



Cameroon Work Plan

FY 2019

Project Year 8

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ENVISION PROJECT OVERVIEW

The US 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 the 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 Cameroon, ENVISION project activities are implemented by Helen Keller International (HKI) with support from RTI International.

TABLE OF CONTENTS

ENVISION PROJECT OVERVIEW	ii
TABLE OF TABLES	iv
ABBREVIATIONS LIST	v
COUNTRY OVERVIEW.....	7
1. General Country Background.....	7
a) Administrative Structure	7
b) Security Situation in Cameroon	7
c) Other NTD Partners.....	8
2. National NTD Program Overview.....	10
a) Lymphatic Filariasis	10
b) Trachoma	12
c) Onchocerciasis	15
d) Schistosomiasis	16
e) Soil-transmitted Helminths	17
3. Snapshot of NTD Status in Country.....	18
PLANNED ACTIVITIES.....	19
1. NTD Program Capacity Strengthening	19
a) Strategic Capacity Strengthening Approach	19
b) Capacity Strengthening Objectives and Interventions.....	19
c) Monitoring and Evaluating Proposed Capacity Strengthening Interventions	20
2. Project Assistance	22
a) Strategic Planning	22
b) NTD Secretariat	23
c) Mapping	24
d) Training	24
e) Supervision for MDA	24
f) M&E.....	25
g) Supervision for M&E and DSAs	25
h) Dossier Development.....	25
.....	27
3. Maps	27
APPENDIX 1: Work Plan Activities.....	30

APPENDIX 2: Table of USAID-supported Regions and Districts in FY19..... 32

TABLE OF TABLES

Table 1: Non-ENVISION NTD partners working in country, donor support, and summarized activities 9

Table 2: Summary of LF endemicity status..... 12

Table 3: Results of the TISs completed since FY14..... 14

Table 4: Endemicity of OV in Cameroon..... 16

Table 5: Snapshot of the expected status of the NTD program in Cameroon as of September 30, 2018 18

Table 6: Indicators to measure progress of interventions. 20

Table 7: Project assistance for capacity strengthening..... 21

Table 8: Planned DSAs for FY19 by disease 25

ABBREVIATIONS LIST

ALB	Albendazole
APOC	African Program for Onchocerciasis Control
CBTI	Community-based Treatment with IVM
CAR	Central African Republic
CCU	Central Coordination Unit
CDC	Centers for Disease Control and Prevention
CDD	Community Drug Distributor
CDTI	Community-Directed Treatment with Ivermectin
CENAME	<i>Centrale Nationale d'Approvisionnement en Médicaments et Consommables Médicaux Essentiels</i> (National Center for Essential Drug Supply)
CIND	Country Integrated NTD Database
CVUC	<i>Communes et Villes Unies du Cameroun</i> (Association of United Communes and Cities)
DMO	District Medical Officer
DMT	District Management Team
DRSP	<i>Délégation Régionale de la Santé Publique</i> (Regional Public Health Delegation)
DSA	Disease-Specific Assessment
ESPEN	Expanded Special Project for the Elimination of NTDs
EU	Evaluation Unit
FEICOM	<i>Fonds Spécial d'Équipement et d'Intervention Intercommunale</i> (Special Council Support Fund)
FRPS	<i>Fond Régional pour la Promotion de la Santé</i> (Regional Fund for Health Promotion)
FTS	Filariasis Test Strips
FY	Fiscal Year
HD	Health District
HKI	Helen Keller International
HQ	Headquarters
ICT	Immunochromatographic Test
IEC	Information, Education, and Communication
IEF	International Eye Foundation
IVM	Ivermectin
JAP	Joint Application Package
LCIF	Lions Club International Foundation
LF	Lymphatic Filariasis
LOE	Level of Effort
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MEB	Mebendazole
MMDP	Morbidity Management and Disability Prevention Project
MOH	Ministry of Public Health
NCEOLF	National Committee for the Elimination of Onchocerciasis and lymphatic filariasis
NGDO	Nongovernmental Development Organization
NGO	Nongovernmental Organization
NTD	Neglected Tropical Disease
ODK	Open Data Kit
OV	Onchocerciasis

PC	Preventive Chemotherapy
PNLCé	<i>Programme National de Lutte contre la Cécité</i> (National Blindness Prevention Program)
PNLO	<i>Programme Nationale de Lutte Contre l’Onchocercose</i> (National Program for the Control of Onchocerciasis)
PNLSHI	<i>Programme National de Lutte contre la Schistosomiase</i> (National Program for the Control of Schistosomiasis and Intestinal Helminthiasis)
PZQ	Praziquantel
Q	Quarter
SAC	School-Age Children
SAE	Serious Adverse Event
SAFE	Surgery–Antibiotics–Facial cleanliness–Environmental improvements
SCH	Schistosomiasis
SMS	Short Message Service
STH	Soil-Transmitted Helminths
TAP	Trachoma Action Plan
TAS	Transmission Assessment Survey
TF	Trachomatous Inflammation–Follicular
TIS	Trachoma Impact Survey
TOR	Terms of Reference
TSS	Trachoma Surveillance Survey
TT	Trachomatous Trichiasis
USAID	US Agency for International Development
USD	United States Dollars
WHO	World Health Organization
ZTH	Zithromax®

COUNTRY OVERVIEW

1. General Country Background

a) Administrative Structure

Cameroon is a central African country covering an area of 475,650 km². The 2019 population of Cameroon is estimated at 25,492,353.¹ Women comprise 50.5% of the total population, and 48.8% of the population resides in urban areas. Most of the country's inhabitants are young: 15.5% of the population is between the ages of 0 and 5 years, and 25.5% is between the ages of 5 and 14 years. The annual population growth rate is 2.5%. The country has more than 230 different ethnicities, and the two official languages are French and English. Administratively, Cameroon is divided into 10 regions, 58 divisions, 360 subdivisions, 360 district councils, and 15 urban municipalities. The health system has the following structure:

- 10 Regional Public Health Delegations (*Délégations Régionales de la Santé Publique* [DRSPs]), each headed by a Regional Delegate, with regional hospitals and similar structures;² and
- 189 Health Districts (HDs), all of which are operational. Each HD has a district hospital and several health centers, which are primary health care centers. In 2014, the Ministry of Public Health (MOH) created new HDs by splitting some HDs. It took time for the new HDs to be fully operational (completed in 2015–2016). In fiscal year 2018 (FY18), there were 189 fully operational HDs.

The Central Coordination Unit (CCU) of the MOH coordinates integrated control activities for the five priority neglected tropical diseases (NTDs) that can be treated with preventive chemotherapy (PC)—lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), soil-transmitted helminths (STH), and trachoma—at the national and regional levels. HD management teams organize and implement the activities at the district and community levels. Community-based (for LF, STH, OV, and trachoma) and school-based (for SCH and STH) platforms are used for drug delivery by community health workers, community drug distributors (CDDs), and teachers. If necessary, the regional and district referral hospitals are in charge of the management of serious adverse events (SAEs) resulting from the drugs distributed.

b) Security Situation in Cameroon

Security issues in Cameroon continue, particularly in Far North Region in HDs that border Nigeria. Boko Haram is very active, and several hundred people have been killed by suicide bombing attacks since 2016. These issues have caused some delays or postponements in the implementation of activities in Cameroon. Kolofata HD has seen multiple suicide bombings and remains a difficult environment for NTD activities.

¹ MOH, *Institut National de la Statistique*, United Nations Population Fund. (2016). *Projections démographiques et estimation des cibles prioritaires des différents programmes et interventions de santé* (p. 27). Retrieved from http://slmp-550-104.slc.westdc.net/~stat54/downloads/2016/Rapport_etude_estimations_populations_cibles_MINSANTE.pdf

² Private and public hospitals with technical facilities similar to those of a regional hospital.

In the past two years, Anglophone separatists in Northwest and Southwest regions have clashed with Cameroonian security forces. In FY18, deaths occurred following demonstrations in these areas, and curfews and bans on public meetings remain in place. These security problems have increased the difficulty of working in these two regions. In FY18, implementing surveys in this area has been challenging.

Helen Keller International (HKI) reviews the security situation in all these regions regularly to ensure NTD program and ENVISION staff safety.

c) Other NTD Partners

In Cameroon, the ENVISION project is implemented by HKI under the leadership of the MOH. Activities are implemented in collaboration with partner nongovernmental development organizations (NGDOs). Other ministerial departments—such as the Ministry of Basic Education, Ministry of Secondary Education, Ministry of Communication, Ministry of Youth and Civic Education, Ministry of Women’s Empowerment and Family, and Ministry of Social Affairs—and the targeted communities themselves, through the participation of CDDs, are also associated with the project. NTD control activities in the country’s 10 regions are organized around previously established networks and structures, such as the long-existing coalition of NGDOs working in OV control.

HKI has signed sub-agreements with specific NGDOs, and these organizations implement mass drug administration (MDA) activities in their traditional regions of intervention: Sightsavers supports activities in Northwest, Southwest, and West regions; International Eye Foundation (IEF) supports South and Adamawa regions; and PersPective works in Littoral Region. HKI directly supports the four other regions (Centre, East, North, and Far North) and also provides financial and technical support to the MOH at the central level.

In addition to the funds provided by the US Agency for International Development (USAID) for PC targeting of the NTDs through the RTI-managed ENVISION project and HKI-managed Morbidity Management and Disability Prevention (MMDP) project, the NTD program also receives financial support from the Government of Cameroon and from other organizations.

The following list (and **Table 1**) provides more details on the support provided for NTD activities:

- **The Government of Cameroon** contributes to the payment of government staff salaries and other agents of the state implicated in project delivery; supports drug pick-up, transportation, and storage; is responsible for operations and various investments (e.g., the building of facilities, infrastructure, logistics); supports the participation of NTD staff in international meetings and training; and manages program coordination associated with MDA and handling of both LF morbidity cases (hydrocele and lymphedema) and trachomatous trichiasis (TT) cases.
- **Sightsavers** has supported OV activities since 1996. This NGDO contributes its own funding to the implementation of integrated LF, OV, SCH, and STH control/elimination activities in Northwest, Southwest, and West regions. Sightsavers has also provided support for the OV elimination committee meeting held in January 2018 and supports the elimination of trachoma in Far North and North regions. Sightsavers supports TT surgeries, the promotion of facial cleanliness, and other hygiene and sanitation activities in Far North.
- **LCIF** supported activities for OV control since 1996 through a coalition of NGDOs. In 2010, LCIF started to reduce its financial support, particularly in HDs endemic for OV in forest areas. In 2015, LCIF stopped all funding activities in South and Littoral regions. In FY17, LCIF supported,

through HKI and IEF, only HDs endemic for OV in the regions of Adamawa, Far North, and North; this OV-direct support ended in February 2018 because LCIF decided to focus on nationwide comprehensive basic eye care. As of July 2018, LCIF is not providing any NTD-specific support. HKI Cameroon, as part of a consortium, has applied for additional funding from LCIF and are awaiting a response from the grant review committee.

- **The World Health Organization (WHO)** contributes technically and financially to the development of NTD plans, holds national planning/review meetings, and provides logistical support for the management of drug supplies.
- **The MMDP project (HKI)** is a 5-year projected funded by USAID. The project works in northern Cameroon to provide support for training in TT and hydrocele surgery. The project will end in July 2019.

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
LCIF	Adamawa Region and OV in North and Far North regions until February 2018; no longer providing support	Provided direct technical assistance to the MOH in strategic planning and capacity building	No	None
		Provided technical and financial assistance to MOH for advocacy and social mobilization		
		Provided technical and financial assistance to MOH for the organization, implementation, and supervision of MDA campaigns to control NTDs		
WHO	Central level	Provides technical and financial assistance to the MOH in strategic planning; WHO also aids in drug supply management.	No	None
MOH	Central level/all endemic areas	Provides government staff salaries, drug storage and transportation, construction of health facilities, infrastructure and logistics, treatment of hydrocele, and support for CDDs	No	Yes
MMDP (HKI)	Far North and North regions	Provides management of TT cases; supports scale-up of LF morbidity management; supports dossier data and narrative (trachoma) development	Yes	None
Sightsavers	Northwest, Southwest, and West regions; Far North and North regions	Supports MDA; Supports TT surgery; water, sanitation, and hygiene activities; and OV elimination activities	Yes (as an ENVISION sub-partner)	USAID

Note: TA, technical assistance.

2. National NTD Program Overview

a) Lymphatic Filariasis

Cameroon has made enormous progress in LF elimination countrywide, and the national goal is to eliminate LF as a public health problem by 2020. Of the 162 districts ever classified as endemic districts, to date, Cameroon has achieved the criteria to stop LF MDA in 136 districts (including preliminary results from the FY18 transmission assessment survey 1 [TAS1]), with a population of 16,328,789 no longer at risk. The remaining 25 districts, plus six partial districts, were found to not be endemic for LF based on mini-TASs conducted in FY16 (see the section on co-endemicity with *Loa loa* below). Thus, the number of HDs that should be considered as endemic is 137.

Thirty-eight districts (out of these 137) entered the surveillance phase (TAS2) in FY18. Cameroon is on track to submit the LF elimination dossier in FY22.

Data entry for the LF dossier began in FY18, led by the National Program for the Control of Onchocerciasis (*Programme Nationale de Lutte Contre l'Onchocercose* [PNLO]) and in partnership with ENVISION. Historical data have been collated, verified, and entered into the data portion of the dossier template. The National Committee for the Elimination of OV and LF (NCEOLF) will support LF dossier development by reviewing the results of all future research on LF elimination activities. The LF elimination dossier requires information on LF MMDP activities in Cameroon. So far, the MMDP project in Cameroon has conducted surgeries on 106 hydroceles cases in five HDs in North and Far North regions. The USAID-funded MMDP project will end in July 2019.

Cameroon started uniting vertical, disease-specific programs into an integrated NTD program in 2010 with the support of USAID through the RTI-managed NTD Control Program, with HKI as the in-country implementing partner. This support allowed the completion of NTD mapping, including LF, throughout the country in 2010–2012 and the scale-up of MDA activities to bring coverage close to 100%. In total, based on the number of HDs after the FY17 redistricting, 162 HDs were classified as LF endemic initially. A Central Coordination Unit (CCU) was established in 2012 to integrate the response to NTDs. This unit brings together all program managers from the MOH and partners.

The treatment strategy was ivermectin (IVM) combined with albendazole (ALB) MDA through community-directed intervention in endemic areas and morbidity management of the disease. LF elimination began in 2008 with mass treatment of nine HDs in North and Far North as part of a pilot project phase with support from WHO and the Mectizan® Donation Program. Disease mapping was completed between 2010 and 2012, using immunochromatographic tests (ICTs), with support from USAID and the African Program for Onchocerciasis Control (APOC); APOC's support covered 60 HDs. The mapping in 2010–2012 revealed that LF is endemic in 162 of 189³ HDs; however, later analysis confirmed that 25 of these HDs were not endemic, and thus, only 137 HD are listed in **Table 2**). Among the 137 districts, 101 are co-endemic with OV, and 87 of these 101 HDs are also co-endemic with *L. loa*. In 2012, IVM and ALB MDA was extended to cover 137 HDs, including 6 HDs partially targeted because of co-endemicity with *L. loa* and the risk of SAEs.

³ 158 of 181 HDs were endemic prior to redistricting. Following the FY14 administrative redistricting, which became fully effective in FY17, the number of HDs increased from 181 to 189, and the number of LF-endemic HDs grew from 158 to 162.

Co-endemicity with L. loa

In Cameroon, 31 HDs were originally classified as co-endemic with LF and *L. loa* (and not with OV). Of these, six began partial treatment in 2011, as mentioned above. The remaining 25 were not treated prior to 2015. A baseline survey was conducted in 2014 in East Region using ICTs to identify sentinel sites for further assessment of the programmatic impact of ALB twice a year and vector control on LF, and a new strategy was piloted in 2015. This strategy followed WHO's 2012 provisional strategy for treating LF in loasis-endemic areas and combined the bi-annual distribution of ALB with the use of long-lasting insecticide-treated nets provided by the National Malaria Control Program. In East Region, 13 of these 31 co-endemic HDs started bi-annual treatment with ALB. In 10 of the 13, the entire HD received bi-annual ALB, while the remaining 3 HDs received either IVM+ALB (in areas where treatment started in 2011) or bi-annual ALB (in IVM-naïve areas).

In FY16, the national LF program planned to extend this bi-annual treatment strategy to the remaining 18 co-endemic HDs (15 treatment-naïve HDs and the other 3 partial-treatment HDs) to reach 100% geographic coverage for LF in Cameroon. However, a review of baseline survey results collected in East Region in 2014 contradicted earlier mapping data. Earlier data had shown ICT prevalence of up to 20% antigenemia, but in 2014, an antigen prevalence of zero was observed in the 31 HDs. After a data review by the WHO Regional Office for the Africa Regional Program Review Group, the bi-annual treatment strategy was suspended. It was recommended that a confirmatory mapping survey (a mini-TAS) be conducted in the 31 HDs in FY16 to evaluate the current LF situation using filariasis test strips (FTS). However, noting that FTS can also cross-react with *L. loa* and *Mansonella perstans*, thick blood smears and polymerase chain reaction were used to confirm FTS positive results. The results from the mini-TAS indicated that none of the FTS positive samples were positive for *Wuchereria bancrofti* using the thick blood smear film or polymerase chain reaction technique. The report has been validated and sent to the Regional Program Review Group. Given the mini-TAS results, the MOH decided not to conduct LF MDA in these 31 HDs, so no bi-annual treatment is planned for the foreseeable future.

TASs and Stopping MDA

In FY14, Cameroon's first five HDs underwent and passed TAS1. In FY16, a further 33⁴ HDs passed TAS1, and 87⁵ HDs passed pre-TAS. In FY17, these 87 HDs underwent and passed TAS1. In FY18, an additional 11 of 12 HDs have conducted TAS1. The MOH has not yet conducted TAS1 in Akwaya (Southwest) because of insecurity. Pending a reassessment of the security situation, TAS1 in Akwaya is planned in FY19.

In FY18, Cameroon planned to conduct TAS2 in 38 HDs, and completed TAS2 in 37. The MOH was unable to conduct TAS2 in Kolofata (Far North) due to insecurity. In FY19, the MOH plans to conduct TAS2 in 36 HDs, including 36 HDs that passed TAS1 in FY17 and Kolofata, pending a security reassessment. The remaining 52 HDs will undergo TAS2 in FY20.

The final reports of TAS1 and TAS2 conducted in FY18 are awaiting validation and are expected to be ready in August 2018. **Table 2** summarizes the current LF situation in Cameroon.

⁴ At the time of the survey, there were 31 HDs, but as a result of redistricting, there are now 33 HDs.

⁵ 86 HDs prior to the redistricting.

Table 2: Summary of LF endemicity status

Survey	Result	# of HDs	Surveillance phase
Mini-TAS (from FY16)	Re-classified as non-endemic from the original 162 HDs	31	N/A
TAS1 in FY14	All EUs passed	5	TAS2 in FY18
TAS1 in FY16	All EUs passed	33	TAS2 in FY18
TAS1 in FY17	All EUs passed	87	TAS2 scheduled for FY19 and FY20
TAS1 in FY18	All EUs passed ⁶	11	TAS2 scheduled for FY20
TAS1 in FY19	Survey not yet started in 1 EU ⁷	1	Not yet planned

b) Trachoma

Historical Data and MDA

The goal of the trachoma program, coordinated by the National Blindness Prevention Program (*Programme National de Lutte contre la Cécité* [PNLCé]), is to eliminate trachoma as a public health problem by 2020. The program uses the WHO-recommended SAFE strategy: S (surgery), A (antibiotics), F (facial cleanliness), and E (environmental improvement). The S, F, and E components are supported by other projects specifically focused on trachoma or integrated with broader water, sanitation, and hygiene-promotion projects. Sightsavers has supported TT surgeries in Far North Region since FY14. The HKI-led MMDP project has also provided technical and financial support in terms of TT surgery in Far North and North since FY15. All 22 HDs that required antibiotic treatment have stopped MDA, and 3,343,175 people are no longer at risk from trachoma.

The MMDP project has supported TT surgical training and TT surgeries in the northern regions of Cameroon. The current TT surgery backlog in FY18 is 4,765 patients requiring TT surgery. Trachoma impact surveys (TISs) performed in FY17 showed that four HDs had a TT prevalence of >0.1% of the total population, and therefore, TT surgical outreach should be implemented. A strategic plan for TT surgery was to be developed in FY17 with the trachoma action plan (TAP), but TAP development was postponed. The TAP was developed in June 2018 during a workshop with support from ENVISION and the MMDP project. Data for surgery, antibiotic distribution, and F& E were inputted into the dossier template, and action points for future trachoma activities were discussed (the draft TAP will be shared with RTI/USAID as soon as it is available).

Activities to eliminate trachoma accelerated in 2010, with USAID support for mapping surveys carried out from 2010 to 2012. Of the 189 HDs, 135 from the southern part of the country (covering seven regions) were not suspected to be endemic because no reports of trachomatous inflammation–follicular (TF) were collected, and because of the good provision of water, the MOH considered that trachoma would be unlikely. During the FY18’s TAP workshop, the country agreed to include indicators into the National Health Information System to gather evidence of the absence of trachoma in previously

⁶ Final confirmation is pending.

⁷ The survey was postponed in this evaluation unit (EU) because of security issues. The PNLO has not indicated when this HD will be surveyed.

unmapped districts. Mapping took place in 54 HDs in Far North, North, and Adamawa regions. Of those, 5 HDs were determined to not be endemic for trachoma (TF 0%); 33 HDs were determined, at that time, to not be a public health problem; 28 HDs had TF<5%; and 5 HDs had TF 5–9.9%. The remaining 16 HDs were considered endemic (TF≥10%). The annual administration of Pfizer-donated Zithromax® (ZTH) and tetracycline eye ointment started gradually, first in the 16 HDs with TF≥10% and then in the 5 HDs with TF 5–9.9%.

Following the TAP workshop in Yaoundé in June 2018, two mapping recommendations were made by Anthony Solomon, the WHO Trachoma Focal Point. First, MOH was asked to establish a data collection system in the seven regions where trachoma was not suspected to confirm that no TF and TT cases have been reported by health centers in these regions. The second recommendation concerns mapping five HDs in East Region. Trachoma mapping in neighboring Central African Republic (CAR) revealed two large HDs with baseline TF prevalence rates of >30% (two HD) and 10–29.9%; these HDs border five HDs in Cameroon’s East Region: Yokadouma, Moloundou, Ndelele, Batouri, and Kete. This finding suggests the possibility that trachoma is present in these HDs as the border with CAR has been relatively porous. These HDs were considered non-endemic by the PNLCé, but no evidence was collected from health centers or other sources in East Region to confirm the absence of TF. This mapping will likely be required for dossier submission.

MDA was conducted in Meri and Petté in FY15. Following the new WHO guidelines, the five HDs with TF prevalence rates between 5% and 9.9% (Moutourwa, Yagoua, Guéré, and Maroua-Rural [now Maroua 3 and Gazawa]), were eligible for a round of MDA in FY16 and underwent TISs in FY17 (**Table 3**). No MDA was planned in either FY17 or FY18.

Kolofata HD was treated by *Ophthalm Sans Frontières* in 2010 and 2011 with azithromycin eye drops. *Ophthalm Sans Frontières* funded an impact survey in 2011 and declared Kolofata to have reached the criteria to stop MDA. Because the HD did not receive oral ZTH, and PNLCé suspects a TF prevalence that would indicate that MDA should be started again, Kolofata was targeted for a re-mapping survey in FY15 and again in FY17. Unfortunately, the security situation in Kolofata is difficult as several suicide bombings have taken place, and the survey has been postponed until FY19 in the hope that the security situation will improve. If the TF prevalence is shown to be >5%, MDA will be conducted in this HD in FY19 (funding source not identified).

Surveys

In July FY14, TISs were conducted in seven HDs using a cross-sectional, two-stage randomized cluster survey. This study used the WHO simplified trachoma coding for the identification and recoding of TF cases. Five HDs (Bourha, Hina, Koza, Mogode, and Roua) have met the criteria for stopping MDA (TF prevalence less than 5%), and the two other HDs (Meri and Petté) had TF prevalence rates between 5% and 9.9%. After another round of MDA in FY15 in these two HDs, TISs were planned for FY16. However, to improve the coordination and planning of other PNLCé activities, PNLCé postponed these TISs until FY17.

In FY15, five HDs in Far North (Goulfey, Guidiguis, Kousséri, Makary, and Mokolo) were scheduled for TIS. These assessments were postponed several times because of insecurity in the region, but finally, surveys were conducted in two of the five targeted HDs (Mokolo and Guidiguis). The TF prevalence rates in these HDs were 1.7% and 1.9%, respectively, indicating that MDA could be stopped. The TISs for the remaining three HDs (Goulfey, Kousséri, and Makary) were postponed until FY17 because of security concerns and showed a TF prevalence <5%. Additionally, in FY15, Kolofata HD was not re-evaluated as

initially planned (and requested by MOH) because of the security situation. As noted above, the Kolofata surveillance survey is postponed until FY19 as the security situation has not improved.

Three HDs in North Region (Poli, Rey Bouba, and Tcholliré) conducted the final round of MDA in 2015, and TISs in these three HDs were planned for FY16. TIS was also planned in FY16 in Tokombéré HD, which completed five rounds of MDA prior to 2015. The TISs in all four HDs were postponed to FY17.

Fourteen HDs conducted TISs in FY17 using the WHO-led Tropical Data system. All 14 HDs were found to have a TF prevalence <5% in children aged 1–9 years (0%–2.5%) and can stop MDA. Eight of these HDs (Goulfey, Guéré, Moutourwa, Pété, Tokombéré, Yagoua, Poli, and Rey Bouba) have TT prevalence rates above 0.2% in people aged 15 years and older, indicating a need for TT management activities. The MOH shared the TIS report with HKI and RTI.

Table 3: Results of the TISs completed since FY14

Year	Type of survey	HD name	TF/TT result (ages 1–9 years)	Notes
FY14	TIS	Bourha, Hina, Koza, Mogode, and Roua	<5%	
FY14	TIS	Meri and Petté	5%–9.9%	1 MDA in FY15 2nd TIS postponed to FY17
FY16	TIS	Mokolo and Guidiguis	<5%	
FY17	TIS	Goulfey, Kousséri, Makary, Moutourwa, Yagoua, Guéré, Maroua 3, Gazawa, Poli, Rey Bouba, Tcholliré, and Tokombéré	<5%	
FY17	2nd TIS	Meri and Petté	<5%	

According to WHO guidelines, trachoma surveillance surveys (TSSs) should be carried out 2 years after an HD has achieved the criteria to stop MDA. Seven HDs in Far North (Bourha, Hina, Koza, Mogode, Roua, Mokolo, and Guidiguis) were originally to undergo surveillance surveys in July 2018; however, due to delays in country and concerns with implementing during presidential elections, these will now occur in FY19 with ENVISION support. 14 additional HDs will also conduct their TSSs in FY19 with CEP1 support (Goulfey, Kousséri, Makary, Moutourwa, Yagoua, Guéré, Maroua 3, Gazawa, Poli, Rey Bouba, Tcholliré, Tokombéré, Meri, and Petté).

The PNL Cé has engaged the Far North Regional Delegation of Public Health and will engage with the United Nations High Commission for Refugees to understand the demographic situation and health interventions in the refugee camp in Minawao (in Mokolo HD). A prevalence survey of Minawao refugee camp took place in July/August 2018. There was no TF found, but TT prevalence was found to be 0.71%, thus further intervention with TT surgery is needed and a TT-only survey thereafter. The other refugee camps in Cameroon are not in trachoma-endemic areas, and there are currently no plans to implement trachoma activities in these camps. The results of the survey will be shared with USAID when they are available.

c) Onchocerciasis

Historical Data and MDA

OV is present in all 10 regions, and baseline epidemiological surveys performed in 1993 indicated an average national prevalence of 40%; 113⁸ of 189 HDs are considered meso-endemic, hyper-endemic, or of mixed endemicity (**Table 4**). Cameroon's primary goal is to eliminate OV by 2025, and the National Onchocerciasis Elimination Strategy is in the process of being finalized by stakeholders and should be finalized before the end of the calendar year. The OV program has received financial and technical support from USAID since 2010 as part of the NTD Control Program (the predecessor to ENVISION). In 2017, the national OV program established the NCEOLF, which will aid in OV elimination activities. The first meeting of the committee took place in January 2018. Major outcomes included the set-up of three sub-committees: the first will develop guidelines for OV elimination in Cameroon, the second will focus on quality assurance for interventions, and the last will write the National Strategic Plan for OV Elimination.

The first control activities began in 1987 with the mass distribution of IVM in North Region, followed by extension of treatment to South and Centre regions between 1990 and 1992 via community-based treatment with IVM (CBTI). The PNLO was created in 1993. The PNLO extended control activities to five regions using the CBTI strategy and, starting in 1999, transitioned to community-directed treatment with IVM (CDTI, which is a community-directed rather than just community-based strategy). The OV program has received financial and technical support from USAID since 2010 as part of the NTD Control Program and continues to receive support through ENVISION. The integrated NTD MDA approach in communities was built on the CDTI strategy developed for OV control

In previous FYs, the primary strategy used was annual CDTI in target endemic communities. IVM was given alone in 12 HDs and together with ALB in 101 HDs, where it was part of integrated treatment for LF and OV. Out of the 113 endemic HDs (redistricting added 2 HDs) receiving treatment with IVM, 103 are co-endemic with *L. loa* and LF; 87 are co-endemic for OV, LF, and *L. Loa*; and 16 HD for OV and *L. loa* only; 10 are endemic for OV only.

Because IVM treatment has been implemented for many years, the risk for SAEs following IVM administration has decreased because of reduced prevalence and parasite load—SAEs mainly occur in treatment-naïve individuals with a high *L. loa* parasite load. To achieve the elimination goal, it is necessary to extend IVM MDA to the 71 hypo-endemic HDs. This extension may potentially increase the number of SAE cases in those areas where IVM has never been administered. The MOH has no plans to either map these hypo-endemic HDs or treat them because the OV program has not sought funding for OV treatment in hypo-endemic HDs. For now, all meso-endemic and hyper-endemic HDs receive IVM. In addition, if an HD presents multiple endemicity status (hyper/meso/hypo), it is given the highest endemicity status, but only its hyper- and meso-endemic areas conduct IVM MDA.

⁸ Previously, there were 111 HDs. The increase is attributable to redistricting.

Table 4: Endemicity of OV in Cameroon

Endemicity Status	# of Districts	Notes
Non-endemic	5	None are under treatment
Hypo-endemic	71	None are under treatment
Meso-endemic	15	
Hyper-endemic	84	
Hyper/meso/hypo	10	7 are mixed hyper-, meso-, and hypo-endemic areas. 3 are mixed hyper- and hypo-endemic areas.
Meso and mixed	4	A mix of meso- and hypo-endemic areas.
Total	189	113 are under treatment

In FY19, ENVISION will provide support for OV MDA in 113 HDs.

d) Schistosomiasis

Historical Data and MDA

In 1983, an agreement was signed by USAID and the Ministry of Higher Education and Scientific Research of the Government of Cameroon for the development of a pilot project for SCH control. This agreement led to the implementation of a vast national epidemiological survey between 1985 and 1987. The survey revealed the distribution and prevalence rates of different SCH species in the country. The high-endemicity areas in the northern regions became the priority areas for implementing the activities of the National Program for the Control of Schistosomiasis and Intestinal Helminthiasis (*Programme National de Lutte contre la Schistosomiase* [PNLSHI], created in 2003). Treatment started in 2007 as school-based deworming. The program began receiving support from USAID through the NTD Control Program, implemented by HKI, starting in 2010.

The first MDA campaigns for SCH and STH in schools were launched in 2007, with support from Children Without Worms. Further campaigns have received USAID support since 2010 for mapping and MDA. The epidemiological mapping conducted in 2010–2012 identified 140 HDs as being endemic (prevalence above 0%). These 140 HDs include 2 HDs (Kouoptamo and Galim in West Region) that were added in 2015 by the national program because of an increase in the SCH prevalence in school-age children (SAC).

The Cameroon national SCH program plans for the elimination of SCH by 2020 and, in the past, opted for a treatment frequency that did not always align with WHO in some HDs. The national program policy is to conduct yearly MDA for SAC where the prevalence is greater than 10% and to treat adults in areas where the prevalence in SAC is >50%. Cameroon receives praziquantel (PZQ) donations from WHO. The national strategy for SCH relies on the mapping results from 2010–2012, which used the Kato-Katz technique, and for FY17, the national program targeted MDA in 84 HDs (4 HDs were added because of redistricting) with the appropriate prevalence for treatment.

Accordingly, in FY17, the number of HDs treated with PZQ was 84; these were treated with a mix of school-based and community-based treatment. A teachers' strike in some regions (Northwest and Southwest) prevented implementation of the school-based strategy as planned; these regions were treated with a community-based strategy. In FY18, ENVISION was unable to provide support for SCH/STH MDA, and the MOH used its own resources to conduct a smaller deworming campaign in 22 HDs (source of funding not known).

In FY18, SCH surveys were conducted in the following 12 HDs with ENVISION support: Edea, Loum, Melong, Njombe Penja, Bertoua, Doume, Kete, Ndelele, Cité Verte, Djoungolo, Efulan, and Mbankomo. An additional 14 HDs were surveyed in Northwest, Southwest, and West regions with Sightsavers funding. The final report (by Sightsavers) was submitted.

In FY19, ENVISION will continue to provide assistance to the MOH in finding donors that can support school-based deworming in all 84 targeted HDs. In addition, CEP-1 plans to conduct SCH/STH surveys in 14 districts.

e) Soil-transmitted Helminths

The first STH treatments were based on data from epidemiological surveys (using the Kato-Katz technique) carried out between 1985 and 1987. Control efforts were intensified with the creation of PNLSHI in 2003 and the establishment of the national strategic plan 2005–2010 for SCH and STH control. The STH program has received USAID support since 2010 for annual mebendazole (MEB) MDA in schools for children aged 5–14 years. Data from mapping in 2010–2012 using the same Kato-Katz slides for SCH and STH showed that the three major STH are present in all 10 regions. SAC are the most frequent sufferers, with high parasite loads and, frequently, poly-parasitic infections. Of the 189 HDs, 110 had prevalence rates of 0–20%, 50 HDs had prevalence rates $\geq 20\%$ and $< 50\%$, and 29 HDs had prevalence rates $\geq 50\%$.

The national strategy is to provide systematic deworming in schools for all SAC, regardless of whether the district is endemic or if children attend school: annual deworming in schools is achieved with MEB for children aged 5–14 years, with the addition of PZQ in SCH-endemic areas. This strategy has been ongoing since the establishment of PNLSHI. With the start of LF MDA in the country, the SAC in HDs implementing LF MDA also received a second round of deworming with ALB. For school-based deworming, SAC who are not enrolled in school were taken to the school by their parents on the day of the MDA to receive treatment. Special social mobilization efforts were conducted by nurses to target this group. Children aged 1–5 years were also treated twice a year via the Mother and Child Health and Nutrition Action Week, during which a package of services, including MEB, is distributed to children under 5 years old. Treatment for these younger children is supported by Canada’s Department of Foreign Affairs, Trade and Development through the United Nations Children’s Fund.

In FY17, all HDs in Cameroon were treated for STH, primarily using the school-based strategy; because of a teachers’ strike, some HDs were treated via a community-based strategy. In FY18, ENVISION was unable to provide support for STH treatment, and the MOH used its own resources to conduct a smaller deworming campaign in 22 HDs. As part of the SCH surveys funded by ENVISION (12 HDs) and Sightsavers (14 HDs), STH data were also collected.

In FY19, ENVISION will continue to provide support to the MOH in finding donors that can support school-based deworming in all 189 targeted HDs. In addition, ENVISION plans to conduct SCH/STH surveys in 14 districts.

3. Snapshot of NTD Status in Country

Table 5: Snapshot of the expected status of the NTD program in Cameroon 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	B	C	D	E	F		G	H	I
Disease	Total No. of districts in Cameroon	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	189	137 ^a	52	0	1	0	0	136	TAS1: 1 TAS2: 87
OV		113	76	0	113	0	0	0	0
SCH		140	49	0	0	22 ^b	118 ^c	0	0
STH		189 ^d	0	0	0	22 ^e	167 ^f	0	0
Trachoma***		22	162	5	0	0	0	0	22 ^g

DSA, Disease-Specific Assessment.

a) 162 HDs were initially mapped as endemic for LF; however, later research revealed that 25 of these should have been classified as non-endemic/never-endemic, and thus, the final number of endemic HDs is 137.

b) Because USAID and ENVISION were unable to provide support for SCH/STH treatment, the MOH used its own resources to conduct a mini-deworming in a small number of HDs (22).

c) Among these 118 HDs, 56 are low-endemic districts, and primary SAC are not being treated twice, as WHO guidelines recommend. The other 62 HDs were not treated because insufficient funding was available to conduct deworming in the 84 targeted HDs.

d) The Cameroon MOH classifies all HDs as endemic, although they are not. Only 79 HDs have prevalence rates >20% and require MDA.

e) Because USAID and ENVISION were unable to provide support for SCH/STH treatment, the MOH used its own resources to conduct a mini-deworming in a small number of HDs (22)

f) These HDs were not treated because insufficient funding was available to support nationwide deworming.

g and h) Kolofata passed an impact survey following distribution of azithromycin eye drops. Evidence suggests recrudescence of trachoma. A re-mapping will be conducted to assess the situation.

PLANNED ACTIVITIES

1. NTD Program Capacity Strengthening

a) Strategic Capacity Strengthening Approach

The main challenges in Cameroon's NTD program are related to strategic planning, the building of effective advocacy, the development of LF elimination dossiers, and data management. ENVISION worked closely with the MOH to identify these priority areas that will need capacity strengthening in FY19. ENVISION translated these priorities into the capacity building activities below.

Capacity goals and strategy

ENVISION's goals for FY19 are to increase capacity, in partnership with the MOH, to ensure that Cameroon can deliver effective MDA and surveys and to develop consistent elimination dossiers (especially for LF). To do this, ENVISION goals will be to improve MOH strategic planning abilities, , mentor the MOH in developing the LF elimination dossier based on the experience gained in developing the trachoma elimination dossier, and coach MOH staff in using the data-driven planning guide (including the CIND) as a key tool in the MDA implementation action plan.

b) Capacity Strengthening Objectives and Interventions

Objective 1: Improved strategic planning by the MOH

Support to update strategic plans: Each program still needs to make progress on updating their respective strategic plans. In FY19, ENVISION will continue to provide guidance to various programs in updating their NTD strategic documents, such as the TAP and OV elimination plan.

Support for the development of OV elimination guidelines: Regarding the National Committee for OV/LF Elimination, ENVISION will participate in several sub-committee workshops aiming to develop guidelines for OV elimination in Cameroon, including evaluation protocols; and the development of a quality assurance policy for interventions, including population census and data from treatment, monitoring, evaluation, and research. These workshops will enable the National Committee for OV/ LF Elimination to prepare a National Strategic Plan for OV Elimination that will determine the elimination strategies to be used, including treatment in hypo-endemic areas, treatment where *L. loa* is co-endemic, where and when to implement bi-annual treatment, where and when to stop MDA, and the necessary vector control strategies. PNLO members are required to attend and participate in these workshops to prepare for the documentation stage of OV elimination.

Objective 2: Strengthen LF elimination dossier preparation capacity

In FY18, the TAP meeting enabled the country to make some progress in developing its trachoma elimination dossier. Although the MOH benefited from the experience of international experts, managing the availability of these experts and the MOH to set a meeting date was a time-consuming process; thus, in FY19, ENVISION will use a different approach for the LF elimination dossier.

LF dossier preparation: In FY18, the RTI Technical Advisor oriented the MOH on the LF dossier template and process. In FY19, as continuing TA, ENVISION and the MOH will hold several meetings to analyze the data collected and use them to update the LF elimination dossier. There will be no need to have an international expert participate, but the WHO country office will be involved.

Objective 3: Improved data management

In FY18, ENVISION provided technical and financial support for the historical data entry in the CIND. However, some progress is still needed to develop a data driven decision-making system; data collected need to be correct and accurate, and the MOH finds using the CIND complicated and time-consuming.

Improving data set quality: To improve the data quality, field supervisors will focus their coaching on CDDs (by checking their registers) and Health Area personnel (by reviewing their data grids before they are sent to the upper level). In addition, the meetings for data harmonization, which previously generally took place just after the annual review meetings (for both the regional and national levels), will now be conducted before these annual reviews. This change is to ensure that prior to starting the review, the data sets are completed and correct.

- c) **Accessibility of the CIND:** To improve the user-friendliness of the CIND, ENVISION will provide financial and technical support to the MOH to make this database accessible on a network to assist the MOH in creating the CIND outputs to be used for decision making. Monitoring and Evaluating Proposed Capacity Strengthening Interventions

Table 6: Indicators to measure progress of interventions.

Program Component	Indicators for measuring the progress of the interventions in reinforcing the program components
Strategic planning	<ul style="list-style-type: none"> - Number of coordination meetings held and reported - Strategic plan written and updated according to standards set and then shared - Availability of documentation validated by the Elimination Committee
LF Elimination Dossier	<ul style="list-style-type: none"> - Number of webinars organized around LF elimination dossier creation for PNLO personnel - Availability of a draft of the LF elimination dossier
Data management	<ul style="list-style-type: none"> - Availability of a harmonized data grid at the regional level - Number of meetings to review data held at the HD level with reports - Number of supportive supervision sessions held with reports - Number of synthesis data grids from the Health Area level without incorrect data - NTD integrated database established on a network

Table 7: 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	Coaching	This activity aims to improve planning and technical capacities.
	Meetings of the National Committee for OV/LF Elimination	Discussions with experts and other members will enable the development of the required documents, such as guidelines for OV/LF elimination and quality assurance for all OV/LF interventions.
LF elimination dossier	Consultants or resource individuals and facilitated organizational strengthening	A consultant will be hired to help consolidate information from the database and reinforce the abilities of program actors to use the data.
	Watching ENVISION LF webinar with team and discuss	Staff will participate in webinars to improve the abilities of PNLO personnel to develop the LF elimination dossier.
	Coaching, partnerships, and webinars	The competency of the MOH and NGOs for developing a work plan for post-LF elimination will be strengthened. A meeting will be held with all the partners to develop a national work plan for post-LF elimination.
Data management	Coaching	This activity aims to improve the skills of data managers from the district to national levels.
	Experience sharing	NGO staff will share their experience with MOH data managers on data analysis and reporting.
	Supportive supervision	This activity aims to improve the quality of work.

Note: NGO, nongovernmental organization.

2. Project Assistance

a) Strategic Planning

In addition to the national-, regional-, and HD-level meetings, in FY19, the Cameroon national NTD program will focus on improved coordination among the MOH, the implementing partners, and other national stakeholders. A second NCEOLF meeting will also be held in FY19.

Activity 1: Annual National Review and Planning Meeting

Prior to the beginning of FY19 activities, the MOH needs to assess achievements realized during the past campaign for all (PC) NTDs and measure the progress made. This will be done during a 2-day meeting that the MOH will conduct in Yaoundé (in Quarter [Q]1 FY19). This meeting, which will also provide an opportunity to plan activities for the coming NTD control campaign, will bring together representatives from the MOH central level (eight staff), WHO (one staff), partner NGOs (14 staff), and regional delegates and/or their regional NTD focal points (10). These participants will:

- review and approve the FY18 MDA dataset;
- discuss the results of the FY18 TAS, TSS, and SCH surveys to plan for future activities;
- plan for upcoming impact and surveillance surveys;
- share best practices identified during the MDA campaigns to improve activity implementation for the upcoming campaigns;
- examine the specific cases of HDs that will have reported low coverage (if any) and develop recommendations for improvements;
- discuss potential solutions to conduct the school-based deworming campaign with local funding or funding from donors other than USAID; and
- discuss the sustainability of the national NTD program and ways to improve and support MOH leadership and ownership.

During the meeting, ENVISION will provide TA based on its expertise and experience via HKI staff and other NGOs that support the NTD program in Cameroon.

Activity 2: Annual Regional Review and Planning Meetings

These meetings bring together central-level MOH teams (five representatives—CCU, PNLSHI, PNLO, PNL Cé, and National Program for the Control of Buruli Ulcers [*Programme National de Lutte contre les Ulcères de Buruli*]); DRSP and HD management teams; and representatives of HKI, WHO, and other NGOs. ENVISION will support a meeting in North West and South West regions after the end of OV MDA in November 2018. Each meeting lasts 2 days (plus 2 travel days) and is held at the end of the MDA campaign. The meetings will include topics such as the following:

- The review of HDs MDA coverage
- The identification of areas with low coverage and possible solutions to improve the coverage
- HD detailed planning for the next MDA campaign, including:
 - identification of barriers to access PC and utilization of PC services;
 - identification of solutions to overcome those barriers;

- supportive supervision (integrated across NTDs); and
- evaluation of activity scheduling.

Impact and surveillance survey results will also be discussed, and future actions identified based on the results.

Activity 3: Central and Regional Coordination Meetings

Coordinating NTD activities in Cameroon can be challenging. The country is large, and there are multiple partners, stakeholders, and implementers working in NTDs. In FY19, ENVISION will support increased coordination among the MOH, stakeholders, and implementing partners. ENVISION will provide technical support via HKI and NGDO participation in some of these coordination meetings organized with MOH financial support. At the regional level, quarterly meetings (bringing together HD management teams and regional staff) will provide time for reviewing the implementation and coordination of the activities of all health programs, including NTD programs. At the central level, the MOH will organize 1-day coordination meetings for NTDs every 3 months. Central-level meetings bring together representatives of all NTD programs (PC and non-PC NTDs), NGDOs working on NTDs, and WHO. During these meetings, the progress on planned activities will be monitored, and the group will work to find solutions to improve implementation.

Activity 4: Meetings with new District Medical Officers (DMOs) in Centre Region

In Centre Region, given that most of the DMOs are newly appointed to HDs conducting OV MDA campaigns, ENVISION will provide technical and financial support during two meetings bringing together these DMOs for 1 day; the first meeting will aim to provide the DMOs with the required skills and tools related to the OV MDA campaign, and the second will allow a mid-term review of the MDA campaigns. Sixteen MOH staff are expected to attend.

Activity 5: Meetings of the NCEOLF

In FY18, the MOH held the first meeting of the NCEOLF. Major outcomes included the set-up of three sub-committees: the first will develop guidelines for OV elimination in Cameroon, the second will focus on quality assurance for interventions, and the third will write the National Strategic Plan for OV Elimination. Participants also provided additional recommendations for the secretariat of the Committee, the National Program for Onchocerciasis Control, and partners. One of these recommendations was to collect all available data from all sources (in-country and from the Expanded Special Project for the Elimination of NTDs (ESPEN)) regarding the past and recent status of OV epidemiology (prevalence and intensity of infection) and control activities (dates and therapeutic coverages) in the country. If possible, data were to be collected at the HD or even Health Area level and used to update the mapping of the endemic levels of OV and loasis and their treatments. After this meeting, the CIND was updated with all available OV data, including data relating to control activities and the intensity of infection.

The next meeting, scheduled for November 2018, will enable evaluating the progress made on implementing the recommendations and the progress made by the sub-committees. Thirty-two MOH and partner organization staff are expected to attend. NTD Secretariat

Activity 1: Special PC NTDs coordination meeting

This meeting will take place at the central level just after the coordination meeting described above for strategic planning. It will bring together NGO (HKI, SSI, IEF, and PersPective), national program staff, and the CCU. Participants will discuss the NTD roadmap and activity timelines, share issues and problems, and coordinate activities so that the national program is more involved in the planning of regional- and

HD-level activities. This meeting will bring together all the partners and national program staff involved in PC NTDs, not those working in all NTDs. This additional time added onto this meeting above, will allow participants to focus on coordination between the MOH and all partners, which has traditionally been challenging in Cameroon.

b) Mapping

Activity 1: Trachoma Mapping In East Region

- c) During the TAP workshop in June 2018, the PNLCé was informed that two neighboring HDs of the CAR (Mambéré-kadéi HD and Sangha-mbaéré HD) reported TF prevalence rates of 16.2% and 32.3%, respectively. Given the important migration flows in this border area, TAP meeting participants recommended a trachoma baseline survey. The following five HDs are targeted: Yokadouma, Ndelele, Batouri, Moloundou, and Kete. This activity should be carried out in Q1 of FY19 to ensure that, if treatment is needed, drugs can be ordered, and MDA implemented as soon as possible to avoid delaying trachoma dossier submission. Training

Activity 1: Trachoma survey training

Training for the TSS, and baseline mapping, both 5 days, at the regional will be supported by ENVISION in the East, North and Far North regions

d) Supervision for MDA

Activity 1: Supervision of Data Collection

Up until 2018, review meetings were held at the regional level to analyze the data and provide feedback to communities. However, through this method, feedback was often delayed. Therefore, starting in 2019, ENVISION intends to conduct data analysis at the health area level to ensure timely feedback to communities. This process will also guarantee that the data from all activities (MDAs, trainings, sensitization, etc.) is available at the time of the regional review meetings. To ensure the quality of the community-based MDA, several supervisory visits are made in the field during the campaign by head nurses responsible for the Health Areas, members of HD management teams, regional NTD staff, the MOH central level, and NGOs themselves.

For data collection:

- The presence and correct use of data collection tools will be checked.
- The databases will be checked to ensure they are filled in at all levels and correct any inconsistencies found.
- Whether the data are archived at all levels will be monitored.
- Feedback will be provided to the persons responsible for the level monitored, any problems will be identified, and corrections to address any issues found in a timely fashion will be suggested.

Before ending each supervision visit in the field, the supervisor must ask the person being supervised to develop an implementation plan for the recommendations. The supervisor must keep a copy of the plan and evaluate its implementation during future supervision.

ENVISION will support this activity in the North West and South West regions after OV MDA in October/November 2018.

e) M&E

Activity 1: Workshop to update the database and prepare the JAP

This one-day meeting organized by the CCU (three staff) will bring together the National Program (nine staff), HKI (four staff), and Sightsavers (four staff). Based on available data, participants will review and validate the form to be sent to WHO regarding the drug orders.

In summary, from the beginning of the project, ENVISION provided financial and technical support to the MOH FY18 for implementation of TAS1 in 136 HDs, TAS2 in 37 HDs, TIS in 21 HDs and TSS in 7 HDs. No EUs failed the DSAs. Additional DSAs are planned for FY19, as summarized in **Table 8** below.

Table 8: Planned DSAs for FY19 by disease

Disease	No. of endemic districts	No. of districts planned for DSA	No. of EUs planned for DSA (if known)	Type of assessment	Diagnostic method (Indicator: Mf, FTS, etc)
Trachoma	0	5	//	Mapping	Clinical grading
Trachoma		7	//	TSS	Clinical grading

f) Supervision for M&E and DSAs

Activity 1: Supervision of the trachoma mapping in East Region

ENVISION will supervise the baseline survey in five HDs of East Region (Yokadouma, Ndelele, Batouri, Moloundou, and Kete). The survey results will inform the PNLCé if trachoma is present in these border HDs: if yes, then treatment with ZTH will be organized; if no, then these surveys will be used as evidence that the HDs are not endemic for trachoma and inserted in the trachoma elimination dossier. The surveys will be carried out using Tropical Data methodology. Dossier Development

Activity 1: Meeting to review the trachoma elimination dossier

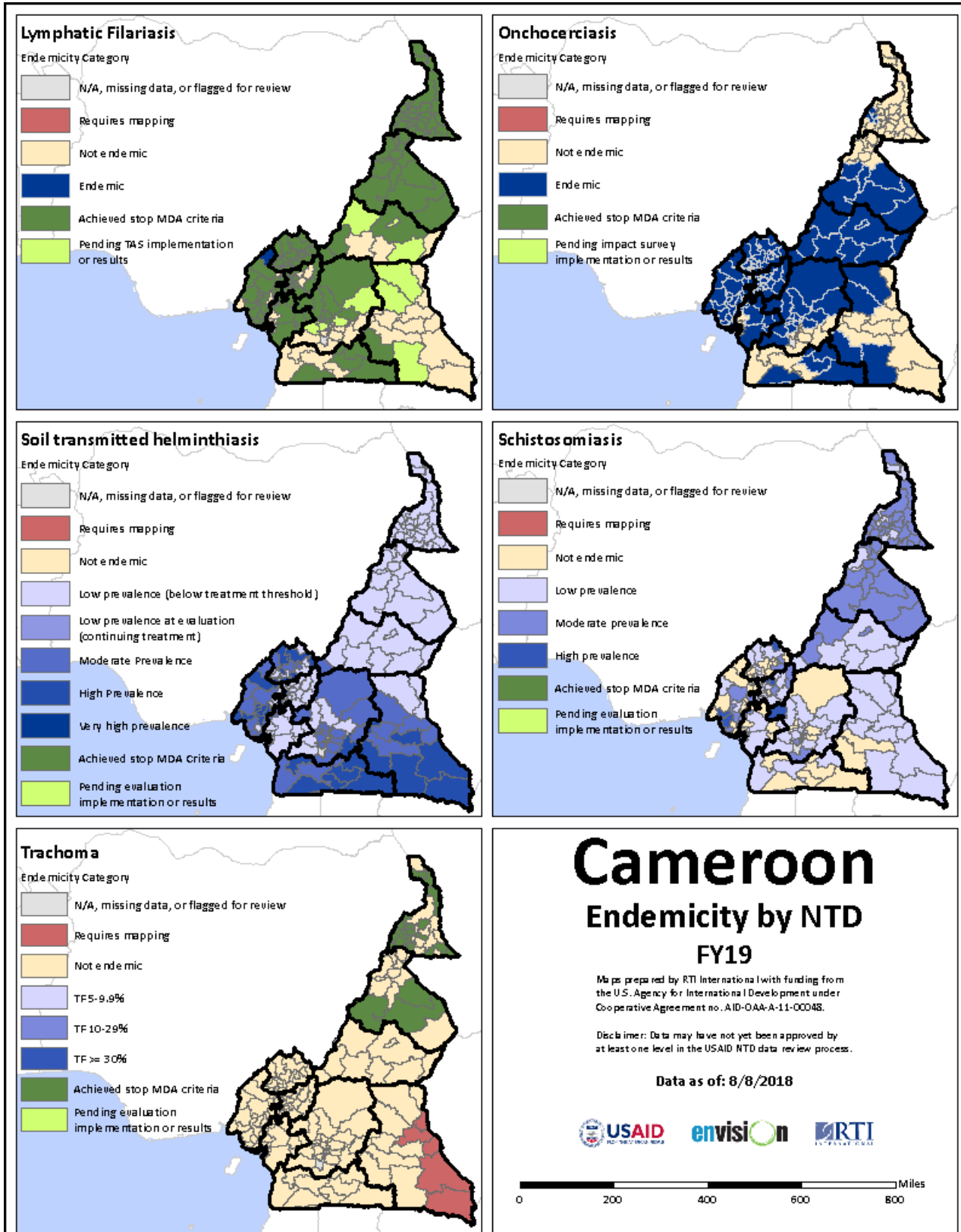
This one-day meeting will bring together the CCU (three staff), the National Program (three staff), HKI (four staff), and Sightsavers (three staff). Participants will evaluate the progress made and update the CIND with new trachoma information from the DSAs and baseline mapping surveys. They will also discuss weaknesses and/or delays and how to solve them.

Activity 2: Meeting to develop and review the LF/OV elimination dossiers

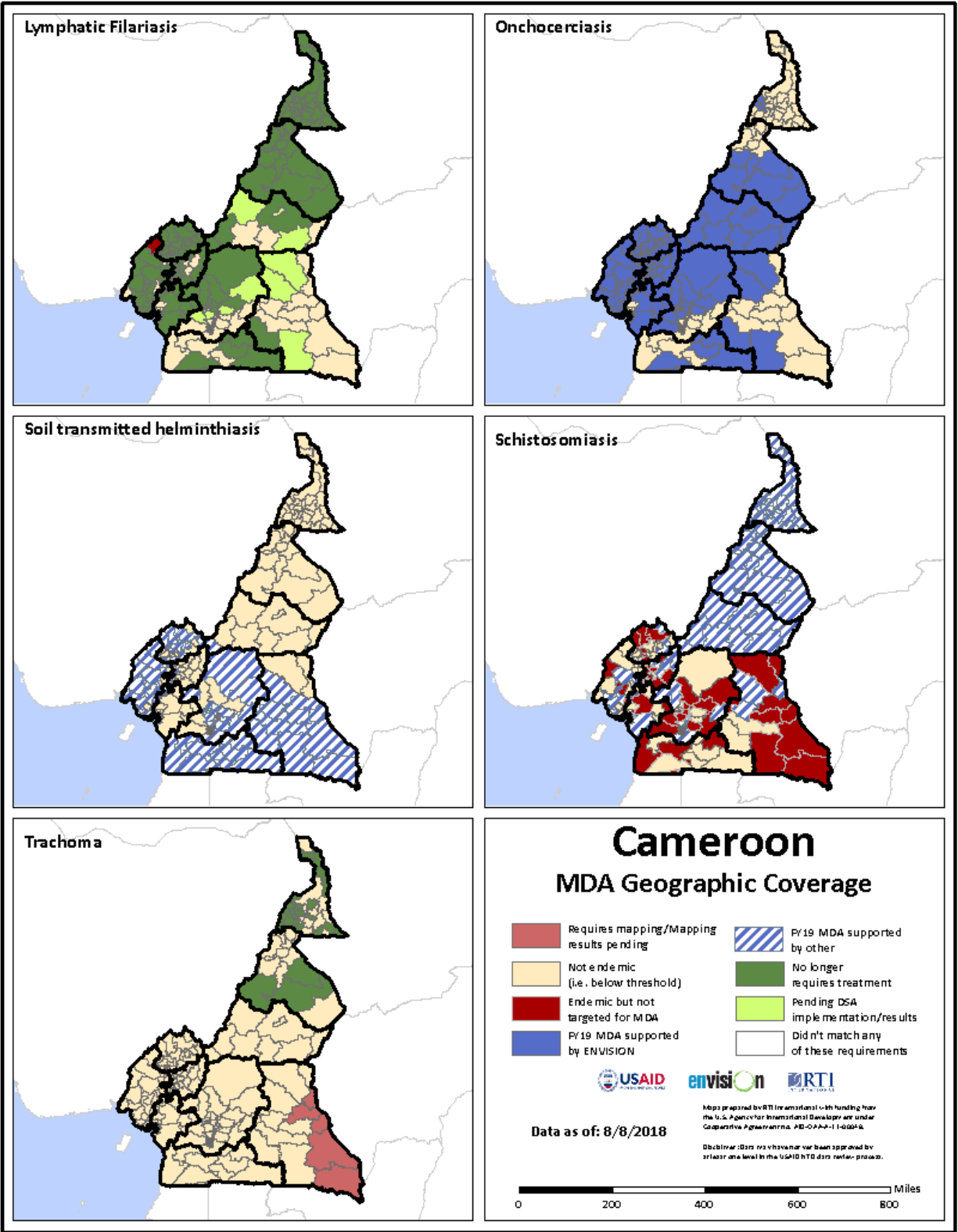
This one-day meeting organized by the CCU (three staff), will bring together the National Program (three staff), HKI (four staff), IEF (two staff), PERSPECTIVE (two staff), and Sightsavers (three staff). Participants will evaluate the progress made. They will also discuss solutions for instances of weakness and/or delays. As part of the dossier development, ENVISION will also hire a consultant to consolidate information from the database, completed the first draft of the narrative and reinforce the capacities of

National Program staff to use the data. The consultant will also be required to attend these quarterly meetings. By the end of FY19, the MOH aims to update the datafiles with all available data and complete a full draft of the narratives.

3. Maps











ENVISION FY19 FY18 CAMEROON WORK PLAN



Cameroon

Progress towards Elimination in FY19 Lymphatic Filariasis

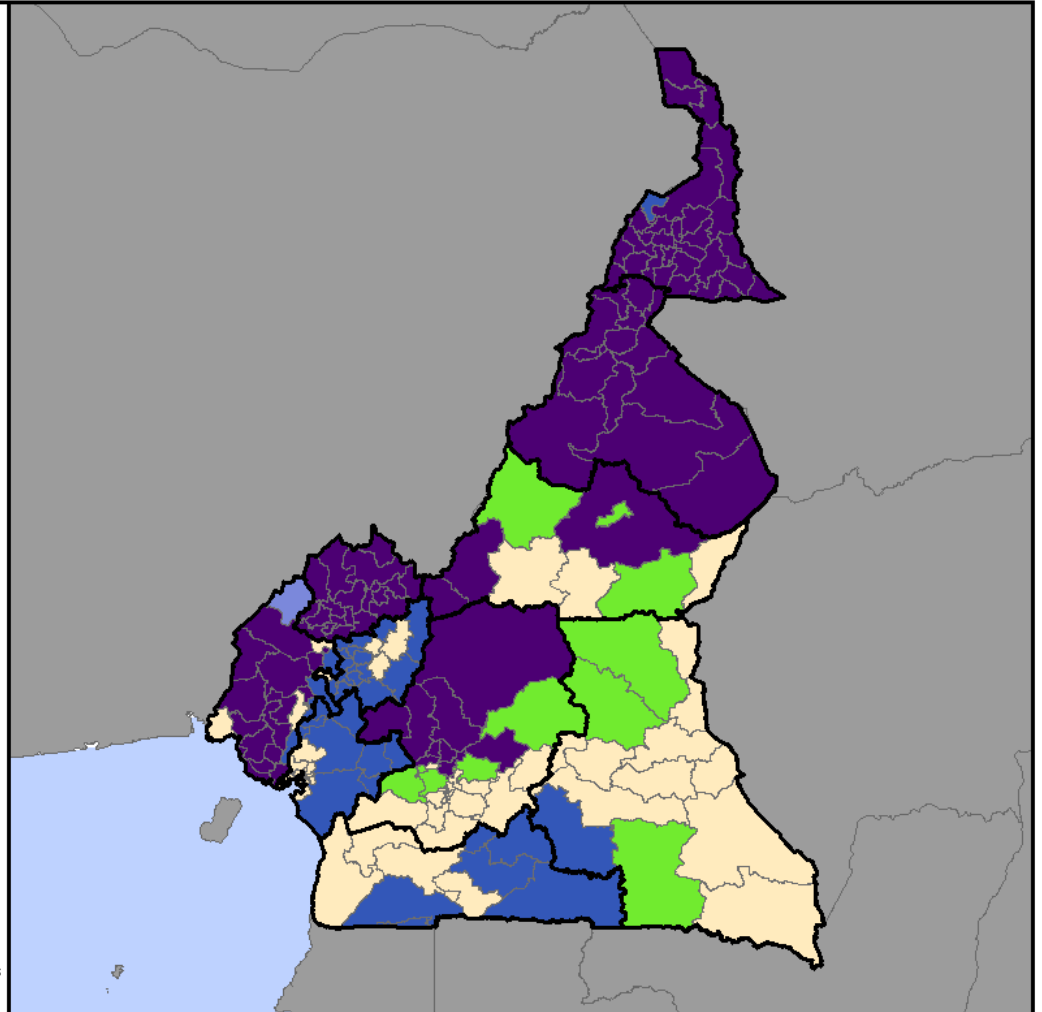
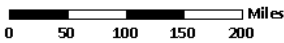
-  Not endemic
-  Endemic, in MDA phase
-  Pending DSA results
-  TAS1 in FY19
-  TAS2 in FY19
-  TAS3 in FY19
-  In post-MDA surveillance phase
-  Requires mapping

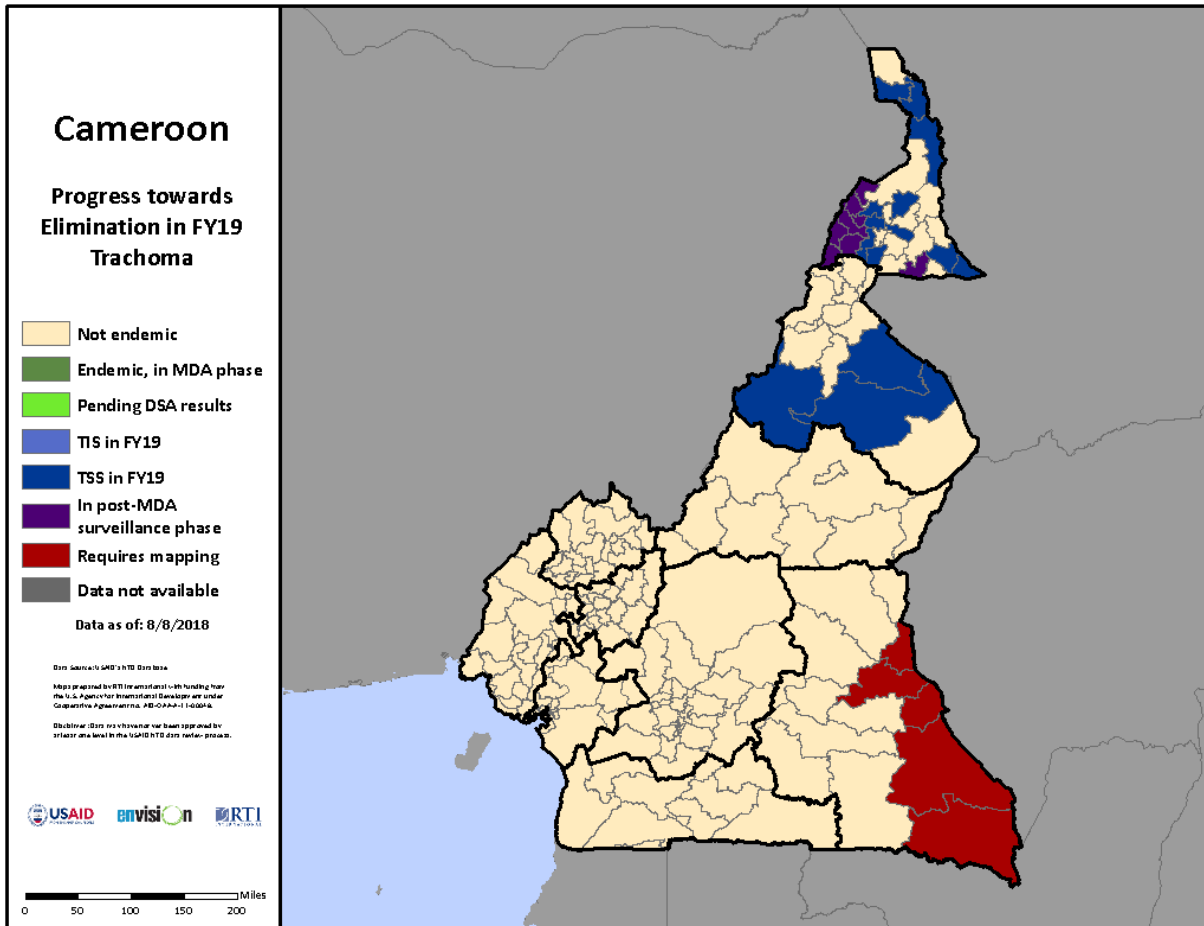
Data as of: 8/8/2018

Data source: WHO/HTM Data base

Maps prepared by RTI International with funding from the U.S. Agency for International Development under Cooperative Agreement #B-0-000-11-00001.

Disclaimer: Data are wherever available are based on the most recent data available.





APPENDIX 1: Work Plan Activities

FY19 Activities
Project Assistance
Strategic Planning
Annual National Review and Planning Meeting
Annual Regional Review and Planning Meeting (After IVM MDA, North West and South West regions only)
Central and Regional Coordination Meetings
Meetings with new DMOs in Centre Region

ENVISION FY19 PY8 Cameroon Work Plan

FY19 Activities
Meetings of the NCEOLF
NTD Secretariat
Special PC NTDs coordination meeting
Mapping
Trachoma mapping in the East Region
MDA Coverage
Training
Trachoma mapping Training
Drug Supply Management and Procurement
Supervision for MDA
Supervision of data collection (After IVM MDA, North West and South West regions only)
M&Es
TSS in 7 districts
Workshop to update the database and prepare the JAP
Supervision for M&E
Supervision of the trachoma mapping in East Region
Dossier Development
Meeting to review the trachoma elimination dossier
Meeting to develop and review the LF/OV elimination dossier
Short-term TA
LF elimination dossier

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

Region	Health Districts	Baseline sentinel sites (list disease(s))	MDA					DSA (list type: TAS 2, TSS, etc.)				
			LF	OV	SCH	STH	TRA	TAS2	TAS1	SCH-STH	TRA mapping/ re-mapping	TSS
Ada-mawa	Bankim											
	Banyo											
	Djohong											
	Meiganga											
	Ngaoundere Urbain											
	Ngaoundere Rural											
	Ngaoundal											
	Tibati											
	Tignere											
Centre	Akonolinga											
	Awae											
	Ayos											
	Bafia											
	Biyemassi											
	Cite-Verte											
	Djoungolo											
	Ebebda											
	Efoulan											
	Elig-Nfomo											
	Eseka											
	Esse											
	Evodoula											
	Mbalmayo											
	Mbandjock											
	Mbankomo											
	Mfou											
	Monatele											
	Nanga-Eboko											
	Ndiki											
	Ngog-Mapoubi											
	Ngoumou											
	Nkolbisson											
	Nkolndongo											
Ntui												
Obala												
Okola												
Sa'A												
Soa												
Yoko												
Est	Abongmbang											
	Batouri										X	
	Bertoua											

Region	Health Districts	Baseline sentinel sites (list disease(s))	MDA					DSA (list type: TAS 2, TSS, etc.)				
			LF	OV	SCH	STH	TRA	TAS2	TAS1	SCH-STH	TRA mapping/ re-mapping	TSS
	Betare-Oya											
	Doume											
	Garoua Boulaye											
	Kete										X	
	Lomie											
	Mbang											
	Messamena											
	Mouloundou											X
	Ndelele											X
	Nguelemendouka											
	Yokadouma											X
Extreme Nord	Bogo											
	Bourha											X
	Goulfey											
	Guere											
	Guidiguis											X
	Hina											X
	Kaele											
	Kar Hay											
	Kolofata											
	Kousseri											
	Koza											X
	Mada											
	Maga											
	Makari											
	Gazawa											
	Maroua 3											
	Maroua 2											
	Maroua 1											
	Meri											
Mindif												
Mogode											X	
Mokolo											X	

Region	Health Districts	Baseline sentinel sites (list disease(s))	MDA					DSA (list type: TAS 2, TSS, etc.)				
			LF	OV	SCH	STH	TRA	TAS2	TAS1	SCH-STH	TRA mapping/ re-mapping	TSS
	Mora											
	Moulvoudaye											
	Moutourwa											
	Pete											
	Roua											x
	Tokombere											
	Vele											
	Yagoua											
Littoral	Bonassama											
	Mbangue											
	Cite Des Palmiers											
	Deido											
	Abo											
	Dibombari											
	Edea											
	Japoma											
	Log Baba											
	Loum											
	Njombe Penja											
	Manjo											
	Mbanga											
	Melong											
	Manoka											
	Ndom											
	New-Bell											
	Ngambe											
	Nkondjock											
	Nkongsamba											
Boko												
Nylon												
Pouma												
Yabassi												
Nord	Bibemi											
	Figuil											

Region	Health Districts	Baseline sentinel sites (list disease(s))	MDA					DSA (list type: TAS 2, TSS, etc.)				
			LF	OV	SCH	STH	TRA	TAS2	TAS1	SCH-STH	TRA mapping/ re-mapping	TSS
	Garoua I											
	Garoua li											
	Gaschiga											
	Golombe											
	Guider											
	Lagdo											
	Mayo Oulo											
	Ngong											
	Pitoa											
	Poli											
	Rey-Bouba											
	Tchollire											
	Touboro											
North West	Ako											
	Bafut											
	Bali											
	Bamenda											
	Batibo											
	Benakuma											
	Fundong											
	Kumbo East											
	Kumbo West											
	Mbengwi											
	Ndop											
	Ndu											
	Njikwa											
	Nkambe											
	Nwa											
	Oku											
	Santa											
Tubah												
Wum												
South	Ambam											

Region	Health Districts	Baseline sentinel sites (list disease(s))	MDA					DSA (list type: TAS 2, TSS, etc.)				
			LF	OV	SCH	STH	TRA	TAS2	TAS1	SCH-STH	TRA mapping/ re-mapping	TSS
	Djoum											
	Ebolowa											
	Kribi											
	Lolodorlf											
	Meyomessala											
	Mvangan											
	Olamze											
	Sangmelima											
	Zoetele											
South West	Akwaya											
	Bakassi											
	Bangem											
	Buea											
	Ekondo Titi											
	Eyumojock											
	Fontem											
	Konye											
	Kumba											
	Limbe											
	Mamfe											
	Mbongue											
	Mundemba											
	Muyuka											
	Nguti											
	Tiko											
Tombel												
Wabane												
West	Bafang											
	Baham											
	Bamendjou											
	Bandja											
	Bandjoun											
	Bangangte											

Region	Health Districts	Baseline sentinel sites (list disease(s))	MDA					DSA (list type: TAS 2, TSS, etc.)				
			LF	OV	SCH	STH	TRA	TAS2	TAS1	SCH-STH	TRA mapping/ re-mapping	TSS
	Bangourain											
	Batcham											
	Dschang											
	Foumban											
	Foumbot											
	Galim											
	Kekem											
	Kouoptamo											
	Malentouen											
	Massangam											
	Mbouda											
	Mifi											
	Penka Michel											
	Santchou											
TOTAL	189	0	0	0	0	0	0	0	0	0	05	0