



a world free of NTDs

# Mozambique Work Plan

FY 2019

Project Year 8

October 2018–September 2019



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.

The author's views expressed in this publication do not necessarily reflect the views of the US Agency for International Development or the United States Government.

## ENVISION Project Overview

The United States Agency for International Development (USAID) 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), trachoma, and three soil-transmitted helminths (STH; roundworm, whipworm, and hookworm). ENVISION’s goal is to strengthen NTD programming at global and country levels and support ministries of health 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:

- Technical assistance
- Monitoring and evaluation (M&E)
- Global policy leadership
- Grants and financial management
- Capacity strengthening at global and country levels
- Dissemination

At the country level, ENVISION provides support to national NTD programs in 19 countries in Africa, Asia, and Latin America by providing strategic technical, operational, and financial assistance for a comprehensive package of NTD interventions, including the following:

- NTD program capacity strengthening
- Strategic planning
- Advocacy for building a sustainable national NTD program
- Social mobilization to enable NTD program activities
- Mapping
- Drug and commodity supply management
- Supervision
- M&E

In Mozambique, ENVISION project activities are implemented by RTI International.

<b>TABLE OF CONTENTS</b>	ENVISION Project Overview .....	ii
LIST OF TABLES .....		iv
LIST OF FIGURES .....	<b>Error! Bookmark not defined.</b>	
ACRONYMS LIST .....		v
COUNTRY OVERVIEW .....		1
1) General Country Background .....		1
a) Administrative Structure .....		1
b) Other NTD Partners .....		2
2) National NTD Program Overview .....		5
a) Lymphatic Filariasis .....		5
b) Trachoma .....		5
c) Onchocerciasis .....		6
d) Schistosomiasis .....		7
e) Soil-Transmitted Helminths .....		7
3) Snapshot of NTD Status in Country .....		8
PLANNED ACTIVITIES .....		9
1) NTD Program Capacity Strengthening .....		9
a) Strategic Capacity Strengthening Approach .....		9
b) Capacity Strengthening Objectives and Interventions .....		9
c) Monitoring Capacity Strengthening .....		10
2) Project Assistance .....		12
a) Strategic Planning .....		12
b) NTD Secretariat .....		12
c) Building Advocacy for a Sustainable National NTD Program .....		12
d) Mapping .....		13
e) MDA Coverage .....		13
f) Social Mobilization to Enable NTD Program Activities .....		14
g) Training .....		16
h) Drug and Commodity Supply Management and Procurement .....		17
i) Supervision for MDA .....		18
j) M&E .....		18
k) Supervision for M&E and DSAs .....		20
l) Dossier Development .....		20
3) Maps .....	<b>Error! Bookmark not defined.</b>	
APPENDIX 1: Work Plan Activities .....		21
APPENDIX 2. Table of USAID-supported Regions and Districts in FY19 .....		22

## LIST OF TABLES

Table 1:	Non-ENVISION NTD partners working in country, donor support, and summarized activities .....	4
Table 2:	Snapshot of the expected status of the NTD program in Mozambique as of September 30, 2018.....	8
Table 3:	Project assistance for capacity strengthening .....	10
Table 4:	USAID-supported districts and estimated target populations for MDA in FY19 .....	13
Table 5:	Social mobilization/communication activities and materials checklist for NTD work planning .....	15
Table 6:	Reporting of DSA supported with USAID funds that did not meet critical cutoff thresholds as of September 30, 2018 .....	19
Table 7:	Planned DSAs for FY19, by disease .....	20

## ACRONYMS LIST

AFRO	WHO Africa Regional Office
ALB	Albendazole
CMAM	Centre for Drugs and Medical Supplies
CNTD	Centre for Neglected Tropical Disease (Liverpool School of Tropical Medicine)
DFID	UK Department for International Development
DPS	Provincial Health Directorate
DQA	Data Quality Assessment
DSA	Disease-Specific Assessment
EU	Evaluation Unit
FEFO	First-Expiry, First Out
FOG	Fixed Obligation Grant
FY	Fiscal Year
GTMP	Global Trachoma Mapping Project
HQ	Headquarters
ICOSA	Integrated Control of Schistosomiasis and Intestinal Helminths in sub-Saharan Africa project
IEC	Information, Education, and Communication
INGO	International Nongovernmental Organization
INS	National Institute of Health ( <i>Instituto Nacional de Saúde</i> )
ITI	International Trachoma Initiative
IU	Implementation Unit
IVM	Ivermectin
KAP	Knowledge, Attitudes, and Practices
LF	Lymphatic Filariasis
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MECC	Mozambique Eye Care Coalition
MISAU	Ministry of Health ( <i>Ministério de Saúde</i> )
NGO	Nongovernmental Organization
NSC	National Steering Committee
NTD	Neglected Tropical Disease
OV	Onchocerciasis
PC	Preventive Chemotherapy
POS	Powder for Oral Suspension
PZQ	Praziquantel
Q1, Q2, etc.	Quarter 1, Quarter 2, etc.
REMO	Rapid Epidemiological Mapping of Onchocerciasis
RPA	Resident Program Advisor
SAE	Serious Adverse Event
SAFE	Surgery–Antibiotics–Facial cleanliness–Environmental improvements
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SCM	Supply Chain Management
SKU	Stock Keeping Unit
SMS	Short Messaging Service
SOP	Standard Operating Procedure
STH	Soil-Transmitted Helminths
STTA	Short-Term Technical Assistance

TA	Technical Assistance
TAS	Transmission Assessment Survey
TEC	Trachoma Expert Committee
TEMF	Trachoma Elimination Monitoring Form
TEO	Tetracycline Eye Ointment
TF	Trachomatous Inflammation–Follicular
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma Impact Survey
TOT	Training of Trainers
The Trust	Queen Elizabeth Diamond Jubilee Trust
TSS	Trachoma Surveillance Survey
TT	Trachomatous Trichiasis
UK	United Kingdom
UNICEF	United Nations Children’s Fund
US	United States
USAID	US Agency for International Development
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization
ZTH®	Zithromax

## COUNTRY OVERVIEW

### 1) General Country Background

#### a) Administrative Structure

Mozambique is divided into 159 districts across 11 provinces, with an estimated population in 2019 of more than 28.2 million people (projected from 2007 census).<sup>1</sup> Currently, there are 34 districts requiring mass drug administration (MDA) for trachoma, 107 for lymphatic filariasis (LF), 159 for schistosomiasis (SCH), and 151 for soil-transmitted helminths (STHs). Mapping has been completed for all five neglected tropical diseases (NTDs) treatable through preventive chemotherapy (PC), though there remains uncertainty about the hypo-endemic status of onchocerciasis (OV) in some districts.

Under the coordination of the National Directorate of Public Health, each province is responsible for planning and coordinating the implementation of NTD activities in each implementing unit (IU). The provincial representatives coordinate activities at the provincial level, act as an intermediary body between the district and national level, and report to both provincial and national bodies.

At the central level, the Ministry of Health (MISAU) is organized into two arms: (1) the National Directorate of Public Health, under which the National NTD Program operates, and (2) the National Directorate of Medical Assistance, within which is the Ophthalmology Department. Under both of these arms, the provincial and district directorates of health operate throughout the country. The National NTD Program and the Ophthalmology Department work in close collaboration. The National NTD Program maintains responsibility for managing MDA campaigns for trachoma, LF, SCH, and STH, while the Ophthalmology Department manages trichiasis surgeries. Disease specific assessments (DSAs) for all NTDs are led by the National NTD Program, except for trachoma impact surveys (TISs), which are jointly managed between the two arms. MISAU is expected to undergo some restructuring in the near future. As part of this restructuring, all infectious disease departments will be combined into one department. While the NTD Department will be incorporated into this larger Department, it is still unknown what other implications this may have. Any operational research is typically handled by the National Institute of Health (INS), which also sits in MISAU at the national level.

The National NTD Steering Committee (NSC), first formed in 2014, continues to meet regularly to discuss key issues on NTD control and elimination and to make recommendations to the National NTD Program. These meetings were held quarterly in the past, but have decreased in frequency and are now held on an as-needed basis, with approximately two meetings a year. The NSC represents various government stakeholders such as the Department of School Health, Department of Environmental Health, INS, and the Centre for Drugs and Medical Supplies (CMAM), among others, and is a platform where new results can be shared and new health policies discussed.

The economic and political environment in Mozambique has gradually improved since the signing of a peace accord in late 2016 between the Mozambican ruling party, the Mozambique Liberation Front (*Frente de Libertação de Moçambique* [FRELIMO]), and the opposition party, the Mozambican National Resistance (*Resistência Nacional Moçambicana* [RENAMO]). However, the country is facing a new security threat in the northern province of Cabo Delgado, where insurgent attacks have been occurring in rural villages since late 2017 and are moving closer to the provincial capital city of Pemba. The government is monitoring the situation and potential impact on program activities. At this time, activities are ongoing as usual, with extra cautions taken when traveling in districts where the insurgent groups are known to be present. While the economy is slowly strengthening, the cost

---

<sup>1</sup> At the start of ENVISION support in Fiscal Year 2013 (FY13), Mozambique was composed of 142 districts. Redistricting in the provinces of Maputo, Manica, Nampula, Tete, and Zambézia in 2015 resulted in the current demarcation of 159 districts.

of goods has not decreased since the abrupt increase that occurred due to inflation. This has resulted in an increased cost of living for the majority of the population.

#### b) Other NTD Partners

The National NTD Program in Mozambique is fortunate to have highly committed partners working in collaboration with each other and with MISAU to provide the best possible support to the national program. The collaboration of partners draws on organizations funded by the US Agency for International Development (USAID) and the UK Department for International Development (DFID), including government, national nongovernmental organizations (NGOs), international NGOs (INGOs), and private donors.

The main partners include the Integrated Control of Schistosomiasis and Intestinal Helminths in sub-Saharan Africa (ICOSA) project, funded by DFID to the Schistosomiasis Control Initiative (SCI) and sub-granted to the Liverpool School of Tropical Medicine's Centre for Neglected Tropical Diseases (CNTD). CNTD provides support for the implementation of LF/STH and SCH/STH MDA in districts targeted by the National NTD Program.

In addition to their support of the ICOSA project, CNTD is supported through DFID funding as part of a group of multidisciplinary initiatives based at the Liverpool School of Tropical Medicine in the UK. The main focus of CNTD's work is to reduce the transmission of LF and support efforts to achieve elimination targets by 2020. In past years, CNTD supported activities such as trainings, sentinel site and spot check surveys for LF, and procurement of diagnostics and office equipment, such as laptops, for the NTD department. In calendar year 2017, CNTD supported the first transmission assessment surveys (TASs) in Mozambique. These surveys took place in the eight LF-endemic districts in Niassa Province and showed that transmission has been reduced to a level that it no longer constitutes a public health problem in six of the districts. In 2018, CNTD will expand support for TASs to other eligible districts in Tete Province. CNTD also provides support for LF morbidity management and works closely with several leprosy organizations. CNTD will continue to support LF MDA, TAS, and morbidity case management and hydrocele surgeries until at least 2019, when current funding is expected to expire.

As part of the ICOSA partnership, SCI provides direct support for sentinel site and spot check surveys for SCH and STH. SCI, with funding from DFID and through its subgrant to CNTD, continues to support SCH MDA at the national level. The Schistosomiasis Consortium for Operational Research and Evaluation research in Cabo Delgado came to an end in 2015.

The World Health Organization (WHO)'s Mozambique country office appointed a new NTD Focal Point in early 2016. With support from WHO and ENVISION, an integrated NTD Database training was conducted in late 2016. In FY17 ENVISION engaged a monitoring and evaluation (M&E) secondment to support historical data entry.

In 2014, RTI International was selected to serve as the coordinating partner for the Queen Elizabeth Diamond Jubilee Trust (The Trust) to assist MISAU in coordinating the scale-up of trichiasis surgeries. The five-year Trust-funded project is managed by Sightsavers UK through the International Coalition for Trachoma Control. The implementing partners (Light for the World and Sightsavers), work closely with MISAU at provincial and district levels and closely with RTI at country level. The Trust project is focused on building capacity for conducting trichiasis surgical outreach and building the capacity of ophthalmic technicians throughout the country. As the coordinating partner, RTI convenes regular meetings to track progress of project activities and provides technical guidance to implementing partners. As The Trust project wraps up its final year in 2018, the focus of support has shifted to ensuring the country has a strong transition plan in place to manage incident cases that will arise after elimination. Working under The Trust and ENVISION funding, RTI is able to support MISAU to ensure data related to all aspects of the trachoma dossier are collected.

The relationships with the water, sanitation, and hygiene (WASH) sector are expected to continue to grow as partners, including WaterAid, World Vision, United Nations Children’s Fund (UNICEF), and Save the Children, become increasingly interested in maximizing the impact of WASH activities on NTD control and prevention. Through these partnerships, ENVISION is exploring ways in which some key messages such as the importance of hand and face-washing to prevent eye diseases (among others) can be disseminated via the various partners’ activities. Globally, WaterAid is branching its focus to water and health, and in Mozambique, it is interested and engaged in many of ENVISION’s activities and eager to participate in ENVISION meetings and trainings. In FY16, WaterAid facilitated one of the WHO modules on WASH from the Program Managers Training Course. ENVISION and WaterAid have also collaborated in a local primary school in Maputo Province on Global Hand Washing Day to introduce key messages on trachoma prevention through face and hand washing. WaterAid became a regular member of the Mozambique Eye Care Coalition (MECC) as did Helen Keller International, among other organizations. It is expected that ENVISION will continue working on community strategies for addressing NTDs and WASH and advocating for the importance of water and sanitation to help reduce the prevalence of NTDs in Mozambique. Through these partnerships, ENVISION is able to ensure that both the “F” and “E”<sup>2</sup> components of the trachoma elimination strategy are addressed.

---

<sup>2</sup> The “SAFE” trachoma elimination strategy: Surgery–Antibiotics–Facial cleanliness–Environmental improvements.

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

Partner	Location (regions/states)	Activities	In FY18, was USAID providing direct financial support to this partner through ENVISION?	List other donors supporting these partners/activities
SCI (through sub-grant to CNTD)	Central level and in endemic areas for SCH	SCH/STH sentinel site and spot check surveys beginning in 2011	No	UK DFID
CNTD	Central level, as well as all areas endemic for SCH and LF	LF/STH and SCH/STH MDA and TAS in districts targeted by the National NTD Program; includes trainings, diagnostics, and supervision	No	UK DFID
Sightsavers	Nampula and Zambézia provinces	Implementation of trichiasis surgical outreach campaigns. Work with Provincial Health Directorate (DPS) in the provinces	No	The Trust
Light for the World	Cabo Delgado and Sofala provinces	Implementation of trichiasis surgical outreach campaigns; work with DPSs in the provinces	No	The Trust
RTI	Central level	Coordination of trichiasis surgical scale-up; documentation of progress toward achieving trachomatous trichiasis (TT) backlog goals nationwide; provincial transition plans in Manica, Inhambane, and Gaza provinces; TT-only surveys, where needed	Yes	The Trust
WaterAid	Central level	Messaging on face and hand washing; facilitation of WASH training during Program Manager's training course	No	—

## 2) National NTD Program Overview

### a) Lymphatic Filariasis

The goal of the WHO Global Programme to Eliminate Lymphatic Filariasis is to eliminate the disease as a public health problem by 2020. A study of the geographical distribution of LF in Mozambique was carried out in 2005–2006, and additional surveys followed in 2012 and 2013. LF immunochromatographic tests were used to assess the *Wuchereria bancrofti* circulating antigen and found a prevalence ranging from 0%–80%. The disease is widely distributed throughout the country, with 113 districts endemic and nearly 20 million people at risk of contracting the disease. Nampula Province is most affected, followed by Cabo Delgado, Zambézia, and Niassa.

CNTD is the main partner supporting MISAU to eliminate LF and has been supporting MDA in Mozambique since 2010, providing annual treatment with ivermectin (IVM) plus albendazole (ALB) to the entire eligible population in endemic areas, per WHO guidelines. The population treated for LF has increased from 1.6 million in 2009 to 14 million in 2014, preventing 4 million new infections of LF since 2010. As mentioned above, CNTD began supporting TAS in eligible districts in 2017. Six districts in Niassa Province passed TAS and no longer require MDA. Additional TASs will be conducted in late calendar year 2018 in Tete province.

LF morbidity management, including hydrocele surgery, is specifically carried out at health facilities on a limited basis through a government-supported system of referral units for corrective surgery. The leprosy program in Mozambique is strong, with self-care groups for the management of lymphedema, adenolymphangitis, and small skin lesions.

The LF MDA is not funded by USAID.

### b) Trachoma

All of the 140 districts suspected to be endemic have been mapped. This mapping revealed that the prevalence rates of trachomatous inflammation–follicular (TF) among 1–9-year-old children were <5% in 75 districts, 5%–9.9% in 28 districts, 10%–29.9% in 22 districts, and ≥30% in 15 districts. The 15 districts with ≥30% TF, all in Niassa Province, were initially mapped at the provincial level, prior to the Global Trachoma Mapping Project (GTMP) and ENVISION. Concerns around the methodology originally used and the lack of clinical cases in the area led to the recommendation to conduct district-level TISs in 2015 after only one to two rounds of MDA. These subsequent surveys showed that all districts had TF prevalence rates of <5% and did not require MDA. These 15 districts conducted trachoma surveillance surveys (TSSs) in fiscal year 2017 (FY17), which confirmed that the prevalence of TF in children aged 1–9 years remains below 5% in all 15 districts. In each of the 28 districts with TF prevalence rates of 5%–9.9% at baseline, MISAU aims to conduct a single round of MDA followed by a TIS. In FY16, with ENVISION support, MISAU conducted MDA in four of these districts (i.e., those with 5%–9.9% TF), selecting those with TF prevalence rates closest to 10%; these districts are located in Tete Province. All four of these districts conducted TISs in FY17, and the results showed that the TF prevalence rates are now below 5% and that MDA can be stopped. A single round of MDA was planned for the remaining 24 districts in calendar year 2017 but was delayed to FY18 and FY19. Three of these 24 districts conducted their single round of MDA in March 2018. The remaining 21 are planned for May 2019. Among the 22 districts with 10%–29.9% TF prevalence rates, 5 districts in Cabo Delgado Province conducted their third round of MDA in FY16 and completed TISs in FY17; the results demonstrated that the TF prevalence rates are now below 5% in all 5 districts.

In October 2017, with ENVISION support, 14 of the remaining 17 districts of Manica, Nampula, and Zambézia provinces conducted TISs after only two rounds of MDA, rather than the typical three rounds. The decision to implement these surveys was made after consultation with WHO and USAID and was intended to help keep Mozambique on track to stop MDA for trachoma in all districts by the end of calendar year 2018. Furthermore, it was hoped that these surveys would help to answer the global trachoma community's programmatic question of whether it is possible to successfully pass a TIS after only two years of MDA in areas faced with security or logistical challenges that prevent a third round. The results showed that eight districts require additional MDA, whereas six districts are now below the threshold of 5% TF. Of the eight that still require MDA, seven are between 5% and 9.9%, and one district, Inhassunge, has a TF prevalence rate of 13.6%, requiring three more rounds of MDA. A preliminary cost analysis revealed that although there are more districts requiring additional MDA than there are districts below the TF threshold, implementing the TISs early resulted in a cost savings for the project. Conducting a third MDA round in the six districts that were found to be below 5% TF after two MDA rounds would have been costlier than conducting a second TIS in the eight districts that will require one more round of MDA and a second TIS. MISAU intended to target a 15th district in Nampula Province in this round of early TISs, but it could not be accessed because of security concerns. MISAU made the decision to move forward with the third round of MDA in this district before conducting the TIS.

For the final two endemic districts, in March 2016, GTMP conducted a detailed re-analysis of the pre-GTMP mapping results from five districts of Nampula Province; this new analysis showed that baseline prevalence in two districts (Erati and Nacala-A-Velha) was 5%–9.9% TF, not  $\geq 10\%$  TF as originally indicated. Because both of these districts had already conducted one round of MDA, TISs were conducted in FY17. The results of the surveys showed that the prevalence of TF was below 5% in Nacala-A-Velha and that MDA could be stopped. In Erati, the TF prevalence was determined to be 6.29%. Thus, MISAU plans to conduct one additional round of MDA there in FY19.

In summary, of the 65 districts with TF prevalence  $>5\%$  at baseline, 15 successfully completed both impact and surveillance surveys, 16 completed impact surveys and will conduct surveillance surveys in calendar year 2019 (FY19 and FY20), 8 have completed all necessary MDA rounds and are awaiting impact surveys in calendar year 2018 (FY19), 25 require one more round of MDA (FY19), and 1 final district requires two more rounds of MDA (FY19 and FY20) before conducting an impact survey. As of the end of FY18, 31 of the 65 districts (48%) initially found to have TF prevalence above 5% are under surveillance.

Support for trachoma control and prevention has become increasingly prioritized in the government agenda over recent years. The ENVISION project continues to provide technical support to MISAU to fully understand and fill in the WHO trachoma elimination dossier. WHO Mozambique is also engaged and keen to see this process move forward and may be willing to provide extra technical support should it be necessary.

The "A" component of the SAFE strategy is covered by USAID funding through ENVISION, with the "S" component addressed through The Trust project. However, the "F" and "E" components of the strategy require additional support to reinforce the control and prevention of trachoma.

### c) Onchocerciasis

OV is endemic in the republics of Malawi and Tanzania, which border Mozambique in the northern and central regions; however, there is still little epidemiological evidence of transmission patterns in Mozambique. In addition, the lack of a rigid border entry system between Mozambique and neighboring countries may facilitate the spread of disease as the movement of people continues. In 1997, the Faculty of Medicine at the Eduardo Mondlane University published a study carried out in Zambézia Province in the district of Milange, confirming the presence of the disease in that area. In 2001, a rapid epidemiological mapping of OV (REMO) was carried out in Niassa, Cabo Delgado,

Zambézia, and Tete with 114 villages selected, though only 97 villages were successfully screened. The results confirmed the existence of the disease at a hypo-endemic level. In 2007, the second REMO was carried out, and the results showed that the prevalence of nodules detected had more than doubled.

Given that REMO is poor in both specificity and sensitivity, and as neighboring countries push for OV elimination, there is a need for confirmation of endemicity through a more rigorous protocol using OV-16. Sightsavers, through its Gates Foundation-funded Onchocerciasis Elimination Mapping project, is interested in piloting the protocol currently under development by the NTD Support Center. The pilot in Mozambique is anticipated to occur after the results of the initial pilots have been reviewed by the WHO-Onchocerciasis Technical Subgroup. ENVISION continues to assist in coordination of the various stakeholders interested in assessing OV endemicity in Mozambique. USAID does not fund OV activities in Mozambique.

#### d) Schistosomiasis

SCH is prevalent throughout all IUs in Mozambique. A study of the prevalence of SCH carried out in 2007 by the INS revealed that district prevalence varied from 3.6% to 100%, with the national average at 43%. The most endemic provinces are Niassa, Cabo Delgado, Nampula, and Zambézia. Almost 27 million people are at risk. Out of the 159 IUs, 45% are hyper-endemic (prevalence rates of >50%), 51% are meso-endemic, and 4% are hypo-endemic. Treatment schedules include once per year, once every two years, and once every three years, depending on the baseline prevalence. Therefore, the actual number of districts being targeted for praziquantel (PZQ) in any given year fluctuates, depending on disease prevalence.

USAID does not support SCH MDA in Mozambique. Districts that are targeted for sentinel site and spot check site surveys are encouraged to use Kato-Katz kits to diagnose both the presence and intensity of infection for SCH and STH. To date, SCI has procured the Kato-Katz kits for MISAU.

#### e) Soil-Transmitted Helminths

STH intestinal parasites affect the poorest populations, often those living in remote, rural areas, and are prevalent throughout all IUs in Mozambique, with 151 of the 159 districts endemic above the treatment threshold of 20%. A study carried out in Mozambique in 2007 on the prevalence of STH demonstrated a wide distribution of high prevalence ranging from 12% to 81%. Out of the 159 IUs, 73 are hyper-endemic, 78 have a prevalence between 20% and 50%, and 8 have a prevalence of <20%. The most affected provinces are those in the north, namely, Niassa, Cabo Delgado, Nampula, and Zambézia. USAID does not support STH MDA in Mozambique.

### 3) Snapshot of NTD Status in Country

**Table 2: Snapshot of the expected status of the NTD program in Mozambique as of September 30, 2018**

A	B	MAPPING GAP DETERMINATION			MDA GAP DETERMINATION		MDA ACHIEVEMENT	DSA NEEDS
		C	D	E	F	G	H	I
Disease	Total No. of districts in COUNTRY	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		
Lymphatic filariasis	159	113	46	0	0	107	0	6
Onchocerciasis*		-	-	-	-	-	-	-
Schistosomiasis		159	0	0	0	159	0	-
Soil-transmitted helminths		151	8	0	0	151	0	-
Trachoma**		65	94	0	11	0	23	31
								Pre-TAS: TAS:  TIS: 8 TSS: 10

\*OV is believed to be hypo-endemic in Mozambique, and MISAU conducted surveys in FY16 to determine the extent of transmission.

\*\* Column F: Includes 3 districts with baseline TF prevalence of 5%–9.9% that conducted their first and only round of MDA in March 2018, 7 districts with TF prevalence between 5%–9.9% following early impact surveys in 2017 (of which 5 completed MDA in FY18), and 1 district with TF prevalence between 10%–29.9% following an early impact survey in 2017 (completed first round of TIS in March 2018). Column G: Includes 21 districts with baseline TF prevalence between 5%–9.9%, requiring a single round of MDA in FY19; 1 district with baseline prevalence between 10%–29.9% that had completed two rounds of MDA but was unable to conduct an early impact survey due to security reasons, and was unable to conduct MDA in FY18 because of ZTH issues; and 1 district with baseline prevalence of 8.41% that conducted TIS in FY17 after one round of MDA that resulted in TF prevalence of 6.29% but which was unable to conduct MDA in FY18 because of ZTH issues.

## PLANNED ACTIVITIES

### 1) NTD Program Capacity Strengthening

#### a) Strategic Capacity Strengthening Approach

##### *Capacity goals*

MISAU's capacity strengthening goals in FY19 will continue to rely heavily on coaching and mentorship through close collaboration between ENVISION Mozambique staff and their counterparts at MISAU. While ENVISION's capacity strengthening efforts will continue to focus on trachoma, this mentoring goal will benefit the NTD Department as a whole. Also, as the primary partner in Maputo, ENVISION is better positioned to provide day-to-day mentoring on general aspects related to program and supply chain management and M&E. Other partners do support some capacity strengthening, and the ENVISION RPA coordinates these activities to avoid duplication of effort and minimize the burden on MISAU. For example, CNTD has led a course for provincial finance managers, Malaria Consortium led social mobilization workshops, and both partners contributed greatly to the Program Managers Training Course.

Staff from the ENVISION Mozambique team will be responsible for working directly with MISAU to strengthen capacity for planning, budgeting, supply chain management, and M&E. They will be responsible for providing training and follow-up support on any tools, as well as for keeping MISAU informed of global developments in NTD guidelines. Capacity strengthening will also occur through exposure trips, experience sharing, and supportive supervision. ENVISION expects its ongoing role to be to ensure relationships with stakeholders, such as CMAM, WHO, drug donors, etc., are maintained and strengthened.

##### *Capacity strengthening strategy*

ENVISION's strategic capacity strengthening approach in FY19 will focus on three key areas:

1. **Program management**
2. **Dossier preparation**
3. **Supply chain management**

#### b) Capacity Strengthening Objectives and Interventions

##### **Objective 1: Enhance program management of MDA**

**Intervention 1: Provide short-term technical consultants to coordinate MDA in each province.** See *STTA* section for more information.

##### **Objective 2: Support the national team in the development of the Dossier for the Validation of Elimination of Blinding Trachoma**

**Intervention 1: Provide technical guidance and leadership on dossier preparation.** See *Dossier Development* section for more information.

**Intervention 2: Recruit a consultant to support MISAU in consolidation and review of the dossier.** See *STTA* section for more information.

**Objective 3: Strengthen supply chain management capacity at MISAU and improve coordination and communication with CMAM and drug donors**

**Intervention 1: Ensure adherence to ZTH supply chain management protocols.** ENVISION will liaise with MISAU and CMAM and provide mentorship during all phases of drug importation and distribution, including regular check-ins with CMAM to verify the stock and validity of drugs in each province, status of drug importation, and supervision of drug distribution and reverse supply chain processes. See *Drug and Commodity Supply Management and Procurement* section for more information.

**Intervention 2: Supply chain trainings at national, provincial, and district levels.** See *Training* section for more information.

c) Monitoring Capacity Strengthening

The ENVISION Technical Advisor and RPA will remain in regular contact with the NTD Coordinator to discuss program accomplishments and needs.

**Objective 2: Support the national team in the development of the Dossier for the Validation of Elimination of Blinding Trachoma**

*Indicators:* Dossier data compiled with high quality, draft dossier completed

**Objective 3: Strengthen supply chain management capacity at MISAU and improve coordination and communication with CMAM and drug donors**

*Indicators:* National ZTH management protocol in use at all levels, MISAU supply chain focal point identified, TEMF created accurately and on time, percent of districts receiving drugs on time

**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?
<b>a. Strategic Planning</b>	<ul style="list-style-type: none"> <li>Guide NTD and Ophthalmology departments to encourage data use in the National Annual NTD Meeting through the <i>Data for Action</i> guide</li> </ul>	<ul style="list-style-type: none"> <li>Build capacity in evidence-based decision making, by encouraging the National NTD Program to take the lead in using data to inform the National Annual NTD Partner Review Meeting</li> </ul>
<b>c. Building Advocacy for a Sustainable National NTD Program</b>	<ul style="list-style-type: none"> <li>ENVISION RPA to advocate at high MISAU levels (Minister of Health, Permanent Secretary to the Public National Health Directorate) to increase and improve awareness of NTDs and the need for government funding</li> </ul>	<ul style="list-style-type: none"> <li>Funding to the National NTD Program being mobilized for implementation of sustainable activities</li> <li>Increase in the number of National NTD Program staff</li> </ul>
<b>g. Training</b>	(See trainings in Table 7)	
<b>h. Drug Supply and Commodity Management and Procurement</b>	<ul style="list-style-type: none"> <li>Supportive supervision during drug importation, transportation, and distribution</li> </ul>	<ul style="list-style-type: none"> <li>Build capacity of CMAM and provincial drug warehouse staff to effectively manage ZTH and TEO through supportive supervision</li> </ul>
<b>i. Supervision for MDA</b>	<ul style="list-style-type: none"> <li>Joint RTI-MISAU and central, provincial, and district-level MISAU representatives conduct supervision during training and MDA implementation</li> </ul>	<ul style="list-style-type: none"> <li>Build capacity of all those involved in MDA implementation, through enhanced support supervision</li> </ul>

Project assistance area	Capacity strengthening interventions/activities	How these activities will help to correct needs identified in situation above?
j. M&E	<ul style="list-style-type: none"> <li>ENVISION Database Manager to provide on-the-job training for the NTD central-level staff, and provincial and district data managers involved in MDA activities</li> </ul>	<ul style="list-style-type: none"> <li>Build capacity of the National NTD Program at different levels to collect, analyze, and use MDA data</li> </ul>
i. Dossier Development	<ul style="list-style-type: none"> <li>Technical guidance from ENVISION for dossier completion</li> </ul>	<ul style="list-style-type: none"> <li>Build capacity of MISAU to compile data and develop a high-quality trachoma dossier</li> </ul>
m. Short-term Technical Assistance (STTA)	<ul style="list-style-type: none"> <li>Recruitment of short-term consultants to enhance supportive supervision during MDA training, social mobilization, and drug distribution</li> </ul>	<ul style="list-style-type: none"> <li>Build capacity at subnational levels to implement high-quality MDA</li> </ul>

## 2) Project Assistance

### a) Strategic Planning

**NTD National Steering Committee (NSC):** The NSC is organized by MISAU and fully supported by ENVISION. Meetings will be held approximately two times per year to discuss technical issues related to the National NTD Program. The central-level NSC is made up of key partners from various government stakeholders, including CMAM, INS, Ministry of Women and Social Affairs, Ministry of Water and Sanitation, and the National NTD Program. Representatives from pharmaceutical companies and INGOs such as Malaria Consortium and CNTD, as well as INGOs working with leprosy, also participate. When possible, higher level MISAU staff participate and open the meeting. The meeting provides an important platform to discuss technical topics, such as supply chain; new MISAU policies; strategies to improve progress toward program goals; and input from other sectors such as water, sanitation, and education. MISAU shares results from recent activities and discusses coverage issues and challenges with human resources. Feedback and guidelines generated from regional and international meetings are also presented and discussed with the committee for further comments and recommendations on implementation. The meeting will also provide an opportunity for all relevant stakeholders to assess progress toward annual objectives and review and revise the activity calendar. Approximately 17 people are expected to attend each two-day meeting. Costs associated with these meetings include venue, refreshments, printing of materials, and travel for three provincial representatives. In FY19, RTI will provide financial support for one NSC meeting, with another partner expected to fund the second meeting.

### b) NTD Secretariat

**Office costs:** ENVISION will continue to cover basic operational costs for the NTD Secretariat, including office supplies, paper and toner for printing, and communications in the form of air time (phone). Other partners such as CNTD support the Secretariat through provision of Internet access for the NTD Department and electrical equipment such as laptops. ENVISION and CNTD communicate with each other to ensure there is no duplication of efforts in operational costs. As this is an on-going activity, the costs will be split with CEP-NTD 2.

**Translations:** Translations between English and Portuguese are often needed because MISAU requires all documents and official communication to be in Portuguese. Several documents must be translated each year (including the work plan) for either MISAU, USAID, or RTI HQ. When possible, the ENVISION team uses a local translator who is familiar with the technical terminology.

### c) Building Advocacy for a Sustainable National NTD Program

**Social Communication and Advocacy Working Group:** Through participation in the Social Communication and Advocacy Working Group of the NTD NSC, ENVISION will be able to better understand where the weaknesses are in advocacy and will have an opportunity to work with MISAU to strengthen the NTD program through raising awareness of the diseases, specifically trachoma. There will be no costs associated with taking part in this working group because the support will be through the RPA's participation in meetings.

**Mozambican Eye Care Coalition (MECC):** ENVISION will continue to participate in the MECC group, which acts as the main eye-care health group in the country with collaboration from INGOs, local NGOs, and MISAU. Recently, other sectors such as Ministry of Education have participated in the meetings and shared their experiences regarding the challenges of eye-care health in schools. This group has been recognized as a regional leader in eye care in neighboring sub-Saharan African countries. Priority agenda items in 2018 included addressing challenges with importation of

medicines and medical supplies and the development of a standardized ophthalmology training curriculum.

As advocacy activities are on-going, they will continue under CEP-NTD 2 in Q4 of FY19.

d) Mapping

Baseline mapping for LF, SCH, STH, and trachoma has been completed. As mentioned in the Country Overview, results from previous REMO studies show that OV is hypo-endemic in Mozambique, and confirmation mapping is being considered by MISAU and other donors.

These activities are not funded by USAID.

e) MDA Coverage

*MDA plans for FY19*

**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 in FY19	Total # of eligible people to be targeted in FY19
Trachoma	All	1	Mixed community-based (house to house and fixed point)	26	3,523,261

In Mozambique, trachoma MDA occurs over a five-day period where mobile teams composed of two health technicians and two volunteers go from door to door or to fixed points, depending on the locality. One health technician is responsible for distributing medicine and the other for recording the distribution on the appropriate reporting forms. The volunteers conduct social mobilization and provide logistical support, such as crowd management, during MDA. Pre-MDA activities begin approximately four weeks before MDA with provincial-level training, followed by district training, and finally, a week of social mobilization prior to MDA. These activities are described in further detail below in the respective sections of this work plan (*Training, Social Mobilization*).

In support of the FY19 MDA, ENVISION will supply materials needed for the MDA, including daily registers, reporting forms, serious adverse event (SAE) forms, MDA handbooks, dose poles, tee-shirts, and banners. Banners and tee-shirts are used to identify official distribution points, volunteers, and supervisors, respectively. The drug distributors also receive tee-shirts. The use of tee-shirts and vests in the campaigns relays a positive image during the MDA and is a way to further promote the work of the national health workers. All materials are clearly marked with MISAU, USAID, RTI, and ENVISION logos. Registers, reporting forms, tee-shirts, and banners were produced during FY18. Therefore, the only materials to be produced in FY19 are updated dose poles and handbooks, reflecting the new Zithromax dosing guidelines. ENVISION will also directly support the costs of central-level supervision, while using FOGs awarded to the provinces to fund training, drug transportation within the province, social mobilization, and drug distribution.

Although a peace accord between the Mozambican ruling party, the Mozambique Liberation Front (*Frente de Libertação de Moçambique* [FRELIMO]), and the opposition party, the Mozambican National Resistance (*Resistência Nacional Moçambicana* [RENAMO]), has been in place since late

2016, insecurity and political unrest continue to have the potential to impact the MDA campaign. In particular, since October 2017, there have been attacks linked to religious extremism in northern and coastal communities of Cabo Delgado Province. MISAU routinely monitors the security situation to ensure it is safe to conduct activities. ENVISION works closely with the Mozambican Government to adapt MDA strategies to enable activities to proceed with reasonable security. In the past, this has involved a combination of approaches, including being flexible with the locations of distribution points in case of security threats; using different types of transportation (air and road) to ensure the safe arrival of medicines to the provinces and districts; providing extra police security as needed for transporters; and issuing communications from the MISAU that the activities are non-political, health based, and of no threat to anyone.

f) Social Mobilization to Enable NTD Program Activities

**Radio messaging:** Radio is the most common means of communication in Mozambique, especially community radio at the district level. Messages will be played on local radio stations throughout the districts targeted for MDA with ZTH and TEO. They are aired four times a day the week prior to the MDA and during the MDA. The messages include the timing and location of MDA, emphasize the safety of the medicine, and encourage the entire population to participate.

**Use of megaphones to disseminate information to communities (procured in FY18):** Megaphones are another common form of sharing information at the community level and are used for various campaigns. They are used to inform people of the timing of MDA and who is eligible to receive treatment. They also allow supervisors to provide basic information on trachoma prevention to the population. In FY19, megaphones and batteries will be used in all districts. Because the FY18 coverage survey showed that word of mouth is one of the more effective methods of encouraging community members to participate in MDA, the number of megaphones per district will increase to six.

**Delivery of IEC materials:** As in previous years, RTI and MISAU will package the IEC materials and drugs into district kits. Completing this activity at the central level ensures that each district receives the correct quantities and reduces the burden on provincial and district level staff. In previous years, materials had to be shipped by air due to insecurity in the central provinces. MISAU will continue to monitor the situation throughout FY19 to determine if overland shipping is possible.

**Opening Ceremony:** The Opening Ceremony/MDA launch takes place on the first day of MDA in one district chosen by MISAU (usually, the most populated). The Head of the Province gives an opening speech, followed by a popular community leader encouraging participation in the local dialect, and finally USAID or the ENVISION RPA will welcome people and stress the importance of the MDA. As CMAM's increased involvement during MDA is expected to continue in FY19, a national CMAM representative will also be invited to speak at the opening ceremony. Local theater groups are invited to perform during the opening ceremony. Through dramatic presentation, they depict the risks of trachoma and the importance of MDA. Media representatives (radio and television) will be present, and the launch is televised that evening and the day after at both provincial and national levels. A press meeting is held before and after the launch takes place. The launch is usually attended by hundreds of people from neighboring communities.

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

Category	Key messages	Target population	IEC Activity (e.g., materials, medium, training groups)	Where/ when will they be distributed	Frequency	Has this material/message or approach been evaluated?
MDA Participation	The drugs provided are free and safe for the entire family. Everyone in the family should participate. Timing and location of MDA.	General population	Radio	Local station 1 week in advance of MDA and during MDA	Radio messages play four times per day for 1 week before and during the MDA	Yes, through knowledge, attitudes, and practices (KAP) component of FY18 coverage survey. Results pending.
MDA Participation	Identify distribution points Dates and location of MDA. Eligible population	Community members	Banners	Hung in front of distribution points 1 week before MDA and during MDA	Displayed daily for 2 weeks	Yes, through KAP component of FY18 coverage survey. Results pending.
MDA Participation	Signs and symptoms of trachoma, prevention measures, including MDA	Community members	Posters	Hung at community gathering areas up to 2 weeks before and throughout MDA	Displayed daily for 2-3 weeks	Yes, through KAP component of FY18 coverage survey. Results pending.

IEC: information, education, and communication

## g) Training

**Refresher national supervision, training of trainers (TOT), and supply chain training:** Because the last national-level training occurred in February 2018, the NTD Coordinator has requested a refresher supervision training to strengthen the quality of supervision from the national and provincial supervisors. This training will be combined with the national-level TOT for MDA and will have a thorough supply chain component. A three-day workshop will be held in Maputo and will be led by central-level MISAU and CMAM staff, with technical and financial support from ENVISION. Three people from each province will be in attendance (NTD focal point, provincial data manager, and drug warehouse manager). From the central level, an additional 13 supervisors will be trained, so that there is a ratio of one central-level supervisor per two districts targeted. The total number of meeting participants will be approximately 35. The first two days will focus on conducting high-quality MDA with effective supportive supervision, and the third day will focus on the ZTH supply chain. Supervisors will share their best practices and challenges—lessons learned from being supervisors during MDA. As a team, the supervisors, MISAU, and ENVISION will identify the gaps in terms of capacity needs and strengthening. Results of the FY18 MDA and reverse supply chain management will be discussed. ENVISION and MISAU will use the FY18 MDA to gather best practices and apply them to the FY19 training. Some of the primary observations during the 2018 MDA and post-MDA supply chain assessment included the lack of adherence to first-expiry, first-out (FEFO) protocols, as well as inconsistent reporting of expiration dates during reverse supply chain logistics.

**Trachoma pre-MDA training, provincial training:** A cascaded training approach will be used in Mozambique, and those trained at the national level supportive supervision and TOT workshop will be responsible for facilitating provincial-level training one to two weeks after the national training. Trachoma MDA trainings will be planned for all provinces conducting MDA. The National NTD Program will lead the trainings, with support from CMAM, and will cover relevant information on trachoma MDA, including components of the SAFE strategy, social mobilization, reporting and management of SAEs, distribution and administration of ZTH and TEO, and supply chain management. The provincial training will occur over three days in each province and will support approximately four district health technicians from each district, plus one provincial supervisor per district targeted.

**Trachoma pre-MDA training, district training:** The four district health technicians trained at the provincial level will train the selected drug distributors (also health technicians) in the districts. The distributors are responsible for administering drugs and filling in registers and will be trained on the same topics that will be covered in the provincial-level training, including trachoma MDA, components of the SAFE strategy, social mobilization, reporting and management of SAEs, and distribution and administration of ZTH and TEO. Results of data quality assessments (DQAs) conducted in FY15 and FY17 and from the coverage survey in FY18 will be used to place an increased emphasis on accurate reporting and data management and review techniques. Teams of two drug distributors are expected to distribute drugs to 3,750 people during the MDA week. Also in the districts, the MDA distribution teams will provide a one-day training to community volunteers. The focus is on social mobilization and communicating with local leaders, who are highly influential in health activities, including MDA. Volunteers are then better equipped to mobilize their communities, which is their primary responsibility during MDA. In Mozambique, volunteers do not distribute any medications or complete any reporting forms. Those responsibilities are given to the district health technicians who receive a more rigorous training, as mentioned above.

**TIS training:** To prepare for the TISs targeted in FY19, RTI will train 30 graders and 30 recorders on the Tropical Data protocol, clinical grading, and use of electronic data capture. The training will be a refresher training for most of the participants. In June 2016, three MISAU staff and one ENVISION staff member attended the Tropical Data training in Arusha, Tanzania. Two more MISAU ophthalmic technicians, who have previously served as impact survey supervisors, were trained and certified as

grader trainers at an ENVISION supported Tropical Data training in April 2018. There is now one certified master grader, three certified grader trainers, and one certified recorder trainer to lead the trainings in the provinces. One ENVISION staff member and one MISAU staff member attended a Tropical Data training in July 2018 and were trained as recorder trainers. Training will occur over three days prior to the surveys and will include field testing.

#### h) Drug and Commodity Supply Management and Procurement

**Drug repackaging, drug transportation, and delivery to provinces and communities:** CMAM manages all pharmaceuticals and medical supplies. It is responsible for importation, distribution, and management of drugs and medical items within Mozambique. ENVISION will continue to serve as a vital link between ITI and MISAU to ensure that the importation of ZTH and TEO is carried out in a timely manner and with open communication. ENVISION, in coordination with CMAM and MISAU, will support the transportation costs of shipping the ZTH and TEO from Maputo to the provincial warehouses, to ensure that drugs are pre-positioned before the MDA. This includes support for repackaging the drugs into district kits that also include the social mobilization and other MDA materials. Completing this task at the national level ensures that each district receives the appropriate quantities of materials and reduces the burden on the provincial staff. ENVISION will also fund the transport of drugs from the provincial warehouse to the communities, using DPS vehicles. The donated drugs must arrive in country at least five weeks prior to MDA in order for repackaging and transportation to occur as planned and with minimal costs.

**Reverse supply chain management:** ENVISION will provide financial support for reverse supply management in the provinces targeted for ZTH MDA. The conditions at the district level are not always good for storing drugs appropriately to maintain their efficacy or viability, and the long distances between districts make it difficult to keep track of the drugs being transported. The security and accessibility of warehouses at the provincial level is also stronger, which ensures that drugs are stored safely and facilitates tracking of drugs throughout the year.

Immediately after the MDA, national and provincial supervisors are responsible for ensuring that all remaining drugs are collected and returned to the provincial warehouse. The process takes approximately three to four days per province. All expired ZTH and empty bottles are incinerated as one of the last steps in this activity. The reverse supply chain process is important for both the National NTD Program and the donating organizations (ITI and Pfizer) to validate the quantity of ZTH that remains in country after MDA. These results are also useful for the province and for the facilitation of the requisition process for the following year. In addition to taking a physical inventory, the national-level teams involved in reverse supply chain management will verify the quantity of medicines reported to be used during MDA and will triangulate the remaining inventory, quantity reported used, and coverage to identify and follow up on any inconsistencies.

**Management of SAEs:** The *Handbook on Serious Adverse Events* was translated and distributed to the provinces and central level in 2015. Supervisors are reminded during MDA training that SAEs occurring during or shortly after MDA should be reported within 24 hours to MISAU, WHO, the drug donation programs, and pharmaceutical companies, and in the case of ZTH distributions, to RTI. MISAU provides SAE reporting forms as part of each MDA so that supervisors can quickly investigate reports and prevent false accusations. SAE reporting requirements are reviewed during NSC meetings as well as pre-MDA trainings. In FY19, ENVISION will work with MISAU to reinforce the adverse event and SAE requirements during the NSC meetings, in MDA and supervision trainings, and during supportive supervision trips to the field.

#### i) Supervision for MDA

Supportive supervision during MDA will occur prior to and during MDA at the provincial and district levels. These supervisory visits are important and help ensure that the correct amount of drugs has arrived in the selected provinces, that this has been communicated to the central level, and that the drugs have been prepared for distribution to the districts. Continuing efforts in FY18, in FY19 ENVISION will support increased national-level supervision to ensure recommendations of the 2017 program assessment are being followed. In addition to the RTI and MISAU staff, ENVISION will recruit four short-term Program Officer consultants to supervise the entire MDA process in each province. See the *Short-Term Technical Assistance (STTA)* section for more details on these positions. At the end of trachoma MDA, review meetings will be held in each of the targeted provinces to review reported drug coverage and ensure the drug distributions that were initially planned were conducted in the correct quantities per selected district.

**Supervision support before and during the MDA by supervisors to ensure high-level quality of the activity:** Supervision at every phase of the MDA is a critical part of the overall activity. Pre-MDA, supervision occurs to ensure that logistically, drugs, IEC materials, and people are where they should be. Distances can be extensive between one distribution point and another, so supervisors need to confirm that there are no issues that could delay the campaign. The ENVISION RPA and the MISAU NTD Coordinator conduct supervision trips with higher level MISAU representation, and in recent years, the head of the Health Office and NTD Focal Point at USAID traveled together to the provincial launch. This trip involves supervision of various districts within the province, ensuring that the campaign is running smoothly. Simultaneously in other provinces, the RTI Finance Manager, RTI short-term Program Officers, and members of the NTD Department participate in other launches and carry out similar supervision activities. In FY19, each province will have one national-level supervisor overseeing the entire MDA process, from provincial training to post-MDA review meetings, and additional supervisors during social mobilization and MDA so that there will be one national-level supervisor for every two districts. As outlined above, these supervisors will be recruited from RTI staff, including the four short-term Program Consultants, national-level MISAU staff, and provincial Focal Points in non-trachoma-endemic provinces.

Supervisors are responsible for monitoring and collecting data and for reporting the overall progress of the MDA in their province, including social mobilization. They are responsible for ensuring that all procedures and protocols are adhered to and that communication is frequent with the central level.

#### j) M&E

**TIS:** Prior to the early impact surveys conducted in FY18, Mozambique had a high success rate for TIS, with only 1 of 26 districts remaining above 5% TF. Of the first 26 surveys conducted to date, only one (Erati District in 2017) resulted in TF prevalence above 5%. Baseline prevalence in Erati was between 5-9.9% and one round of MDA was carried out in FY15 with good reported coverage. In FY18, ENVISION supported TIS in the 14 districts with baseline prevalence of 10%–29.9%. These include five districts in Nampula Province (three evaluation units [EUs]), six districts in Zambézia Province (five EUs), and three districts in Manica Province (two EUs). These districts had conducted two rounds of MDA, but the MDA planned for 2017, which was meant to be the third and final round of MDA for the country, was pushed to FY18. In order to maintain Mozambique’s momentum toward elimination, and after consultation with WHO and global trachoma experts, the MISAU chose to conduct impact surveys in the districts with prevalence between 10% and 29.9% after only two rounds of MDA. Of these 14 districts, 10 were on the lower end of the prevalence range, with baseline prevalence ranging between 10.2% and 14.5%. Of the remaining 4 districts, the highest reported prevalence was 19.8%. The reported MDA coverage from the previous two rounds of antibiotic distribution in these 14 districts was above the recommended WHO threshold of 80% (with the exception of 1 round of low coverage in Liupo). In a fifteenth district, Memba, in Nampula

Province, the National NTD Program planned to conduct an early TIS, but it was canceled due to security reasons. Results of the TIS showed that 6 districts have TF prevalence <5%, 7 districts have TF prevalence of 5%–9.9%, and 1 district has TF prevalence >10%.

In FY19, ENVISION will support TIS in eight EUs across eight districts. This includes three districts in Manica (two EUs) and five districts in Zambézia (six EUs). Five of the eight districts planned for impact surveys completed early impact surveys in 2017 after two rounds of MDA with results showing TF between 5% and 9.9%. The other three districts had baseline prevalence of 5%–9.9%. All eight districts conducted MDA in March 2018.

Children between 1 and 9 years old will be surveyed for prevalence of TF and trichomatous inflammation-intense, and people 15 years and older will be surveyed for prevalence of TT, scarring trachoma, corneal opacity, and visual impairment. WHO’s simplified trachoma grading system will be used to identify and register trachoma cases, and the Tropical Data service will be employed.

ENVISION, as the main partner for trachoma activities, will remain fully engaged with MISAU to verify that the activities are feasible with the limited human resources at different levels. As partners, the project wants to ensure that ENVISION activities are strengthening the national system and will monitor along the way for any human resource constraints.

**Table 6: Reporting of DSA supported with USAID funds that did not meet critical cutoff thresholds as of September 30, 2018**

NTD	Number of remaining endemic districts	Type of DSA carried out	Number of DSAs conducted with USAID support	Number of EUs that did not meet critical cutoff thresholds	Why did the EU not “pass” the DSA?	Post-DSA failure activities
Trachoma	34	TIS	40	9	Eight of these districts conducted impact surveys after only 2 rounds of MDA, instead of the usual 3. One of these eight, Inhassunge, remained above 10%, and the suspected reason is due to particularly poor water and sanitation conditions. The same is true for the ninth district, Erati.	One additional round of MDA is planned in Erati in May 2019. Three more rounds of MDA are planned in Inhassunge. One was conducted in March 2018, the second and third will be conducted in May 2019 and in 2020.
		TSS	15	15	N/A	N/A

**Table 7: Planned DSAs for FY19, by disease**

Disease	No. of endemic districts	No. districts planned for DSA	No. of EUs planned for DSA	Type of assessment	Diagnostic method
Trachoma	65	8	8	TIS	Tropical Data standardized clinical grading
Trachoma		6	5	TSS	Tropical Data standardized clinical grading

k) Supervision for M&E and DSAs

**TIS:** As mentioned above, MISAU has one certified master grader (Head of National Ophthalmology Department), four certified grader trainers (NTD Coordinator, Ophthalmologist, two ophthalmic technicians), and one certified recorder trainer (RTI-Mozambique Knowledge Management Officer), with two additional recorder trainers expected by the end of FY18. They will lead and supervise TIS trainings and field implementation, noting that some may only be able to serve as trainers and not supervisors, due to the extensive time commitment involved with data collection. Each field team will be supervised by a MISAU grader supervisor and an RTI recorder/logistics supervisor. While previous support from ENVISION has enabled MISAU to carry out high-quality data collection, ENVISION will continue to call upon support from the project’s Trachoma Focal Point and Technical Advisor in the planning phase of the surveys, particularly in protocol development and cluster selection.

l) Dossier Development

RTI began supporting MISAU for completion of the data collection portion of the trachoma dossier in FY16. During the National Annual NTD Partners Review Meeting in February 2017, the data were shared with each province for review. Each province was also asked to begin working on compilation of data for the “F” and “E” components of the SAFE strategy. RTI will continue to support MISAU with dossier completion through technical guidance from the HQ Technical Advisor and Trachoma Focal Point.

In FY18, RTI met with the National NTD Coordinator and National Head of Ophthalmology to discuss plans for dossier preparation. At their request, RTI will oversee and coordinate development with the National NTD Coordinator, who will lead components related to “A,” “F,” and “E” of the SAFE strategy, and the National Head of Ophthalmology, who will oversee anything related to trachoma surgeries and surveys. MISAU will divide sections of the dossier among national trachoma stakeholders for development of the narrative. Each of the two groups will meet monthly or bi-monthly to discuss progress.

Once all sections have been completed, CEP-NTD 2 will support a consultant to compile the sections, rewriting to ensure consistency in voice. A dossier review meeting will be held in Q4, under CEP-NTD 2, for the members of the Dossier Task Force to review the completed draft. MISAU aims to have the dossier finalized by the end of FY19, with the exception of the remaining surveillance surveys that will carry forward into 2022.

## APPENDIX 1: Work Plan Activities

FY18 Activities
<b>Management Support</b>
Technical/Programmatic support to country teams and national program
<b>Project Assistance</b>
Strategic Planning
NTD National Steering Committee (NSC), Central Level
NTD Secretariat
Office Costs
Translations
Building Advocacy for Sustainable National NTD Program
Social Communication and Advocacy Working Group
Mozambique Eye Care Coalition (MECC)
MDA Coverage
FY19 trachoma MDA in 5 provinces, 26 districts
Social Mobilization to Enable NTD Program Activities
Radio messaging
Use of megaphones to disseminate information to communities
Opening ceremony
Training
Supportive supervision and TOT for national and provincial NTD Focal Points
Trachoma pre-MDA training, provincial training
Trachoma pre-MDA training, district training
Drug Supply Management and Procurement
Drug repackaging, drug transportation, and delivery to provinces and communities
Reverse supply chain management
Supervision for MDA
Trachoma MDA supervision in 5 provinces, 26 districts
Monitoring and Evaluations
Trachoma impact survey
Supervision for Monitoring and Evaluation
Trachoma impact survey
Dossier Development
Trachoma dossier development
STTA
Provincial Program Officers

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

Province	District	Trachoma MDA	Trachoma impact survey
	Ancuabe		
Cabo Delgado	Balama	X	
	Chiure		
	Ibo	X	
	Macomia	X	
	Mecufi	X	
	Meluco	X	
	Mocimboa Praia	X	
	Montepuez	X	
	Mueda		
	Muidumbe	X	
	Nangade		
	Palma		
	Pemba Metuge	X	
	Quissanga	X	X
Manica	Guro		X
	Macossa		X
	Tambara		X
Nampula	Angoche		
	Erati	X	
	Memba	X	
	Mogincual	X	
	Nacala Velha		
	Liupo	X	
	Moma	X	
	Larde	X	
	Monapo	X	
	Muecate	X	
	Nacaroa	X	
Sofala	Chemba	X	
	Maringue	X	
Tete	Cahora Bassa	X	
	Chiuta	X	
	Magoe	X	

Province	District	Trachoma MDA	Trachoma impact survey
	Zumbu	X	
Zambézia	Chinde		X
	Luabo		X
	Inhassunge	X	
	Mopeia		X
	Morrumbala		X
	Dere		X