Gesellschaft für Zusammenarbeit* (German Agency for International Cooperation)
GoT	Government of Tanzania
HKI	Helen Keller International
HQ	Headquarters
IEC	Information, Education, and Communication
IMA	IMA World Health
IP	Implementing Partner
ITI	International Trachoma Initiative
IVM	Ivermectin
JAP	Joint Application Package
JRSM	Joint Request for Selected Medicines
KCCO	Kilimanjaro Centre for Community Ophthalmology
LF	Lymphatic Filariasis
M&E	Monitoring and Evaluation
MC	Municipal Council
MDA	Mass Drug Administration
MIS	Management Information System
MMDP	Morbidity Management and Disability Prevention
MOH	Ministry of Health
MOHCDGEC	Ministry of Health, Community Development, Gender, Elderly and Children
MSD	Medical Stores Department
NBS	National Bureau of Statistics
NIMR	National Institute for Medical Research

NTD	Neglected Tropical Disease
ODK	Open Data Kit
OR	Operational Research
OV	Onchocerciasis
PC	Preventive Chemotherapy
PZQ	Praziquantel
QEDJT	Queen Elizabeth Diamond Jubilee Trust
RCH	Reproductive and Child Health
RDT	Rapid Diagnostic Test
RHMT	Regional Health Management Team
RPRG	Regional Programme Review Group
SAC	School-age Children
SAE	Serious Adverse Event
SAFE	Surgery–Antibiotics–Facial Cleanliness–Environmental Improvements
SC	Spot Check
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SS	Sentinel Site
SSA	Sentinel Site Assessment
SSTEAC	SCH/STH Technical Expert Advisory Committee
STH	Soil-transmitted Helminths
STTA	Short-term Technical Assistance
TAF	Technical Assistance Facility
TAS	Transmission Assessment Survey
TC	Town Council
TEC	Trachoma Expert Committee
TF	Trachomatous Inflammation–Follicular
TFDA	Tanzania Food and Drug Administration
TFGH	Task Force for Global Health
TIBA	Tackling Infections to Benefit Africa
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma Impact Survey
TOEAC	Tanzania Onchocerciasis Elimination Expert Advisory Committee
TOT	Training of Trainers
TSS	Trachoma Surveillance Survey
TT	Trachomatous Trichiasis
TV	Television
TWG	Technical Working Group
TZNTDCP	Tanzania Neglected Tropical Disease Control Program
UK	United Kingdom
USAID	US Agency for International Development
WHO	World Health Organization
ZTH	Zithromax

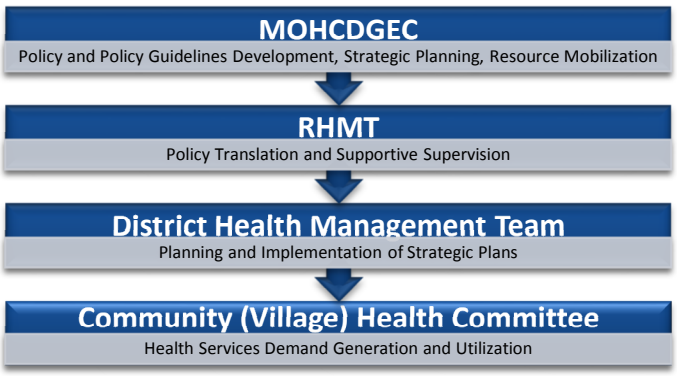
1) General Country Background

a) Administrative Structure

Tanzania is divided into 31 regions, five of which make up the semi-autonomous islands of Zanzibar and have a different government structure. Mainland Tanzania has 26 regions with 185 administrative councils. These regions are subdivided into divisions, wards, and villages, which are further subdivided into hamlets. Each village and ward has a chairperson and executive officer, and each hamlet has a chairperson. District councils (DCs) are the governing body at the district level and are headed by district executive directors. Elective representation levels begin at the villages and move upward to wards and then districts, which are the primary units responsible for public service delivery, including primary health care.

The Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC)—formerly known as the Ministry of Health and Social Welfare—guides policy development, strategic planning, resource mobilization, quality control, and evaluation and provides guidelines to regions and districts on the overall direction of health program implementation and service delivery throughout Tanzania. Service delivery, leadership, and governance are decentralized, with key roles and responsibility divided among four levels (Figure 1). Regional Health Management Teams (RHMTs) interpret policy and provide overall technical supportive supervision to the respective Council (or District) Health Management Teams (CHMTs) of that region. The CHMTs develop health plans and budgets and implement, monitor, and evaluate the impact of these plans. The district level is where national plan execution and coordination occur. The lowest level of the health system falls at the community level. Activities incorporated into CHMT health plans are derived based on the community needs identified by community (village) health committees.

Figure 1. MOHCDGEC leadership and governance levels



The Tanzania Neglected Tropical Disease (NTD) Control Program (TZNTDCP) is under the MOHCDGEC's Office of the Chief Medical Officer, Directorate of Preventative Services, and is housed at the Tanzania National Institute for Medical Research (NIMR). At the central level, there is a national NTD Program Coordinator and two program officers who are funded by the MOHCDGEC. There were previously four program officers; in fiscal year 2018 (FY18), one retired, and one passed away. These positions have yet to be replaced. NIMR also pays for five support staff to help with the implementation of NTD activities. The NTD Program Coordinator is assisted by the NTD Secretariat for overall program coordination and management.

The TZNTDCP program works through the RHMTs, CHMTs, and local communities to plan and implement NTD control activities and is led by national, regional, and district coordinators at each respective level. At the district level, there are cascade leaders and zonal managers who provide frontline health workers (FLHWs) with supportive supervision and aid in data collection. For mass drug

administration (MDA), at the community level, community drug distributors (CDDs) are trained to distribute medicines to the household level and report accordingly. On average, one FLHW is responsible for supervising 15 to 20 CDDs. For school-based interventions, mainly targeting soil-transmitted helminths (STH) and schistosomiasis (SCH), primary school teachers help distribute the medicines and report to the health facilities.

Redistricting

From 2010 to August 2015, redistricting increased the number of districts from 132 to 166. By FY17, an additional 20 districts had been created, increasing the total number of districts to 186. However, in FY18, Tanganyika DC in Katavi Region did not function as a DC. Instead, it fell under the administrative control of Mpanda DC and Mpimbwe DC, and the total district count for Tanzania decreased from 186 to 185. No redistricting is anticipated in FY19. All newly formed districts have been assigned the same baseline lymphatic filariasis (LF), SCH, STH, onchocerciasis (OV), and/or trachoma prevalence values as their parent districts. However, in subsequent and future assessments, particularly routine monitoring and impact assessments, each new district is treated as a separate district, and its own prevalence data are gathered and established.

b) NTD Implementing Partners (IPs) and Collaborators

NTD control and elimination activities in Tanzania are supported by several partners (**Table 1**), in collaboration with the TZNTDCP. The MOHCDGEC provides funding for the TZNTDCP staff mentioned above and salaries for all MOHCDGEC-linked staff working in the NTD program from the regional to district levels. The MOHCDGEC also provides vehicles at the district and regional levels for activity implementation and supervision. As described below, the US Agency for International Development (USAID) has provided funding for NTD programming in Tanzania since 2010 through the NTD Control Program (2010–2011) and ENVISION (2011 to date). Both efforts have been managed by RTI International as prime and IMA in country. USAID also provided funding for the African Program for Onchocerciasis Control (APOC) to implement an integrated NTD program in six regions (Ruvuma, Mbeya, Iringa, Njombe, Tanga, and Morogoro) in 2009–2015. APOC supported pre- and post-MDA activities and M&E activities (e.g., funding for OV epidemiological and entomological surveys and pre-transmission assessment surveys [pre-TASs]). APOC ended in December 2015, and ENVISION took on the programmatic support in these six OV-endemic regions in FY16.

In addition to USAID support, DFID funds several partners to support the TZNTDCP. Specifically, DFID funding to the TZNTDCP through CNTD supports community-based LF MDA in six districts of Dar es Salaam Region. In FY18, CNTD funding included training, community mobilization, MDA, and data collection. In FY18, CNTD conducted pre-TASs, but preliminary results indicate that several districts will not pass. In addition, CNTD also established lymphedema care and hydrocele surgeries in the three districts where they completed LF morbidity mapping. To date, they have provided funding and technical assistance (TA) to complete more than 2,000 surgeries. CNTD has also worked closely with the TZNTDCP to develop a national morbidity management and disability prevention (MMDP) program strategy and framework for scaling up MMDP activities across the country. As noted above, CNTD also employs a database manager seconded to the NTD Secretariat. For FY19, although CNTD did not have its full financial commitment determined at the time of the Annual Joint Planning Meeting, CNTD plans to continue to provide funds for MDA in Dar es Salaam Region. In addition, CNTD plans to provide funding for hydrocelectomies for more than 1,000 additional patients. Finally, with funding from the *Deutsche Gesellschaft für Internationale Zusammenarbeit* (German Agency for International Cooperation [GIZ]), work is ongoing to assess morbidity in Lindi and Kilwa districts.

DFID also funds the Schistosomiasis Control Initiative (SCI) to address SCH and STH. SCI has supported school-based MDA in the Lake Zone regions (Mwanza, Kagera, Kigoma, Mara, and Shinyanga) and Dar es Salaam Region. In FY18, SCI supported SCH precision mapping in districts of Mara Region. In FY19, SCI will continue to provide funding to TZNTDCP to support praziquantel (PZQ) and albendazole (ALB) school-based MDA in the five Lake Zone regions and Dar es Salaam. SCI has also procured PZQ for areas where it operates; however, they will begin phasing out their donation as Tanzania moves toward receiving all PZQ through the World Health Organization (WHO) donation.

DFID funds a 5-year trachoma SAFE project through Sightsavers HQ. This project has worked on the "S" (surgery) component of the SAFE strategy since July 2014, with linkages to other partners and sectors for other components. The project aims to support national-level trachoma surgery planning and coordination through its Tanzania coordinating partner, HKI. DFID also supports partners to conduct trachomatous trichiasis (TT) surgeries, with activities in regions distributed as follows: IMA supports surgeries in Mtwara, Sightsavers in Pwani, and the Kilimanjaro Centre for Community Ophthalmology (KCCO) in Arusha and Manyara. DFID/SAFE is also funding the facial cleanliness ("F") and environmental improvements ("E") components of the SAFE strategy. Simavi, a Dutch organization, receives funding for Manyara Region and HKI for Arusha and Pwani regions. DFID plans to conduct three more TT-only surveys in districts where surveys are needed in February 2019.

The Queen Elizabeth Diamond Jubilee Trust (QEDJT) is funding a 3-year project (April 1, 2016–March 31, 2019) to conduct SAFE efforts through TT surgeries. HKI is the coordinating partner for QEDJT funding as well under Sightsavers HQ. Currently, QEDJT funding supports the following partners to carry out TT surgeries: Sightsavers/Tanzania in Lindi, Kongwa Trachoma Project in Dodoma, and KCCO in Arusha.

Beginning in July 2018, Sightsavers HQ will provide funding through the UK Commonwealth Fund for the further expansion of TT surgery and outreach services across the 15 districts that still have a TT backlog. All current IPs under SAFE have been invited to submit proposals for these additional 15 districts. The IPs expansion districts are now 26; HKI supports eight districts, IMA supports seven districts, KCCO supports five districts, Kongwa has three districts, and Sightsavers has three districts.

Sightsavers/Tanzania has focused on eye care, education, and rehabilitation services. It has provided training and funding for eye examinations and implements the "S," "F," and "E" components of the SAFE strategy in two districts in Morogoro and Ruvuma regions. Furthermore, as noted above, it has also provided TT surgeries in Tanga and Ruvuma, in addition to Pwani Region, where it works under the DFID/SAFE project.

As mentioned above, KCCO works under DFID/SAFE and QEDJT, in Arusha and Manyara regions. KCCO also supports research projects focusing on trachoma, including treatment for endemic villages in Siha District in Kilimanjaro Region.

The Kongwa Trachoma Project receives funding from the International Trachoma Initiative (ITI) to conduct bacteriological trachoma infection research in children and track antibodies formation in another cohort of children. Their research is focused in a few selected villages of Dodoma Region.

The Tackling Infections to Benefit Africa (TIBA) Partnership is an Africa-led, wide-ranging, multi-disciplinary research program that aims to empower African scientists to effectively and sustainably tackle NTDs and improve preparedness. It is funded by the National Institute for Health Research of the UK though the University of Edinburgh. The organization has specifically selected NTD scientists in Tanzania for fellowships, including the current IMA program manager.

The End Neglected Tropical Diseases (END) Fund has been working on and off in Tanzania for several years, with all funding from private donors (e.g., individuals, corporations). END Fund has been providing

support for TT surgeries in Tanga and Tabora and some funding for hydrocelectomies in Tanga Region. In FY19, END Fund plans to continue support in the same regions and to expand hydrocelectomies to Tabora Region. END Fund's previous global funding for OV work was not extended to Tanzania, and currently, whether funding will be available to support any OV work in Tanzania in the future remains uncertain.

Statoil is an international offshore oil company based in Mtwara, southern Tanzania. As part of its corporate social responsibility, it supports hydrocelectomies in Mtwara Region. In 2015, Statoil supported 103 hydrocelectomies at Mikindani Town Council (TC), and it pledged to support 100 hydrocele surgeries in Mtwara DC in FY18. In addition, it has conducted a follow-up health economic assessment of its beneficiaries.

Finally, CBM International has also provided funding for TT surgeries periodically throughout the country.

Table 1. Non-ENVISION NTD partners working in country, donor support, and summarized activities

Partner	Location	Activities	Is USAID providing NTD financial support to this partner?	Other donors supporting these partners/ activities?
CBM	Country office in Dar es Salaam	Provision of some TT surgeries	No	Other
HKI	Manyara, Singida, and Tabora regions; is also a coordinating partner for DFID/SAFE and QEDJT-funded regions (Pwani, Lindi, Mtwara, Arusha, Manyara, and Dodoma)	TT surgery coordination; funding for "F" and "E" components of SAFE strategy	No	DFID/SAFE and QEDJT
IMA	Mtwara Region	TT surgery	No	DFID/SAFE
CNTD	Dar es Salaam and other regions covered periodically through TAS and other research efforts	Funding for MDA and M&E in Dar es Salaam; seconded database manager to NTD Secretariat; hydrocelectomy	No	DFID and other
Sightsavers/Tanzania	Morogoro, Pwani, Lindi, and Ruvuma regions	Focused on eye care-related activities, including trachoma control; support mainly for TT surgeries; seconded program officer to NTD Secretariat	No	DFID/SAFE, DFID, and QEDJT
SCI	Kagera, Kigoma, Mara, Mwanza, Shinyanga, Dar es Salaam, and Simiyu regions	School-based MDA for SCH/STH; various studies	No	DFID

Partner	Location	Activities	Is USAID providing NTD financial support to this partner?	Other donors supporting these partners/ activities?
KCCO	Kilimanjaro Region	TT surgeries; research and treatment of high-prevalence villages in Siha District	No	DFID/SAFE and QEDJT
Kongwa Trachoma Project	Dodoma region	TT surgeries, research, and TA in Kongwa DC and MDA in Chamwino	No	DFID and QEDJT
ITI	Trachoma-endemic districts	Supply ZTH	No	Pfizer
Statoil	Mtwara region	Hydrocele surgery (100 surgeries planned for FY18)	No	None
END Fund	Tanga region	Hydrocele surgery	No	None
Simavi	Manyara region	SAFE Water, Sanitation, and Hygiene activities	No	DFID/SAFE
TIBA	National	Capacity development of NTD staff	No	Other

2) National NTD Program Overview

Several NTDs are endemic in Tanzania, the five most common being LF, OV, SCH, STH, and trachoma.

a) Lymphatic Filariasis

As of June 30, 2018, Tanzania has been able to stop LF MDA in 96 of 120 endemic districts. Before the end of FY18, the national program is planning TAS1 in three districts. If these three districts pass TAS1 as expected, the total number of districts that will require MDA in FY19 will be 24 (18 of which are ENVISION supported). Thus, the TZNTDCP has made remarkable progress in LF elimination, decreasing the number of endemic districts from 120 in 2015 to 24 in 2019. The scale down of MDA is based on good MDA coverage and rigorous disease monitoring by the program in collaboration with ENVISION.

LF mapping in Tanzania was carried out from 1999 to 2004, and the results showed that LF was endemic in all districts in the country. Mapping data indicated high endemicity in the coastal regions and lower levels further inland. Accordingly, the national strategy was to start MDA campaigns in areas with high endemicity first and then progressively add regions further inland.

MDA began in 2000 in districts along the coast where the prevalence at the time of mapping was very high; however, treatment was periodically interrupted because of lack of funding support. Since regular funding support was initiated by USAID (through ENVISION and APOC) and DFID (through CNTD), MDA campaigns have become integrated into the TZNTDCP. The LF MDA package in Tanzania includes ivermectin (IVM) and ALB and is distributed once a year. This IVM+ALB package is distributed house to house in all endemic communities by CDDs.

Remapping

In 2012, CNTD funded a TAS in Mwanza Region, even though treatment with IVM+ALB had never been initiated in the region. The results indicated that there was no ongoing transmission. Following consultation with WHO's Africa Regional Office (AFRO) Regional Programme Review Group (RPRG), the TZNTDCP decided in 2015 to remap the 63 (now 65) districts where MDA had not yet started, including those in Mwanza Region, with funding from ENVISION and the Task Force for Global Health (TFGH). The results indicated that all 63 (now 65) districts were below the MDA threshold. Based on the remapping, 65 of 185 districts are regarded as non-endemic, and only 120 were ever endemic.

LF MDA

In FY18, MDA was conducted in 27 districts nationwide (including 21 ENVISION-supported districts) in October 2017, targeting 3.5 million people. All 3.5 million people were treated, with 100% program coverage and 81% epidemiological coverage. During this MDA, 100% of districts met their epidemiological coverage targets. In August 2018, 18 districts will be treated with IVM+ALB, and the results will be reported in FY19.

Progress toward the 2020 elimination target is impressive, and only 20% (24/120) of the endemic districts still need MDA in FY19, all of which had a high starting prevalence. These districts are the 'last mile' for LF elimination and are discussed subsequently in the report. The NTD Secretariat, with assistance from ENVISION and CNTD, is making concerted efforts to intensify social mobilization and ensure high MDA coverage. In FY19, 10 districts will conduct re-pre-TAS, and further analysis of MDA will be performed to better understand the possible reasons underlying the failed pre-TAS.

LF M&E

In Tanzania, the district is the implementation unit. To determine TAS eligibility, post-fifth-round sentinel site (SS) and spot check (SC) site assessments are conducted in every district in accordance with WHO guidelines. The TZNTDCP recommends that wherever possible, any parasitological SS/SC site assessment should be integrated and include samples from three NTDs: LF, STH, and SCH. In each implementation unit, the TZNTDCP previously selected one village as the SS and two as the SC sites. Criteria for village selection include (1) stable population, (2) approximately 500 inhabitants or more, and (3) known high LF endemicity or expected low coverage. Within the site, 250–300 individuals aged 5 years and older are tested for circulating filarial antigen (CFA).

In May FY18, the TZNTDCP conducted re-pre-TAS in 11 districts. Three districts passed the re-pre-TAS, and eight districts did not reach the 2% CFA cut-off. Given the failed pre-TAS this date has been pushed to 2022.

In FY18, TZNDTCP will conduct TAS1 in three districts in August 2018. These three districts were part of one evaluation unit (EU) that failed a TAS1 in 2016. They have since completed additional rounds of effective MDA and passed a re-pre-TAS in May 2018. The TZNTDCP conducted TAS2 in 66 districts in FY18, all of which passed. In the 56 districts where surveys have been completed, all districts hare reported sustained interruption of transmission. The TZNTDCP is concerned about the possibility of districts that pass TAS2 and/or TAS3 and still have positive children. Although positive cases are treated following surveys, little known is about the transmission dynamics in communities with filariasis test strip (FTS)-positive children. Tanzania is pursuing some operational research (OR) with funding from TFGH to answer this question.

In FY19, the MOHCDGEC plans to conduct re-pre-TAS in 10 districts, TAS1 in 5 districts, TAS2 in 17 districts, and TAS3 in 6 districts.

MMDP

The TZNTDCP conducted LF morbidity mapping via house-to-house smart phone data collection in the six districts of Dar es Salaam Region with funding and TA from CNTD. Additionally, with funding from GIZ, work is ongoing to assess morbidity in two districts in Lindi region. Within Dar es Salaam, an estimated total of 6,000 patients have been identified. CNTD has committed to support hydrocoelectomy for all 6,000 people in a phased approach. By 2018, a total of 2,000 had received surgery at planned surgical camps within the city. Additional surgeries are expected to be performed in 2019 to continue to address the backlog. IMA received funding from the Izumi Foundation for hydrocele surgeries in Mtwara and Lindi regions. This funding subsidized surgeries for 1,320 men suffering from hydrocele before the project ended in 2016.

History of USAID Support

In FY10, under the NTD Control Program, USAID started supporting LF MDA (IVM+ALB) in seven regions (Mtwara, Lindi, Pwani, Dodoma, Singida, Rukwa, and Katavi), and in FY11, under ENVISION, USAID supported this activity in two additional regions (Tabora and Manyara). In FY16, ENVISION began funding IVM+ALB MDA in addition to school-based PZQ+ALB MDA in the six OV-endemic regions previously supported by APOC. Under ENVISION, integrated LF/STH/SCH SS and SC site assessments and pre-TAS and TAS were also carried out. In FY15, in collaboration with TFGH, ENVISION supported LF remapping efforts for 63 districts where no LF MDA had been initiated.

b) Trachoma

By June 2018, Tanzania was able to stop MDA in 64 of its 71 endemic districts. The TZNTDCP's goal is to eliminate blinding trachoma in Tanzania by 2020. Mapping for trachoma was completed in 2014, with ENVISION providing funding and TA for grader and enumerator training through ENVISION's role in the Global Trachoma Mapping Project. Through the inclusion of Tanzania in the Global Trachoma Mapping Project and electronic data capture during baseline and impact surveys, mapping speed and quality improved significantly. Based on baseline surveys, a total of 61 districts were trachoma endemic with ≥5% trachomatous inflammation–follicular (TF) prevalence. Following redistricting, the total number of districts estimated to have TF prevalence rates of ≥5% was 71. By the end of FY15, all districts requiring MDA were receiving treatment, and 100% geographical coverage was achieved. As program interventions were implemented, some districts achieved TF prevalence rates below 5% and, thus, met the criteria for stopping MDA. In FY19, only ten endemic districts will need MDA (Table 2).

To eliminate blindness resulting from trachoma, the SAFE strategy must be implemented for one to five years in districts determined to be endemic (depending on baseline prevalence) before impact surveys are conducted. The TZNTDCP carried out trachoma impact surveys (TISs) in 2009, and then annually since 2012 in various districts. By the beginning of FY18, 60 endemic districts (85%) have reached the criteria for stopping MDA for trachoma (<5% TF). Of the 11 endemic districts where MDA is ongoing in FY18, 11 districts are not yet eligible for TIS.

By end of FY18, 11 TIS and 21 TSS surveys will be completed. Data from Arusha region, where baseline prevalence was >50%, indicated a significant drop in TF level. Results from the remaining eight TIS surveys will be available upon their completion in August 2018. Preliminary results show that three districts will not pass the TIS and two districts are at 4.9%. Recent survey results have shown the need for a more in-depth analysis of the remaining endemic districts and a specialized intervention approach. Specifically, within the Maasai belt of northern Tanzania, ENVISION has discovered that there are many subdistricts that have higher prevalence rates than the overall district, with some subdistricts reporting TF levels exceeding 50%. These subdistricts include migratory pastoralist groups temporarily residing within static communities before migrating along a route toward Kenya.

The program has taken several steps to address these findings, including conducting a cluster-level analysis of TF infections, which revealed the clustering of heavy infections in certain communities; reviewing MDA coverage at the subdistrict level to better understand MDA uptake patterns and systematic noncompliance; and performing OR to understand ocular chlamydia infections, which indicated ongoing transmission. These findings and unique challenges were presented to the TEC in June 2018. The TEC stated it will welcome a mid-year request for ZTH to conduct MDA and suggested conducting a new baseline survey in the Maasai corridor districts in Arusha region. The TZNTDCP, with assistance from ENVISION, will develop a plan to enhance social mobilization in Maasai communities to improve coverage, ensure that these populations receive treatment, and submit a midyear request for ZTH to ITI.

In addition to transmission among the Maasai in Arusha Region, six districts in Dodoma have experienced "bouncing" TF prevalence, where the TF level has risen and fallen around the 5% threshold in recent TISs. Dodoma Region is dry and is home to several nomadic populations, including Maasai and other ethnic groups. The TZNTDCP, with ENVISION technical and financial support, plans to conduct quantitative and qualitative assessments in some districts in the region to determine if there is systemic noncompliance in specific populations and assess how to redirect and reframe social mobilization efforts to ensure all resident Dodoma populations are reached.

In FY19, TSS are planned in nine districts and TISs in four districts. All four districts have had a TIS before.

Trachoma Morbidity

The TZNTDCP, with support from the DFID/SAFE and QEDJT projects (described in the Partner Support section), has expended substantial effort to reach the ultimate intervention goals for TT surgery. These projects cover Lindi, Mtwara, Dodoma, Arusha, Manyara, and Pwani regions. Through these combined efforts, the TZNTDCP anticipates that the TT surgery backlog in these regions will be cleared by the end of FY20. In FY18, the unmanaged TT UIG has been estimated at 16,000 people. In addition, as mentioned in the Partner Support section, the UK Commonwealth Fund, through Sightsavers, will provide funding starting in August 2018 to cover TT surgeries in the remaining 15 districts with a backlog UIG that has not yet been addressed.

c) Onchocerciasis

The TZNTDCP's goal is to eliminate OV by 2025, guided by the new WHO guidelines for OV elimination. OV is endemic in 7 foci across 28 districts in 6 regions: Mbeya, Morogoro, Njombe, Ruvuma, Iringa, and Tanga. The community-directed treatment with IVM (CDTI) program was launched by APOC in Tanzania in 1997. The 7 CDTI foci (Tanga, Tukuyu, Ruvuma, Tunduru, Mahenge, Kilosa, and Morogoro), comprising 21 districts, were treated with APOC support through a phased scale-up approach. By 2009, when three additional districts were included, the TZNTDCP had moved to an integrated MDA approach and treated all districts in the six regions with IVM+ALB with funding from APOC and, later, ENVISION. Because of redistricting, the number of OV-endemic districts has increased from 23 in FY16 to 28 in FY17; a new region, Songwe, was established in 2016, increasing the number of OV-endemic regions from 6 to 7 in FY17.

All OV-endemic districts are co-endemic for LF, and since 2009, these districts have received IVM+ALB through annual community-based MDA. From 2009 to 2015, APOC supported OV activities with USAID funding; starting in FY16, ENVISION began funding MDA activities in OV-endemic regions.

In February 2018, the TZNTDCP held the third meeting of its national elimination committee, the Tanzania OV Elimination Expert Advisory Committee (TOEAC). The committee reviewed the progress of the OV program and provided recommendations on the way forward in several key areas related to OV elimination. Of note, the TOEAC will advise on next steps for OV treatment (e.g., continued treatment on an annual basis, alternate treatment strategy, or stopping MDA) based on the results of any monitoring and mapping activities.

OV MDA

By FY18, the program had stopped LF MDA in 23 of 28 OV-endemic districts; however, all 23 districts continued with district-wide IVM+ALB MDA. In FY19, the program will switch to IVM monotherapy for OV as per WHO guidelines in these 23 endemic districts. Five districts are still endemic for both LF and OV.

Following the results of OV monitoring in Morogoro and Tanga regions, the TOEAC advised initiating twice-a-year IVM MDA in nine districts and potentially two more in 2019. These nine districts include four districts in Mahenge focus and five districts in Tanga focus. The formal request for twice-a-year treatment will be submitted to the Mectizan® Donation Program in July 2018. Two additional districts may also be targeted for twice-a-year treatment. A decision on these districts will be taken at the February 2019 TOEAC meeting when the results of surveys conducted in FY18 will be presented to the committee.

OV M&E

The TZNTDCP, with guidance from the TOEAC and funding from ENVISION, implemented its first OV epidemiological assessment survey in Tukuyu focus in December 2016. A total of 3,198 children aged 6–9 years were assessed, and 1 (0.03%) was positive (as measured using an OV16 rapid diagnostic test [RDT]). This is a good indicator of progress toward elimination. However, WHO requires definitive results from OV16 enzyme-linked immunosorbent assay (ELISA) analysis for a decision to stop MDA. TFGH agreed to fund the analysis of dried blood spot (DBS) samples in 2017. This activity was delayed because the TFGH and Centers for Disease Control and Prevention provided additional TA and funding to train the NIMR Tanga laboratory on an updated ELISA protocol. With funding from TFGH, it is anticipated that all DBS samples from the Tukuyu OV surveys will be analyzed by August 2018.

The TZNTDCP is still seeking funding to analyze the DBS samples from the Tanga (6,000) and Morogoro (4,000) surveys. Furthermore, following the FY18 OV monitoring surveys implemented in 16 districts in August 2018, an additional 8,500 DBSs will require analysis. When the results are available, the program will present them to the TOEAC for review and guidance. It is hoped the Tukuyu focus will meet the WHO MDA stopping criteria in FY19.

The TZNTDCP conducted OV monitoring using several different protocols in FY17, aiming to assess both OV prevalence and the various protocols' cost-effectiveness and feasibility. OV monitoring surveys in two districts in Tanga focus were nested in the LF TAS2 and were conducted among primary school pupils in Grades 1, 2, 3, and 4, representing children aged 6–9 years old. The OV monitoring survey in Tunduru was nested in a pre-TAS.

Also in FY17, OV monitoring surveys were conducted in Morogoro Region, where the OV16 RDT positive rate ranged from 0% to 2.8% in children under 10 years (Table 3).

d) Schistosomiasis

SCH was mapped in 2004 through blood-in-urine questionnaires, which provide information about *Schistosoma haematobium* but not *S. mansoni*, administered to school-age children (SAC) in all districts. The results indicated a high prevalence (≥30%) in 13 districts and moderate prevalence (>1% and <30%) in 153 districts. Of the 185 endemic districts, with ENVISION funding, 15 of 18 high-prevalence districts are treated annually, and 119 of 167 moderate-prevalence districts are treated every 2 years; the remainder (51) are treated with funding from SCI. SCH control efforts in Tanzania target SAC, including both those who are enrolled in primary schools and who are not enrolled; high-risk adults are not treated.

In FY17, the TZNTDCP, with ENVISION and SCI TA, began thoroughly reviewing mapping and SS/SC data to identify a better treatment strategy going forward. The data were presented at the Annual Joint Planning Meeting in June 2017, and information down to the ward level was provided. This initial review included an analysis of mapping and SS/SC data on *S. haematobium* and *S. mansoni* to update district and ward endemicity data and shape the treatment strategy. This analysis helped identify which districts can be treated less frequently (twice during a child's school years) and those where a high prevalence in identified foci/communities requires treating high-risk adults with PZQ according to WHO's protocol for SCH control; however, the program did not change its treatment strategy.

In 2018, SCI funded and provided technical support for precision SCH (and STH) mapping in all nine districts of Mara Region. Preliminary results indicate that 50%–70% of the current treatment area does not need MDA and that 25% needs MDA once every 2 years. These findings suggest the need for a significant shift in the SCH control focus in the lake zone, as only 5% to 10% of the wards need twice-per-

year treatment with PZQ. To further support this effort, SCI also procured PZQ for the treatment of 800,000 high-risk adults.

The results from the Mara precision mapping work were shared during the June 2018 SCH/STH Technical Working Group (TWG) meeting. The TWG advised the program to continue with a proposed new strategy of ward-level PZQ MDA, where possible. However, the TWG also recognized that while precision mapping allows for a more targeted approach to MDA, there are also logistical and financial constraints to implementation.

SCH MDA

In FY18, PZQ MDA has been completed in at least half of the districts. Initial treatment data show that 100% have attained the minimum 75% coverage target. In the past, treatment coverage has been low in most regions, in part because of overestimation of the denominator, as described below. The SAC population was previously estimated using a blanket percentage projected from the national population census provided by the National Bureau of Statistics (NBS). As noted in the STH section, district-specific proportions have been applied to estimating SAC, and the TZNTDCP will use these estimations going forward.

The TZNTDCP has learned from the coverage and Knowledge, Attitudes, and Practices studies that the primary inhibitor to taking PZQ during MDA is fear of adverse events (AEs). This fear has led to parents not allowing their children to attend school during MDA days. The program has worked on targeted social mobilization strategies that involve school management committees and parent associations to respond to these myths and increase MDA participation. Furthermore, the program requires that a meal be eaten before PZQ MDA in schools. Teachers work with parents to collect food and prepare a meal for all SAC taking PZQ during an MDA. No serious AEs (SAEs) have been reported after taking PZQ in years, including in FY18. Food has been successfully provided during school MDA of PZQ because of the involvement of regional and district political, education, and health leaders during regional advocacy meetings. The mobilization of schoolchildren, their parents, and resources to provide meals to children on the day of MDA is key to success during implementation. The food must be cooked at the schools, and eating is directly observed by the teachers. District education officers are involved in all NTD planning and review meetings and are members of their district NTD teams. District education officers mobilize school heads, NTD representative teachers, and school committee members to ensure food is provided during school MDA. In addition, school committees and school heads issue letters of information or make announcements in the community to ask parents to contribute food and other resources toward the preparation of food for MDA.

History of USAID Support

USAID started funding community-based MDA (IVM+ALB) and school-based MDA (PZQ+ALB) in FY10 under the NTD Control Program in seven regions (Mtwara, Lindi, Coast, Dodoma, Singida, Rukwa, and Katavi) and in FY11, under ENVISION, in two additional regions (Tabora and Manyara), for a total of nine regions. In FY16, ENVISION began supporting IVM+ALB MDA in addition to school-based PZQ+ALB MDA in the six OV-endemic regions previously supported by APOC. ENVISION has also supported integrated LF/STH/SCH SS/SC site assessments.

In FY19, in addition to the support mentioned above through ENVISION, TZNTDCP will facilitate the first SCH/STH Technical Expert Advisory Committee (SSTEAC) meeting. This meeting will provide a platform for the presentation of new SCH and STH data and endorsement of changes to the treatment strategy.

e) Soil-transmitted Helminths

STH is believed to be endemic throughout Tanzania, although parasitological baseline mapping of STH has not taken place. In 2004, the MOHCDGEC conducted a desk review of hospital and health facility records. At the time, all regions were found to require some level of STH intervention per WHO guidelines (for this reason, Table 4 does not represent this as a mapping gap). Control efforts for STH through the TZNTDCP target primary school SAC aged 7–13 years who are at greatest risk for STH infection. Preschool children (1–6 years of age) are treated through the vitamin A/deworming program run by the Reproductive and Child Health (RCH) Section of the MOHCDGEC. The main intervention for SAC is MDA with ALB, which is implemented by trained school teachers supported by health personnel and complemented by school health education and environmental sanitation. By the end of FY18, 100% of the country will have been reached with at least one round of STH treatment, with ENVISION, SCI, and CNTD providing support to the MOHCDGEC. In districts that are non-endemic for LF and those that have passed TAS, the TZNTDCP conducted school-based ALB or ALB+PZQ MDA (depending on the SCH treatment protocol). In districts that are still LF or OV endemic, the TZNTDCP conducts school-based MDA with ALB or ALB+PZQ and a second round of MDA through community distribution of IVM+ALB.

In the past, coverage rates among SAC have been low, and although the reasons for these low rates vary by district, the main contributing factor across all districts prior to FY15 was the challenge of correctly estimating the number of SAC. In FY15, following concerns about high estimates of the SAC population by the national NTD Secretariat, a data review was conducted. With the aid of the 2012 National Population Census report (which is disaggregated by age and gender) released by the NBS in 2013, school-age categories were determined. The national policy states that primary-level education is for children aged 7 years and older and runs from Grade 1 to 7. NBS estimates that the age range for SAC is 7–13 years of age. Upon a review of the 2012 census report, this group corresponds to a national average of 19.1% of the total population. However, this proportion varies from district to district. Thus, district-specific proportions of SAC were determined and applied accordingly; these proportions range from 12.3% to 22.7%. These estimates are as realistic as any the TZNTDCP can currently obtain. They have been applied and used in estimating MDA needs and targets since FY15 and will continue to be used in the future.

As stated above, USAID started funding community-based MDA (IVM+ALB) and school-based MDA (PZQ+ALB) in FY10 under the NTD Control Program in seven regions (Mtwara, Lindi, Coast, Dodoma, Singida, Rukwa, and Katavi) and in FY11, under ENVISION, in two additional regions (Tabora and Manyara), for a total of nine regions. In FY16, ENVISION began supporting IVM+ALB MDA in addition to school-based PZQ+ALB MDA in the six OV-endemic regions previously supported by APOC. However, starting in FY19, OV-endemic districts that have stopped LF MDA will offer IVM only (not IVM+ALB). This is a shift in the MDA strategy for these 23 districts, and communities will be mobilized and educated on this change. ALB will continue to be provided in school-based MDA for STH, targeting only SAC. Integrated LF/STH/SCH SS/SC site assessments and integrated TASs were also supported by USAID. In FY19, the TZNTDCP, with ENVISION funding and IMA's TA and supervision, will continue deworming for SAC in 134 districts. SCI funds PZQ+ALB in the six districts in the lake zone.

3) Snapshot of NTD Status in Country

Table 2. Snapshot of the <u>expected</u> status of the NTD program in Tanzania as of September 30, 2018

		Columns C+D+E=B for each disease*			Columns F+G+H=C for each disease				
		MAPPING GAP DETERMINATION			MDA GAP DETERMINATION		MDA ACHIEVEMENT		DSA NEEDS[a]
A	B	C	D	E	F		G	H	I
Disease	Total No. of Districts in Tanzania	No. of districts classified as endemic	No. of districts classified as non-endemic	No. of districts in need of initial mapping	No. of districts receiving MDA as of 09/30/18		No. of districts expected to be in need of MDA at any level: MDA not yet started, or has prematurely stopped as of 09/30/18	Expected No. of districts where criteria for stopping district-level MDA have been met as of 09/30/18	No. of districts requiring DSA as of 09/30/18
					USAID-funded	Others			
LF	185*	120*	65	0	17	6	0	96	Pre-TAS: 10
									TAS1: 5
									TAS2: 17
									TAS3: 6
OV		28	157	0	28	0	0	0	Elimination Mapping: 13
SCH		185	0	0	134	51	0	0	*SSA 9 (integrated with LF pre-TAS)*
STH		185	0	0	134	51	0	0	
Trachoma		71	114	0	10	0	0	64	TIS:9 TSS: 9**

*In FY18, the total number of districts changed from 186 to 185 because Tanganyika DC reverted to the two councils of Mpanda DC and Mpimbwe DC. In addition, the number of ever-LF-endemic districts decreased from 121 to 120.

**TSS will be conducted in 9 districts with 12 EUs, as 3 districts have a population of >250,000 and will be split into 2 EUs per district.

PLANNED ACTIVITIES

1) NTD Program Capacity Strengthening

a) Strategic Capacity Strengthening Strategy

ENVISION and the NTD Secretariat have identified the following priorities for capacity strengthening to ensure the continued success of efforts to address NTDs in Tanzania.

- Ensure that the TZNTDCP fully implements the resource and partner mobilization plans developed in FY18 though technical capacity development focusing on resource mobilization and advocacy.
- Continue to build the NTD management capacity at the central and regional levels to ensure high-quality project implementation beyond partner support.
- Continue to build the M&E capacity of MOHCDGEC staff at national, regional, and district levels and strengthen the culture of data use for project management and decision-making.

b) Capacity Strengthening Objectives and Interventions

Objective 1: Ensure that the TZNTDCP fully implements the resource and partner mobilization plans developed in FY18 though technical capacity development and milestones.

Intervention 1: Central-level advocacy and resource mobilization : To ensure sustainability of ENVISION achievements, in FY18 the TZNTDCP and ENVISION are establishing a resource mobilization team that will be composed of TZNTDCP staff and selected regional representatives. In the fourth quarter of FY18, the team will lead meetings in 6 of the 19 regions selected on the basis of need for increased resources and the inclusion of NTD activities in CCHPs and budgets. The team will discuss the history of USAID support and highlight achievements made. Political and government leaders will understand that to sustain the achievements made, district councils must find ways to provide more resources

Intervention 2: On-the-job training and informal meetings at the TZNTDCP focusing on advocacy and resource mobilization : In FY19, ENVISION staff and seconded staff will host an internal meeting led by the IMA ENVISION Program Manager focusing on the importance of advocacy and resource mobilization. Staff will be coached on ways to provide on-site training and talking points regarding advocacy and resource mobilization to use in their day-to-day activities.

Objective 2: Continue to build the NTD management capacity at the central and regional levels to ensure high-quality project implementation beyond partner support.

Intervention 1: Transition plan for ENVISION-supported seconded staff : The NTD Secretariat relies heavily on seconded staff funded partners, including three by ENVISION. In FY19, ENVISION, with support from USAID/Washington, will also continue to engage and advocate with MOHCDGEC leadership and the GoT to absorb some of the seconded staff into their payroll. Additionally, ENVISION will work with the NTD Coordinator to implement the secondment transition plan where possible, with the understanding that if additional positions are not allocated to the NTD Secretariat, current staff do not have the bandwidth to take on these responsibilities.

Objective 3: Continue to build the M&E capacity of MOHCDGEC staff at national, regional, and district levels and strengthen the culture of data use for project management and decision-making.

Intervention 1: Continue supporting high-quality DSAs. : The ENVISION M&E secondment and IMA staff will continue to work with the national program to ensure expertise in implementing LF TASs and OV monitoring surveys. Mentoring activities at the national and regional levels and ongoing trainings for all DSAs will continue in FY19. Capacity building activities in FY18 and plans for FY19 are highlighted in the M&E section. ENVISION will also continue to provide coaching on the use of the WHO integrated NTD database and the Tanzania-specific NTD database.

c) Monitoring and Evaluating Proposed Capacity Strengthening Interventions

To ensure continual monitoring of capacity strengthening efforts, ENVISION staff will continue to meet regularly with the TZNTDCP and discuss capacity strengthening progress and needs in key technical, managerial, financial, and operational areas. ENVISION will also liaise with other relevant government stakeholders, including the Department of Preventative Services and NIMR. These meetings will serve as a platform to regularly monitor and assess the proposed capacity strengthening interventions mentioned above. The Annual Joint Planning Meeting, TWGs, and other meetings described under Strategic Planning will also provide opportunities for ENVISION and the TZNTDCP to more broadly discuss capacity strengthening needs and opportunities with Tanzania's NTD partners and donors (please reference Table 1).

Objective 1: Ensure that the TZNTDCP fully implements the resource and partner mobilization plans developed in FY18 though technical capacity development and milestones.

Indicators:

- Advocacy plan and resource mobilization plan with milestones completed and shared with ENVISION, USAID, and partners

Objective 2: Continue to build the NTD management capacity at the central and regional levels to continue high-quality project implementation.

Indicators:

- As possible given NTD Secretariat staffing, milestones completed for each of the three remaining USAID-supported secondments

Objective 3: Continue to build the M&E capacity of MOHCDGEC staff at national, regional, and district levels and strengthen the culture of data use for project management and decision-making.

Indicators:

- TZNTDCP manages the WHO Integrated NTD Database and Tanzania-specific database.
- Joint Application Package (JAP), TEMF/Zithromax application, and other relevant forms submitted properly and on time.
- National M&E focal points draft protocols and ENVISION reviews for quality through on-site coaching.

Table 3. Project assistance for capacity strengthening

Project assistance area	Capacity strengthening interventions/activities	How these activities will help to correct needs identified in situation above
Strategic Planning	1. Annual Joint Planning Meeting 2. Disease-specific TWG meetings 3. TOEAC meeting	Opportunity for local and international disease-specific experts to lead and promote discussions to address disease-specific issues that might otherwise be lost in the framework of integration. The meetings provide a space to review and discuss disease-specific data to inform programmatic decision-making and short- and long-term strategic planning.
NTD Secretariat	1. The TIPAC is updated regularly and can be used annually to build the capacity of partners to plan activities and identify gaps.	TIPAC identifies funding gaps, which help stakeholders choose priority areas of interest for support.
Building Advocacy for a Sustainable National NTD Program	1. The TZNTDCP is prioritizing the development of a sustainable strategy to increase domestic resources and local financing toward the direct implementation of NTD activities. 2. Nongovernmental Organization NTD Coalition 3. Transition plan for seconded staff	Promoting achievements and strengthening government ownership, advocacy, coordination, and partnership Planning for results, resource mobilization, and financial sustainability
Social Mobilization to Enable NTD Program Activities	1. Continue to implement BCC strategy for nomadic communities	Strengthen the social mobilization skills for implementing activities for difficult-to-reach communities. Using this unique social mobilization strategy will also encourage the TZNTDCP to address difficult-to-reach populations and will serve as an example for future communication strategies.
Drug Supply and Commodity Management and Procurement	1. On-the-job training and mentoring provided by the Drug and Logistics Officer	Mentoring from the secondment has ensured that other staff members understand standard operating procedures for handling NTD medicines, quantification (to reduce medicine waste resulting from expiry), and SAE management, among others.
Supervision for MDA	1. Provide focused supervision efforts during trainings for FLHWs, CDDs, and teachers. 2. Strengthen monitoring mechanisms during supportive supervision (e.g., supervision checklists)	Supportive supervision enhances skills of FLHWs, CDDs, and personnel from the District Health Management Teams through coaching and mentoring.
Dossier Development	1. Continue to analyze data and prepare the trachoma dossier document	The dossier process is expected to strengthen the documentation skills of the TZNTDCP

2) Project Assistance

a) Strategic Planning

Each year, IMA staff work closely with the NTD Secretariat to develop a national NTD plan of action. This plan for FY19 was developed in May 2018, prior to the TZNTDCP Annual Joint Planning Meeting. The NTD action plan outlines the goals, objectives, and activities for the year, with an emphasis on maintaining high coverage in endemic regions and strengthening the NTD management capacity in 19 ENVISION-supported regions (through partner-supported trainings and supervision and mentorship from the TZNTDCP). The action plan aligns with MOHCDGEC priorities, the draft updated Tanzania NTD Master Plan, and the USAID ENVISION FY19 work plan and is well coordinated with the priorities and plans of other stakeholders and partners.

The NTD Secretariat has used the Tool for Integrated Planning and Costing (TIPAC) for several years, and its output aligns closely with the NTD Master Plan, ENVISION work plans, and the TZNTDCP national NTD plan. The tool is used to estimate the costs for yearly activities, identify anticipated gaps, and help the TZNTDCP to manage and plan accordingly across the different donor FYs.

Planned Activities for FY19

Activity 1: Regional and district review/planning meetings :In FY19, ENVISION, will continue to support the annual regional and district review/planning meetings led by the TZNTDCP. These meetings will take place in November and December for 41 districts that will conduct community-based IVM/ALB MDA, seven districts that will conduct ZTH MDA, and all 134 districts conducting PZQ and ALB school-based MDA. IMA staff, in partnership with national NTD Secretariat members, will facilitate the regional meetings. District-level meetings will be led by the regional NTD coordinators. Regional and district meetings will be held in the 134 ENVISION-supported districts across 19 regions. Each regional meeting will host respective district representatives from across the region. These meetings focus on reviewing previous MDA activities and lessons learned to develop and inform plans in line with the national NTD plan for upcoming MDA-related activities. These meetings are an important opportunity for the exchange of feedback with the regional and district levels on activities that work well and areas of challenges. MDA coverage information is reviewed and discussed, which helps to inform any needed changes or additions to activities for the upcoming year.

Activity 2: Disease-specific TWG meetings **:**In FY19, ENVISION and the TZNTDCP will continue to organize and facilitate disease-specific TWG meetings (for LF/OV, STH/SCH, and trachoma) to allow for and promote discussions to address disease-specific issues. The NTD Secretariat will present data for review and discussion, and this will drive planning and decision-making. These TWGs will meet in FY19, and ENVISION, in collaboration with the national NTD Secretariat, will organize and participate in discussions during these meetings. ENVISION will support one meeting for each TWG (two meeting days total for the three meetings) during the third quarter (the TWG meetings will take place the same week as the Annual Joint Planning Meeting).

Activity 3: Annual Joint Planning Meeting : To ensure that the MOHCDGEC can better lead the coordination of local and international NTD partners in Tanzania and to avoid duplication and increase harmonization of efforts among partners, ENVISION will help in organizing an Annual Joint Planning Meeting for local and international stakeholders in FY19. It is critical for the MOHCDGEC to consider differing FYs and planning cycles when planning with all partners and donors and establishing how best to plan activities. Each year, the TIPAC is used to plan activities and identify gaps. In addition to partner presentations, the NTD Secretariat presents activities that were completed, highlighting successes and

challenges in using the data to guide activities. The meeting promotes active discussion on issues of MDA coverage, data quality, and regional- and district-level concerns. As in previous years, the disease-specific TWG meetings will be held the day before the Annual Joint Planning Meeting to take advantage of partner organization representatives who will be in Tanzania to attend both sets of meetings.

Activity 4: TOEAC meeting :Tanzania established an OV expert committee in FY16: the TOEAC. In FY19, the TZNTDCP plans to conduct one TOEAC meeting to plan for OV efforts and elimination in the country. Representatives from USAID, IMA, RTI, AFRO/RPRG, END Fund, the Centers for Disease Control and Prevention, and others will be invited to attend this meeting. ENVISION funds the participation of RTI and IMA staff from HQ (which will be tied to a project oversight visit, as detailed above in the Travel section) and in-country staff. The 2-day meeting will provide a platform for reviewing new OV data and formalizing plans for the TZNTDCP. The goals of the meeting include reviewing the elimination strategy, deciding on stopping MDA in specific foci/districts, and determining actions for any remaining areas of unknown endemicity.

Activity 5: STH and SCH data review meeting: Because of the success of the TOEAC, as outlined above, and as a means to move forward with updating the SCH and STH strategies, in FY19, ENVISION will fund a 2-day meeting data review meeting for STH and SCH, which will serve as a stepping stone toward a SSTEAC. As outlined in the disease-specific section, the TZNTDCP has collected new SCH data that warrant a revision of the current SCH treatment plan to better target infected SAC and use resources more efficiently. In addition, because of changing funding priorities and amounts, STH needs to continue to look for new platforms and/or donors to be able to continue treatments. The SSTEAC will convene representatives from the TZNTDCP, USAID, RTI, IMA, and other stakeholders and partners.

b) NTD Secretariat

In Tanzania, the TZNTDCP is led by a national NTD Coordinator, who heads the program's central coordination unit, which is referred to as the national NTD Secretariat. The major role of the Secretariat is to provide leadership, direction, overall supervision, and coordination of all TZNTDCP-related activities in the country at all levels.

Activities for FY19

Activity 1: Administrative and transport support to NTD Secretariat: In FY19, ENVISION funding will continue to provide administrative and operational support to the national NTD Secretariat, including stationery and other office supplies and communication costs, including telephone and email/Internet services. Transportation assistance includes the provision of fuel and vehicle maintenance to support the NTD Secretariat with supervisory activities and some general operations.

c) Building Advocacy for a Sustainable National NTD Program

Activities for FY19

Activity 1: District-level advocacy meetings (nine districts) – 2× annual treatment for OV :ENVISION will work with the TZNTDCP to lead meetings in nine districts that will receive twice-a-year annual treatment for OV. In February 2018, the TOEAC reviewed updated OV assessment information and determined that nine districts are eligible for twice-a-year treatment with IVM, pending approval by the Mectizan® Donation Program. These districts include four districts in the Mahenge focus and five districts in the Tanga focus. Following OV assessment surveys, which will take place in June 2018, it is anticipated that

two more districts in the Morogoro focus will be determined to be eligible for twice-a-year treatment (Morogoro DC and Mvomero DC).

Activity 2: District-level advocacy meetings (10 districts) – Stop MDA **:**Community sensitization meetings for stopping MDA will be conducted by ENVISION in the estimated 10 districts that will meet the criteria for stopping MDA and have unique challenges following stop MDA. These unique challenges include the following: a large TT backlog may build up after stopping MDA, driving the need for a more focused F&E strategy, or some districts that have recently stopped LF MDA may still continue OV MDA. The meetings will provide a venue for discussions to avoid confusion or misunderstandings among district NTD teams and communities in unique situations.

Activity 3 Central-level advocacy and resource mobilization : To ensure the sustainability of ENVISION achievements, in the fourth quarter of FY18, the TZNTDCP and ENVISION are establishing a resource mobilization team composed of TZNTDCP staff and selected regional representatives. This team will lead meetings in FY18 in 6 of the 19 regions selected based on need to increase resources for and the inclusion of NTD activities in CCHPs and budgets. The team will discuss the history of USAID support and highlight achievements. Political and government leaders will understand that to sustain the achievements made, DCs must find ways to provide more resources.

In FY19, ENVISION will support a meeting at the central level to review these district-level meetings and the advocacy efforts carried out thus far, including the NTD Learning Day and the Launch of the NTD Master Plan. This meeting will provide a platform to determine a way forward for advocacy and resource mobilization efforts in the future.

d) Mapping

All trachoma mapping for Tanzania has been completed, and LF remapping was finished in FY15. SCH was mapped in 2004 through blood-in-urine questionnaires administered to school children in all districts. STH is considered endemic throughout Tanzania, although baseline mapping of STH has not taken place. In addition, all OV meso- and hyper-endemic mapping has been completed.

OV mapping to “determine presence of OV” to start the control program was finished in the 1990s in many parts of Tanzania. During that period, purposively suspected communities were sampled, and nodule prevalence was used to classify communities as “meso or hyper endemic.” At that time, all communities regarded as hypo-endemic were left out of the control program. As the TZNTDCP pivots to an OV elimination program, elimination mapping must be conducted to determine if additional districts are endemic and require treatment. As such, ENVISION is proposing to support elimination mapping in 13 districts.

Activity 1: OV elimination mapping . The program identified and the TOEAC recommended elimination mapping in 13 districts (Table 6). Ten of the 13 districts have met the criteria for stopping LF MDA, and 2 districts were never endemic for LF. In FY19, ENVISION will support elimination mapping using OV16 RDTs and DBS testing in these 13 districts. A protocol for this survey was presented to the TOEAC members via email for review and guidance. Upon the completion of this elimination mapping, and entomology work (using previous USAID/WHO/APOC funding), the TZNTDCP plans to present the data at the February 2019 TOEAC to further guide the OV elimination strategy.

e) MDA Coverage

Table 4. USAID-supported districts and estimated target populations for MDA in FY19

NTD	Age groups targeted	Number of rounds of distribution annually	Distribution platform(s)	Number of districts to be treated	Total # of eligible people to be targeted
				in FY18	in FY18
LF (August 2019)	All at-risk people ≥5 years old in a district	1	Community based (IVM+ALB)	18*	3,834,185
OV ROUND 1 (February 2019)	All at-risk people ≥5 years old in a district	1	Community based (IVM only)	9**	2,743,549
OV ROUND 2 (August 2019)	All at-risk people ≥5 years old in a district	1	Community based (IVM only in 23; IVM+ALB in 5)	28*	6,430,398
STH (August 2019)	All at-risk people ≥5 years old in a district	1	Community based (ALB as part of IVM+ALB)	18	3,834,185
Trachoma (August 2019)	All at-risk people ≥6 months old in a district	1	Community based (ZTH)	10	1,768,008
SCH (February 2019)	SAC only, enrolled and non-enrolled in primary schools	Annual or skipped year	School based (PZQ)	81	3,914,709
STH (February 2019)	SAC only, enrolled and non-enrolled in primary schools	1	School based (ALB)	134	6,201,187

*Five districts will receive LF and OV MDA in August 2018.
**Twice-a-year MDA will be implemented in nine districts—Malinyi, Ulanga, Ifakara, Kilombero, Lushoto, Bumbuli, Korogwe, Muheza, and Mkinga—which are already TOEAC approved. An additional two districts (Mvomero and Morogoro DC) may be eligible for 2× IVM MDA following a monitoring survey in August 2018 and TOEAC review.

Activities for FY19

Location in budget: MDA Coverage and Subawards

Activity 1: Purchase of replacement measuring papers for PZQ : ENVISION will support the purchase of measuring papers for PZQ, which are budgeted at a 20% replacement rate because of the increased enrollment of SAC, which is attributed to the free education policy introduced in 2017. This rate will also cover the expected wear and tear.

Activity 2: Production of LF and OV dose poles : ENVISION will support the production of dose poles, which are budgeted at a 20% replacement rate.

Activity 3: Production of trachoma MDA dose poles : In light of the new ZTH dosing guidelines from ITI, ENVISION will support the production of new dose poles for use in ZTH MDA. Training on the new dosing requirements to avoid SAEs will be incorporated into ongoing activities.

Activity 4: Production and replacement of school and household registers : For MDA data collection, the TZNTDCP uses school and household registers. Overall, a 20% replacement rate has been applied.

However, in Lindi, Mtwara Pwani, Dodoma, Singida, Rukwa, Katavi, and five former APOC regions, a 100% replacement rate has been applied as they have fully used their registers.

Activity 5: Printing of summary data forms : ENVISION will support the printing of replacement summary data forms for all 19 regions, and 134 districts, budgeted at 100%. These Region, District, and health facility summary forms are used to aggregate data from the service delivery point to the district and from districts to region.

Activity 6: Transportation of MDA supplies : In FY19, ENVISION will support the transportation of replacement MDA supplies and summary data forms from the central level to regions and districts.

f) Social Mobilization to Enable NTD Program Activities

Activities for FY19

Activity 1: Production of integrated IEC materials : To continue to improve community-level NTD knowledge and coverage rates, ENVISION will fund the production of integrated IEC materials for both school- and community-based MDA campaigns in ENVISION-supported areas (Table 5). Taking into consideration the results from past coverage surveys, improvements have been made over the years to messaging and materials. In addition to coverage surveys, social research was conducted in the Maasai area in 2016 and a nomadic and pastoralist population-specific strategy was developed in 2017 and implemented in FY18. District and regional teams also provide their verbal input on experiences working with all populations, and strategies are adapted as needed. Findings from all methods are used to design and continually update the IEC strategy on a regular basis, most recently in October 2017.

Activity 2: Airing of radio and TV spots at national, regional, and district levels : ENVISION, in collaboration with the NTD Secretariat, will support air radio and TV spots at the national, regional, and district levels. These programs will be aired through different national and local radio stations for all 19 ENVISION-supported regions and 134 districts. Messages will not only be aired during the MDA period but will also be rolled out 1 to 2 months prior to the MDA activities to saturate the communities with correct information and rectify any key misconceptions prior to MDA implementation, thereby creating demand for drugs and increasing MDA coverage. Because of increased advocacy with regional and district community leaders, contributions have come from the regional and district levels in support of MDA. (e.g., transportation and extended “free” radio air time devoted to NTD information and upcoming MDA). In some districts and communities, NTD coordinators have been able to organize “free” publicity and promotion of MDA activities through radio talk shows.

Activity 3: Delivery of IEC materials : After materials have been produced, ENVISION will support the delivery of the IEC materials to regions and districts. ENVISION will also fund, through FOGs, district distribution of the materials to the facility, school, and household levels. Posters are hung in schools, ward offices, and health facilities, and banners are placed in strategic locations, advertising the MDA efforts. Flyers/fact sheets and brochures are also produced and delivered. Flyers, fact sheets, and brochures are given to teachers, school boards, health workers, and community leaders for distribution to parents and students prior to school-based MDA. Flyers/fact sheets contain disease-specific and MDA information and are designed to be used by FLHWs, teachers, and CDDs. They are often used as quick reference guides.

Activity 4: Social mobilization activities in Maasai districts : To improve social mobilization approaches, in FY17, the TZNTDCP, with the support of the BCC consultant, gathered existing information on coverage surveys, IEC materials, and research recommendations. The consultant synthesized and highlighted key information, which was used to develop communication strategies aligned with

nomadic/pastoralist culture and settings. The consultant worked with the Health Education and Promotion Unit of the MOHCDGEC to develop an NTD social mobilization strategy and materials for the following: training community mobilizers as change agents; organizing school competition games and essay writing, using folk media groups; carrying out meetings with key community leaders in Maasai communities, which have strong cultural traditions; and organizing community-accepted events, such as barbecue days. These events will continue to be used as platforms for lobbying and obtaining community acceptance of NTD activities to pass on knowledge of NTDs and MDA. Although coverage in Maasai areas has improved, the results of recent TISs demonstrate that more work is needed. In FY19, ENVISION will continue to refine the BCC strategy, adapting materials based on more recent research and in response to the migratory patterns, sub-groups, and unique needs of pastoralist communities.

Table 5. Social mobilization/communication activities and materials checklist for NTD work planning

Category	Key messages	Target population	IEC strategy	Where/when will they be distributed?	Frequency	Has this material/message or approach been evaluated?
MDA participation	Inform the community about MDA dates and locations in the community	SAC and the entire population in the community (except pregnant women and children under 2 years old)	Banners, posters, and brochures	• Banners hung in main crossroads 4 weeks before MDA • Posters used during community sensitization meetings starting 8 weeks before MDA • Brochures and flyers given to CDDs, FLHWs, and teachers for distribution to target audiences before MDA	• Banners posted for duration of MDA • Posters used throughout mobilization and during MDA	Messages have been evaluated over the years by the NTD Secretariat and partners, and the TZNTDCP have requested feedback from communities during coverage surveys and supervision visits.
MDA participation	Treatment medications are free and safe; they come from the best laboratories overseas.	SAC and the entire population in the community	Radio and TV spots	• Radio and TV spots aired starting 1 month before MDA	• Radio and TV spots: aired four–six times per day	Messages have been evaluated over the years by the NTD Secretariat and partners, and these stakeholders have requested feedback from communities during coverage surveys and supervision visits.

Category	Key messages	Target population	IEC strategy	Where/when will they be distributed?	Frequency	Has this material/message or approach been evaluated?
	If you sometimes experience side effects, this is a sign that the medicine is working, and we have drugs to handle these side effects.	SAC and the entire population in the community (except pregnant women and children under 2 years old)	Posters, flyers, and brochures	• Posters, flyers, and brochures distributed and used 2 weeks–1 month in advance of MDA	Posters hung in schools and in community locations with traffic	Messages have been evaluated over the years by the NTD Secretariat and partners, and these stakeholders have requested feedback from communities during coverage surveys and supervision visits.
	If you sometimes experience side effects, this is a sign that the medicine is working, and we have drugs to handle these side effects.	SAC and the entire population in the community (except pregnant women and children under 2 years old)	Radio and TV spots	• Radio and TV spots aired starting 1 month before MDA except in the west, where spots are aired 3 months in advance of MDA	• Radio and TV spots: aired four–six times per day	Messages have been evaluated over the years by the NTD Secretariat and partners, and these stakeholders have requested feedback from communities during coverage surveys and supervision visits.
Disease prevention	The drugs are preventative and curative for NTDs; the earlier you take the medications, the better.	SAC and the entire population in the community (except pregnant women and children under 2 years old)	Posters, flyers, and brochures	• Posters distributed to FLHWs, teachers, and CDDs and used 2 weeks–1 month in advance of MDA	• Posters hung in schools and in community locations with traffic	Messages have been evaluated over the years by the NTD Secretariat and partners, and these stakeholders have requested feedback from communities during coverage surveys and supervision visits.
Disease prevention	The drugs are preventative and curative for NTDs; the earlier you take the medications, the better.	SAC and the entire population in the community (except pregnant women and children under 2 years old) and	Radio and TV spots	• Radio and TV spots aired starting 1 month before MDA, except in the west, where spots are aired 3 months in	• Radio and TV spots: aired four–six times per day • Community meetings held prior to pre-MDA activities	Messages have been evaluated over the years by the NTD Secretariat and partners, and these stakeholders have requested feedback from

Category	Key messages	Target population	IEC strategy	Where/when will they be distributed?	Frequency	Has this material/message or approach been evaluated?
		community leaders		advance of MDA • Community meetings		communities during coverage surveys and supervision visits.
Disease prevention	The drugs are preventative and curative for NTDs; the earlier you take the medications, the better.	SAC and the entire population in the community (except pregnant women and children under 2 years old)	Community public address systems	Megaphones distributed to FLHWs, teachers, and CDDs and used 2 weeks–1 month in advance of MDA	Community locations with heavy traffic	Messages have been evaluated over the years by the NTD Secretariat and partners, and these stakeholders have requested feedback from communities during coverage surveys and supervision visits.
Nomadic/ pastoral-specific social mobilization strategy	NTDs are caused by transmissible organisms, which can be prevented and treated by modern medicines.	Children, youth, and adults (both men and women)	Community leaders, health workers, and schoolteachers' fora	Group discussion, mentoring, and coaching	At every community meeting and in RCH clinics and schools	Messages will be evaluated by the NTD Secretariat and partners, and these stakeholders have requested feedback from communities. Strategy will be refined in FY19.
	Improved perception of risk and increased self-efficacy to prevent infections	Community leaders (village/ward executive officers and influential religious and traditional leaders), parents/ guardians, and teachers	Media (print and electronic)	Schools, public places, and local radio stations	At every community meeting, in RCH clinics and school councilors' monthly meetings, and on RCH clinic days	
	Messages targeting cultural and community behavior or practices associated with NTD transmission	Community leaders (village/ward executive officers and influential religious and traditional leaders); parents/	Media (print and electronic), policymakers, and health workers	Schools, public places, and local radio stations	At every community meeting, in RCH clinics and schools, at traditional festivals and councilors' monthly meetings, and	

Category	Key messages	Target population	IEC strategy	Where/when will they be distributed?	Frequency	Has this material/message or approach been evaluated?
		guardians, and teachers			on RCH clinic days	
	Messages targeting cultural and community behavior or practices associated with NTD transmission	Parents of school children	Creation of Community Ambassadors; school pupils properly trained and equipped to speak to, e.g., peers and parents	Households and peers	Variable	
	Water and sanitation improvements and practices	Traditional leaders	Demonstrations of correct hygiene practices, fliers, posters, and brochures	During traditional barbeques/ ceremonies	Scheduled according to the discretion of the elders	

g) Training

Activity 1: Refresher training of trainers (TOT) : As part of the annual MDA training, ENVISION staff and the NTD Secretariat will facilitate MDA TOTs for district and regional NTD coordinators. In the current 19 regions and 134 districts where ENVISION will be implementing activities, each region will have a 1-day refresher TOT. All region and district teams received a refresher training in FY18. A total of three people from each level are targeted for TOT: one NTD coordinator from the Health Department, one coordinator from the Education Department, and one pharmacist.

In FY19, the TOT will focus on improving and maintaining optimal coverage at the subdistrict level. A simple micro-planning technique will re-emphasize identifying clear treatment targets per each health facility (and, wherever possible, per village). All 48 districts that will be conducting community-based MDA will use the NTD Management Information System (MIS) for reporting MDA coverage data, which requires having health facility-level populations, targets, and subsequently, treatment numbers. This approach will also be taught for use in school-based MDA.

To improve data use at the local level, district- and regional-level TOTs will highlight the key indicators to gauge MDA success and how to take remedial action to improve coverage. Using indicators and taking remedial action will be a routine practice during supportive supervision of MDA activities.

Activity 2: Accountants' refresher training: Financial management, especially at the regional and district levels, will continue to require mentoring and oversight in FY19. To ensure that ENVISION funds are managed per USAID, RTI, and IMA requirements, ENVISION will conduct refresher finance training for 37 selected district and regional accountants managing ENVISION funds.

A 1-day refresher training for ENVISION sub-grantees at the regional/district levels will be held for these select district/regional accountants. The accountants are members of the regional or district NTD teams, and as such, they attend some TOT sessions; therefore, the accounts' training usually is planned as a parallel TOT session. Furthermore, ENVISION accountants will provide onsite mentorship to all accountants when they visit these districts for supportive supervision. At the training, ENVISION will also provide accountants who are new to ENVISION with a simple guidance manual that highlights key compliance issues. In addition, these trainings will highlight ways to advocate for more NTD activities to be covered under CCHP funding and creative ways that regions and districts can use existing platforms for social mobilization and training.

Activity 3: Trachoma graders' refresher trainings: In FY19, a total of 30 graders and 30 recorders will be re-trained on the standard procedures for TISs and TSSs with ENVISION funding. This training is important to maintain the quality of survey works as per Tropical Data standards. Tanzania has qualified grader and recorder trainers for this purpose and also has a pool of trainees who can be called upon as needed for the TIS surveys. However, as noted in FY18, the attrition rate among experienced graders is fairly high because they reach retirement age; hence, more must be trained to maintain an adequate pool for these surveys.

Activity 4: TZNTDCP database management training: In FY19, a total of 920 health care workers in at least 23 districts will be trained on the management and use of the CP database. This training will focus on two key elements: (1) using MDA micro-planning for MDA planning and implementation and (2) reporting MDA coverage using the micro-reporting tools. At least three district-level personnel are expected to be very conversant with using the NTD MIS to enter developed micro-plans and subdistrict treatment data into the NTD MIS, generate district reports, and use the dashboard to quickly assess subdistrict MDA coverage and take remedial actions as needed.

Activity 5: Printing of training manuals for CDDs (LF/OV, trachoma, and teachers/FLHWs): Each FY, to ensure proper coordination of training for teachers, FLHWs, and CDDs, the TZNTDCP conducts refresher training and new training for drug distributers and supervisors at different levels using the cascade strategy. In FY19, ENVISION will fund the printing of training manuals for CDDs in 48 districts that will implement community-based MDA and training manuals for FLHWs and teachers in 134 districts that will conduct school-based MDA. Updated ZTH dosing guidelines provided by ITI will be included in the training materials. The printing is budgeted at 20% to replace worn-out or lost manuals. In addition, in light of the updated Zithromax dosing guidelines, training manuals will need to be updated and ENVISION has budgeted for 100% replacement for the 10 trachoma districts.

Activity 6: District-level training activities: ENVISION will also fund the training of district NTD teams. Trainings will be conducted in a cascade fashion, with regional and district NTD coordinators facilitating training for the regional and district NTD teams, which in turn will train FLHWs, teachers, and CDDs. FLHWs and CDDs will receive a 1-day training before community-based MDA in February 2019 (in 9 districts for OV MDA) and August 2019 (48 districts). The community-based training will include specific information about the new dosing guidelines for ZTH, as provided by ITI. Teachers will receive a 1-day refresher training from the district NTD teams prior to the school-based MDA rounds. Teachers will then distribute medicines during the MDA under the supervision of FLHWs and district NTD teams.

Teachers

In the current 19 regions and 134 districts, teachers will be the key to strong school-based MDA performance. With funding through district-level FOGs, teachers will receive a 1-day refresher training conducted by district NTD teams, with support from ENVISION. Under the previous MDA model,

teachers received far less supportive supervision, and refresher trainings were not held each year prior to MDA.

FLHWs and CDDs

In districts where community-based MDA campaigns for LF, OV, and/or trachoma are planned, FLHWs and CDDs will each receive 1 day of training funded through FOGs. Training will focus on key MDA steps, including NTD overview, drugs used for MDA, eligible populations for each drug package, dosing, how to introduce the program, and the use of household registers.

h) Drug and Commodity Supply Management and Procurement

Activities for FY19

Activity 1: Drug transportation from the national warehouse to regions **:**All medicines, after clearance from the port, are stored at MSD and transported to the districts by MSD before MDA activities. However, MSD transport to districts can be delayed because of late drug arrival in country, changes in MOHCDGEC/TZNTDCP MDA planning, or general timing issues with MSD. The transportation of NTD drugs through MSD is usually conducted in coordination with the transport of other, non-NTD medicines, and MSD will often wait until the truck is full before shipping. Furthermore, MSD sometimes closes for consecutive weeks to conduct inventory. Both of these issues have led to delays in the transportation and delivery of NTD drugs for MDA. In FY19, if there are delays in transport before MDA activities, ENVISION will provide funds for drug transportation and hire private transporters to move the drugs to the regions. This strategy will only need to be considered if there are delays in receiving the drugs from outside of Tanzania, or if customs clearance is slow and the drugs are only released 2 weeks or less before MDA campaigns.

Activity 2: Transport from region to distribution points (districts) **:**The transport of medicines from the district to community levels is normally conducted by District Medical Officers using district vehicles. Based on past experience, 50% of the community MDA districts will require at least some additional funding to deliver the drugs to the district level.

Activity 3: Reverse supply chain : Experience in previous years has shown that after completing MDA in most districts, unused medicines are left at health facilities, sometimes in poor storage conditions; hence, a functioning reverse supply chain system is needed. Some of these medicines have long expiry dates, warranting proper storage so that they can be used in future MDA rounds. For example, between 2013 and 2016, ENVISION supported the TZNTDCP to collect and transfer more than 4 million PZQ tabs, more than 1 million ZTH tabs, and more than 25,000 bottles of ZTH powder for oral suspension to other districts. The major challenge has been transportation for district pharmacists to travel to different health facilities and gather all the unused drugs for proper storage at district health pharmacies. Based on past experience, in FY19, ENVISION will support reverse supply chain activities in 18% of ENVISION-supported districts.

Activity 4: Mentorship on JSRM and other WHO reporting tools: ENVISION provides mentorship to the NTD Secretariat and program staff on how to prepare not only the JRSM but also other WHO-required reporting tools, the annual work plan, the Joint Reporting Form, the epidemiological forms, and the TAS eligibility forms.

i) Supervision for MDA

Activities for FY19

Activity 1: Supportive supervision of pre-MDA school- and community-based distribution : In FY19, ENVISION will continue to fund supportive supervision of all MDA-related activities at all levels, from national, regional, and district to health facility and school levels. With ENVISION support, TZNTDCP staff will conduct supportive supervision during training and pre-MDA activities, such as community mobilization. TZNTDCP and IMA staff will travel to districts during the training and community mobilization activities in advance of community- and school-based MDA campaigns. To maximize staff resources, supportive supervision is conducted in districts with new NTD coordinators, districts where the NTD coordinator has shown weakness in the past, districts where the district leadership pose challenges, and districts with low coverage in the previous MDA. In these districts, TZNTDCP and IMA staff will interact with district staff and FLHWs, providing oversight for activities and using a checklist to track activities. District staff will also supervise training and community mobilization activities conducted at the health facility, school, and community levels, with funding through FOGs. In addition, in FY19, there will be supportive supervision costs for the pre-MDA activities for the 2nd round of OV treatment in 11 districts.

Activity 2: Supportive supervision for all school- and community-based MDA campaigns : ENVISION will also provide funding for NTD Secretariat members and ENVISION staff to conduct supportive supervision for school- and community-based drug distribution before and during the community- and school-based MDA campaigns. TZNTDCP staff, along with IMA staff, will supervise all activities at the regional and district levels and will carry out spot supervision of activities implemented at the health facility, school, and community levels. As with pre-MDA activities, staff performing supportive supervision also use a checklist to assist in monitoring activities. With funding from IMA through FOGs, district NTD teams will, in turn, mentor FLHWs on supportive supervision. FLHWs will be trained to provide supportive supervision to CDDs and teachers. Regional teams, with funding through FOGs, will provide spot supportive supervision to activities at the district, school, health facility, and community levels. Furthermore, regular meetings will be held between ENVISION and NTD Secretariat staff to review each MDA activity (e.g., training, social mobilization) shortly after that activity's implementation and to explore and mitigate any possible obstacles to the next activities. M&E

j) M&E

FY19 Activities

Activity 1: LF re-pre-TAS in 10 districts: In FY19, the program plans to conduct re-pre-TAS in 10 districts. The surveys will assess two villages for CFA among the at-risk population aged 5 years and older using FTS. This re-pre-TAS will enable the program to request RPRG approval for stop-MDA TASs in these districts if the criteria are met. It is also important to note that in many of the districts conducting re-pre-TAS, the baseline prevalence was initially relatively high. The program will also coordinate pre-TASs with STH and SCH assessments. Because these districts will have completed at least five rounds of MDA, the STH/SCH survey results will inform the SCH/STH treatment strategy.

Activity 2: TAS2 in 17 districts : In FY19, the TZNTDCP anticipates that 17 districts will be eligible for TAS2. These districts passed TAS1 in 2015/16, and since 2016, they have been in a post-treatment surveillance phase. They are located in Tabora, Manyara, and Morogoro regions. The TAS2 results will be important when making the programmatic decision to continue with surveillance; if any of the districts

fail to meet the critical cut-off point, then the program will need to restart MDA because transmission could be ongoing.

Activity 3: TAS3 in six districts. : The TZNTDCP anticipates that six districts will be eligible for TAS3 in FY19. These include three districts in Tanga, two districts in Mtwara, and one district in Pwani.

Activity 4: TIS in nine districts : In FY19, TISs are planned for nine districts. This number is dependent on the results of the ongoing FY18 TISs and TSSs. Based on recommendations from the TEC, in Arusha, TIS will be conducted separately for mobile populations and static communities. This strategy will be finalized in FY19.

Activity 5: TSS in eight districts and 10 EUs : Eight districts that have stopped implementing MDA (but are still implementing the "S, F, and E" components of the SAFE strategy) will conduct a surveillance survey to detect any disease recrudescence. ENVISION will support these eight districts (10 EUs) for TSS. Because of the large populations of Chamwino and Kongwa, all of which are >250,000, each district must be split into two EUs, in line with Tropical Data recommendations and guidelines.

Activity 6: Maasai Baseline Survey : In FY19, the TZNTDCP, through ENVISION support, will conduct baseline mapping in two EUs of the Maasai corridor. Recent sub-district surveys along the Maasai corridor have shown a high TF prevalence, though the static "parent" districts have passed TIS. For this reason, ENVISION, through recommendations from the TEC, will survey two EUs compromised of nomadic communities in two provinces along the Maasai belt. These surveys will ensure that the program understands transmission dynamics among mobile populations and allow for changes to implementation strategy if needed.

Activity 7: Coverage review : The TZNTDCP has proposed a review of coverage in the MDA registers in selected districts with the following characteristics: (1) persistent high rates of LF transmission, (2) rebounding TF prevalence >5%, and (3) persistent OV infections. An electronic data capture tool is being developed by the TZNTDCP that mimics the normal household register, and individual family member MDA details will be entered into the tool. On average, two to three villages will be selected per district. The data collected will be analyzed to gauge key MDA uptake information including but not limited to age, gender, and MDA uptake. All personal details will be kept private as each individual will be assigned a unique number. This health facility analysis of multi-year individual and family data will help the program triangulate reported coverage by age, gender, and locality and detect systematic noncompliance. In turn, lessons learned from this activity will help the program improve MDA planning and implementation and support districts to attain optimal coverage, as required. In FY19, ENVISION will support coverage review activities in seven districts; this activity is tentatively planned for October/November 2018.

* TAS1 not yet conducted; waiting for RPRG approval and anticipate conducting before end of FY18.

Table 6. Planned DSAs for FY19, by disease

Disease	No. of endemic districts	No. of districts planned for DSA	No. of EUs planned for DSA	Type of assessment	Diagnostic method (Indicator: Mf, FTS, etc)
LF	27	10	10	Re-Pre-TAS	FTS
		17	20	TAS2	FTS
		6	6	TAS3	FTS
STH	185	10	10	SS/SC*	Kato-Katz
SCH	185	10	10	SS/SC*	Kato-Katz and urine filtration
Trachoma	71	9	9	TIS	Clinical Grading
		9	12	TSS	Clinical Grading
OV	28	13	13	OV elimination mapping	OV16 RDT, DBS, and ELISA

* Will be carried out as part of pre-TAS.

k) Supervision for M&E and DSAs

Activities for FY19

Location in budget: M&E and DSA Supervision

Activity 1: Supervision of re-pre-TAS sites : ENVISION will support supervision costs for LF/SCH/STH SS and SC sites in 10 districts.

Activity 2: Supervision of TAS2 : ENVISION will support supervision costs for TAS2 for 20 districts.

Activity 3: Supervision of TAS3 : ENVISION will support supervision costs for TAS3 for six districts (equivalent to six EUs).

Activity 4: Supervision of trachoma surveys: ENVISION will support supervision costs for four TIS districts and eight TSS districts (10 EUs). Please see the M&E section above for more information.

Activity 5: Supervision for Maasai Baseline Surveys: ENVISION will fund supervision costs for Maasai baselines in two EUs. Please the M&E section for more information.

Activity 6: Supervision of OV Elimination Mapping: : In FY19 ENVISION will fund supervision costs for OV elimination mapping in 13 districts.

l) Dossier Development

Activity 1: Trachoma dossier development meeting : In FY19, ENVISION will fund one 2-day meeting to finalize the full draft trachoma dossier. In FY17, the TZNTDCP updated the National Trachoma Action Plan with technical support from the Trachoma TWG and other stakeholders, and a draft dossier was produced, which has been updated further in FY18. However, data from F&E and MDA IPs are still being gathered and entered into the trachoma dossier template, and the full draft narrative needs to be

finalized. In FY19, ENVISION will continue to provide technical support through the Regional Technical Advisor to ensure the F&E data are collected. The 2-day trachoma dossier development meeting will allow for a review of the progress reached and finalization of the narrative to be shared with key stakeholders for review and comments. By the end of FY19, the TZNTDCP will have a full draft narrative and an up-to-date data sheet including TT surgery information.

Activity 2: LF dossier development meeting : In FY17, the LF TWG developed an action plan to begin the dossier development process for Tanzania, and in the fourth quarter of FY18, the LF dossier team will be provided with technical guidance to implement the action plan, especially the data collection systems and understanding of all the templates and the narrative outline. In FY19, ENVISION will fund one 2-day meeting for further review of the available data and drafting of the narrative section. These efforts will be followed by continuous updating of the data entry dossier template. By the end of FY19, the TZNTDCP will have all MDA and DSA data entered and a draft narrative with all historical information in one place.

APPENDIX 1: Work Plan Timeline

FY19 Activities
Management Support
Ongoing Staffing and Country Office Support
Project Assistance
Strategic Planning
Region/District Review and Planning Meetings (ALB + PZQ/ ALB MDA in 130 Districts and 19 Regions)
Disease-specific Technical Working Group Meetings
Annual Joint Planning Meeting
OV Expert Committee Meeting
SCH/STH Expert Committee Meeting
NTD Secretariat
Administrative and Transport Support
Building Advocacy for Sustainable National NTD Program
District Advocacy Meeting – 2× Annual Treatment for OV (11 Districts)
District Advocacy Meeting – Stop MDA (10 Districts)
Region/District Advocacy Meeting – Persistent Transmission (10 Districts)
Central Level Advocacy for Region/District Resource Mobilization in Selected Districts
Mapping
OV Elimination Mapping
MDA Coverage
MDA Supplies (Measuring Paper)
MDA Supplies (Dose Poles)
Production of Registers
Production of Summary Data Forms
Social Mobilization to Enable NTD Program Activities
Printing/Production Integrated IEC/BCC Materials (Replacement)
Airing Radio and Television Spots: Culturally Appropriate Messages/MDA Adverts/Jingles
Delivery of IEC Materials
Social Mobilization in Maasai Districts
Training
Refresher Training of Trainers for Region NTD Teams
Finance and Accountants Training
Trachoma Graders Refresher training
TZNTDCP Database Management Training
Training of District NTD Teams (FOGs)

FY19 Activities
Training of FLHWs (FOGs)
Training of CDDS (FOGs)
Training of Teachers (FOGs)
Drug Supply Management and Procurement
Drug Transportation from MSD in Dar es Salaam to Regions
Drug Transportation from Regions to Distribution Points
Reverse Logistics
Mentorship on JRSM and other WHO reporting tools
Supervision for MDA
Supportive Supervision for IVM + ALB / ZTH (18 + 23 +7 Districts)
Supportive Supervision for ALB + PZQ / ALB (134 Districts)
Supportive Supervision for IVM (9 Districts)
M&E
LF SS/SC Site Assessments in 10 Districts
TAS2 in 20 districts
TAS3 in 5 districts
TIS in 4 Districts
TSS in 7 Districts
Supervision for M&E
Supportive Supervision of LF re-pre-TAS
Supportive Supervision for TAS2 in 20 districts
Supportive Supervision for TAS3 in 5 districts
Supportive Supervision for TIS in 4 Districts
Supportive Supervision for TSS in 7 Districts
Supportive Supervision for OV Elimination Mapping in 13 Districts
Dossier Development
LF and Trachoma Dossier Development Meeting
STTA
Trachoma Dossier Development Consultant (Local)
LF Dossier Development Consultant (Local)
TIPAC Training

APPENDIX 2: Table of USAID-supported Regions and Districts in FY19

			Mapping	Baseline	FY 2019 MDA NEED					DSA				
S/No.	Region	District			LF	OV	TRA	STH	SCH	LF	OV	SCH	STH	TRA
	Total	135			18	28	8	134	81	36	-	10	10	13
1	Arusha	Arusha City Council						X	X					
2	Arusha	Arusha DC						X	X					
3	Arusha	Karatu DC						X	X					
4	Arusha	Longido DC					X	X	X					TIS
5	Arusha	Meru DC						X	X					
6	Arusha	Monduli DC						X	X					
7	Arusha	Ngorongoro DC					X	X	X					
8	Dodoma	Bahi DC						X	X					
9	Dodoma	Chamwino DC						X	X					TSS
10	Dodoma	Chemba DC					X	X	X					
11	Dodoma	Dodoma MC						X	X					
12	Dodoma	Kondoa DC						X	X					
13	Dodoma	Kondoa TC						X	X					
14	Dodoma	Kongwa DC						X	X					TSS
15	Dodoma	Mpwapwa DC	OV elimination Mapping				X	X	X					TIS
16	Geita	Bukombe DC						X	X					
17	Geita	Chato DC						X	X					
18	Geita	Geita DC						X	X					
19	Geita	Geita TC						X	X					
20	Geita	Mbogwe DC						X	X					
21	Geita	Nyang'hwale DC						X	X					
22	Iringa	Iringa DC						X						
23	Iringa	Iringa MC						X						
24	Iringa	Kilolo DC	OV elimination Mapping					X						
25	Iringa	Mafinga TC						X						
26	Iringa	Mufindi DC				X		X						
27	Kagera	Ngara DC												
28	Katavi	Mlele DC						X	X					
29	Katavi	MpandaDC						X	X					
20	Katavi	Mpanda MC						X	X					
31	Katavi	Mpimbwe DC						X	X					
32	Katavi	Nsimbo DC						X	X					
33	Kilimanjaro	Hai DC						X	X					
34	Kilimanjaro	Moshi DC						X	X					
35	Kilimanjaro	Moshi MC						X	X					
36	Kilimanjaro	Mwanga DC						X	X					
37	Kilimanjaro	Rombo DC						X	X					
38	Kilimanjaro	Same DC						X	X					
39	Kilimanjaro	Siha DC						X	X					
40	Lindi	Kilwa DC			X			X	X					
41	Lindi	Lindi DC			X			X	X					
42	Lindi	Lindi MC			X			X	X	pre-TAS		SSA	SSA	
43	Lindi	Liwale DC	OV elimination Mapping					X	X					

			Mapping	Baseline	FY 2019 MDA NEED					DSA				
S/No.	Region	District			LF	OV	TRA	STH	SCH	LF	OV	SCH	STH	TRA
	Total	**135**			**18**	**28**	**8**	**134**	**81**	**36**	**-**	**10**	**10**	**13**
44	Lindi	Nachingwea DC	OV elimination Mapping		X			X	X	pre-TAS, TAS1		SSA	SSA	TSS
45	Lindi	Ruangwa DC			X			X	X	pre-TAS, TAS1		SSA	SSA	
46	Manyara	Babati DC						X	X	TAS2				
47	Manyara	Babati TC						X	X	TAS2				
48	Manyara	Hanang DC						X	X	TAS2				
49	Manyara	Kiteto DC					X	X	X	TAS2				TIS
50	Manyara	Mbulu DC						X	X	TAS2				
51	Manyara	Mbulu TC						X	X	TAS2				
52	Manyara	Simanjiro DC					X	X	X	TAS2				TIS
53	Mbeya	Busokelo DC				X		X						
54	Mbeya	Chunya DC						X						
55	Mbeya	Kyela DC				X		X	X					
56	Mbeya	Mbarali DC						X						
57	Mbeya	Mbeya City Council						X						
58	Mbeya	Mbeya DC						X						
59	Mbeya	Rungwe DC				X		X						
60	Morogoro	Gairo DC				X		X		TAS2				
61	Morogoro	Ifakara TC				X		X		TAS2				
62	Morogoro	Kilombero DC				X		X		TAS2				
63	Morogoro	Kilosa DC			X	X		X		pre-TAS, TAS1		SSA	SSA	
64	Morogoro	Malinyi DC				X		X		TAS2				
65	Morogoro	Morogoro DC			X	X		X		pre-TAS, TAS1		SSA	SSA	
66	Morogoro	Morogoro MC			X			X		pre-TAS		SSA	SSA	
67	Morogoro	Mvomero DC			X	X		X		pre-TAS, TAS1		SSA	SSA	
68	Morogoro	Ulanga DC				X		X		TAS2				
69	Mtwara	Masasi DC			X			X	X					
70	Mtwara	Masasi TC						X	X					
71	Mtwara	Mtwara DC						X	X					
72	Mtwara	Mtwara-Mikindani MC			X			X	X					
73	Mtwara	Nanyamba DC						X	X					
74	Mtwara	Nanyumbu DC						X	X					
75	Mtwara	Newala DC						X	X	TAS3				
76	Mtwara	Newala TC						X	X	TAS3				
77	Mtwara	Tandahimba DC						X	X					
78	Njombe	Ludewa DC				X		X						
79	Njombe	Makambako TC						X						
80	Njombe	Makete DC	OV elimination Mapping					X						
81	Njombe	Njombe DC				X		X						
82	Njombe	Njombe TC						X						
83	Njombe	Wanging'ombe DC						X						
84	Pwani	Bagamoyo DC	OV elimination Mapping					X	X					
85	Pwani	Chalinze DC	OV elimination Mapping					X	X					
86	Pwani	Kibaha DC			X			X						

			Mapping	Baseline	FY 2019 MDA NEED					DSA				
S/No.	Region	District			LF	OV	TRA	STH	SCH	LF	OV	SCH	STH	TRA
	Total	**135**			**18**	**28**	**8**	**134**	**81**	**36**	**-**	**10**	**10**	**13**
87	Pwani	Kibaha TC						X						
88	Pwani	Kibiti DC	OV elimination Mapping					X	X					
89	Pwani	Kisarawe DC						X	X					
90	Pwani	Mafia DC			X			X						
91	Pwani	Mkuranga DC						X	X	TAS3				
92	Pwani	Rufiji DC	OV elimination Mapping					X	X					
93	Rukwa	Kalambo DC					X	X	X					
94	Rukwa	Nkasi DC						X	X					
95	Rukwa	Sumbawanga DC						X	X					
96	Rukwa	Sumbawanga MC						X	X					
97	Ruvuma	Madaba DC				X		X						
98	Ruvuma	Mbinga DC				X		X						
99	Ruvuma	Mbinga TC				X		X						
100	Ruvuma	Namtumbo DC				X		X						
101	Ruvuma	Nyasa DC				X		X						
102	Ruvuma	Songea DC				X		X						
103	Ruvuma	Songea MC				X		X						
104	Ruvuma	Tunduru DC				X		X	X					TSS
105	Singida	Ikungi DC						X	X					
106	Singida	Iramba DC						X	X					
107	Singida	Itigi DC						X	X					TSS
108	Singida	Manyoni DC						X	X					TSS
109	Singida	Mkalama DC						X	X					
110	Singida	Singida DC						X	X					
111	Singida	Singida MC						X	X					
112	Songwe	Ileje DC				X		X						
113	Songwe	Mbozi DC						X	X					
114	Songwe	Momba DC						X	X					
115	Songwe	Songwe DC					X	X						
116	Songwe	Tunduma TC						X	X					
117	Tabora	Igunga DC						X	X	TAS2				
118	Tabora	Kaliua DC						X		TAS2				
119	Tabora	Nzega DC						X	X	TAS2				
120	Tabora	Nzega TC						X	X	TAS2				
121	Tabora	Sikonge DC						X	X	TAS2				
122	Tabora	Tabora MC						X		TAS2				
123	Tabora	Urambo DC						X		TAS2				
124	Tabora	Uyui DC						X		TAS2				
125	Tanga	Bumbuli DC				X		X		TAS3				
126	Tanga	Handeni DC	OV elimination Mapping					X						
127	Tanga	Handeni TC	OV elimination Mapping					X						
128	Tanga	Kilindi DC						X						TSS
129	Tanga	Korogwe DC			X	X		X						
130	Tanga	Korogwe TC			X			X						
131	Tanga	Lushoto DC				X		X		TAS3				
132	Tanga	Mkinga DC			X	X		X		pre-TAS		SSA	SSA	

			Mapping	Baseline	FY 2019 MDA NEED					DSA				
S/No.	Region	District			LF	OV	TRA	STH	SCH	LF	OV	SCH	STH	TRA
	Total	**135**			**18**	**28**	**8**	**134**	**81**	**36**	**-**	**10**	**10**	**13**
133	Tanga	Muheza DC				X		X		TAS3				
134	Tanga	Pangani DC			X			X		pre-TAS		SSA	SSA	
135	Tanga	Tanga City Council			X			X		pre-TAS		SSA	SSA	
	Grand Total	**135**			**18**	**28**	**8**	**134**	**81**	**36**	**-**	**10**	**10**	**13**