USAID's Act to End Neglected Tropical Diseases | West Program

BENIN

FY2020 Annual Work Plan

Annual Work Plan
October 1, 2019 to September 30, 2020

Contents

ACRONYM LIST

AcceleraTE	Accelerate Trachoma Elimination
AE	Adverse Event
AFRO	Regional Office for Africa (WHO)
ALB	Albendazole
APOC	African Program for Onchocerciasis Control
ATP	Annual Transmission Potential
AZT	Azithromycin
BMGF	Bill & Melinda Gates Foundation
CAME	Centrale d'Achat des Médicaments Essentiels (Center for Procurement of Essential Medicines)
CDD	Community Drug Distributor
CDTI	Community-Directed Treatment with Ivermectin
CES	Coverage Evaluation Survey
Co-RUP	Co-Responsable d'Unité Pédagogique (Pedagogical Unit Deputy Chief)
CP	Conseiller Pédagogique (Pedagogical Advisor)
C/SPIRS	Chief of Planning Information and Health Research Service (Chef Service de Planification Information et Recherche en Santé)
C/RAMS	Chargé de Recherche et d'Appui à la Mobilisation Sociale
CRP	Chef de Région Pédagogique (Head of School District)
DDEMP	Direction Départemental de l'Enseignement Maternelle et Primaire (Departmental Directorate of Pre-school and Primary Education)
DDS	Direction Départementale de la Santé (Departmental Health Directorate)
D-FEAT	District Filariases Elimination Action Tool
DFID	UK Department for International Development
DNSP	Direction Nationale de la Santé Publique (National Public Health Directorate) (MOH)
DOT	Directly-Observed Treatment
DPMED	Direction de la Pharmacie du Médicament et des Explorations Diagnostiques – DPMED
DPP	Direction de la Programmation et de la Prospective (Directorate of Programming and Foresight)
DPS	Direction de la Promotion de la Scolarisation (Schooling Promotion Directorate)
DQA	Data Quality Assessment
DSA	Disease-Specific Assessment
EDC	Electronic Data Capture
EPIRF	Epidemiological Reporting Form (WHO)
ESPEN	Expanded Special Project for Elimination of Neglected Tropical Diseases (WHO AFRO)
EU	Evaluation Unit
FTS	Filariasis Test Strip
FY	Fiscal Year

GOB	Government of Benin
GTMP	Global Trachoma Mapping Project
HAT	Human African Trypanosomiasis
HdZ	Hôpital de Zone (Health Zone Referral Hospital)
ICT	Immunochromatographic Test
IDM	Intensified Disease Management
IEC	Information, Education, and Communication
IITA	International Institute for Tropical Agriculture
INSAE	Institut National de la statistique et de l'analyse économique (National Institute of Statistics and Economic Analysis)
ITI	International Trachoma Initiative
IVM	Ivermectin
JAP	Joint Application Package (WHO)
JRF	Joint Reporting Form (WHO)
JRSM	Joint Request for Selected PC Medicines (WHO)
KCCO	Kilimanjaro Center for Community Ophthalmology
LF	Lymphatic Filariasis
M&E	Monitoring and Evaluation
MCZS	Médecin Coordonnateur de Zone Sanitaire (Health Zone Head Doctor)
MDA	Mass Drug Administration
MDP	Mectizan Donation Program
MDSC	Multi-Disease Surveillance Center (Burkina Faso)
MEMP	Ministère de l'Enseignement Maternelle et Primaire (Ministry of Pre-school and Primary Education)
Mf	Microfilaraemia
MMDP	Morbidity Management and Disability Prevention
MOH	Ministry of Health
NGO	Nongovernmental Organization
NTD	Neglected Tropical Disease
OCP	Onchocerciasis Control Program
OV	Onchocerciasis
PC	Preventive Chemotherapy
PCR	Polymerase Chain Reaction
PNLLUB	Programme National de Lutte contre la Lèpre et l'Ulcère de Buruli (National Leprosy and Buruli Ulcer Control Program)
PNLMT	Programme National de Lutte contre les Maladies Transmissibles (National Program for Control of Communicable Diseases)
PNLP	Programme National de Lutte contre le Paludisme (National Malaria Control Program)
POS	Powder for Oral Suspension
PZQ	Praziquantel

RDT	Rapid Diagnostic Test
RPRG	Regional Programme Review Group
RUP	Responsable d'Unité Pédagogique (Pedagogical Unit Chief)
SAC	School-Age Children
SAE	Serious Adverse Event
SAFE	Surgery–Antibiotics–Facial Cleanliness–Environmental Improvement
SCH	Schistosomiasis
SCT	Supervisor's Coverage Tool
SMM	Sustainability Maturity Model
SNIGS	Système National d'Information et de Gestion Sanitaire (National Health Information and Management System)
SOP	Standard Operating Procedure
STH	Soil-Transmitted Helminths
STTA	Short-Term Technical Assistance
TAP	Trachoma Action Plan
TAS	Transmission Assessment Survey
TEO	Tetracycline Eye Ointment
TI	Trachomatous Inflammation - Intense
TF	Trachomatous Inflammation–Follicular
TFGH	Task Force for Global Health
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma Impact Survey
TS	Trachomatous Scarring
TSO	Technicien supérieur en ophtalmologie (Senior Ophthalmological Officer)
TT	Trachomatous Trichiasis
TV	Television
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization
XOF	West African Franc
ZS	Zone Sanitaire (Health Zone)
ZTH	Zithromax®

NARRATIVE

1. National NTD Program Overview

Benin's administrative and financial capital is Cotonou. In 1999, the country's six political and administrative departments were reorganized into a total of 12 departments (Alibori, Atacora, Atlantique, Borgou, Collines, Couffo, Donga, Littoral, Mono, Ouémé, Plateau, and Zou). These departments (hereafter referred to as regions) are further subdivided into a total of 77 communes (hereafter referred to as districts), which are composed of a total of 546 arrondissements (boroughs, hereafter referred to as sub-districts) and 5,295 villages (population size can vary from 500 to 2,000).

The Ministry of Health (MOH) is responsible for the initiation, planning, implementation, coordination, and monitoring and evaluation (M&E) of the country's health programs, with plans laid out in its National Health Development Plan, the current version of which covers the period 2017–2021.

Facilities at the central (first) level of the health pyramid includes the Hubert Koutoukou Maga National University Hospital, the National Hospital of Respiratory Medicine, the National Psychiatric Center, the Gerontology Center, the Lagune Mother and Children's Hospital, the Entomological Research Center, and the National Medical Laboratory, all located in Cotonou.

At the intermediate level of the health pyramid, the country's reorganization into 12 regions became effective in February 2017 with the nomination of a Departmental Director of Health for each region.

Each region is subdivided into zones sanitaires (ZS - health zones). Each region is comprised of between two and four ZS for a total of 34 ZS across Benin. Each ZS is made up of one or more districts. Each health zone is supervised by a health zone head doctor (Médecin Coordonnateur de zone sanitaire [MCZS]) and is intended to consist of a network of first-line health facilities (village health units, stand-alone maternity wards, clinics, sub-district health centers), and private health facilities, all of which are supported by a health zone referral hospital (Hôpital de Zone [HdZ]). As of mid-July 2018, each of the 34 health zones has a focal point for neglected tropical diseases (NTD), based in one of the districts that make up their health zone. At the ZS level, the MOH has designated nurses to serve as NTD focal points; additionally, "Chargés de la Recherche et d'Appui à la Mobilisation Sociale" (C/RAMS) are in charge of social mobilization activities. The districts are the implementation units for public health activities. District Medical Officers are in charge of leading the activities implemented at this level and they also supervise nurses who are in charge of the sub-districts affiliated to that district.

The health care sector also includes humanitarian organizations and associations, including non-governmental organizations (NGOs) and religious institutions, and the pharmaceutical and medical products industry. Laboratory technicians working in the private sector and involved in health-related activities are being trained and supervised with the financial support of the World Health Organization (WHO) and the Government of Benin (GOB); this training includes diagnosis and care of epidemic-prone diseases (e.g. meningitis, measles, yellow fever) and case management of the intensified disease management (IDM) NTDs such as Human African Trypanosomiasis (HAT). The frequency of these trainings depends on need, and the timing of the trainings is seasonal for certain diseases (e.g., lab technicians are trained on meningitis before the start of the dry season).

The MOH has set up a National Health Information and Management System (Système National d'Information et de Gestion Sanitaire [SNIGS]), fed by data from all public as well as many private health facilities.

In Benin, NTD activities are implemented by the National Communicable Disease Control Program (Programme National de Lutte contre les Maladies Transmissibles [PNLMT]) and the National Leprosy and Buruli Ulcer Control Program (Programme National de Lutte contre la Lèpre et l'Ulcère de Buruli [PNLLUB]). The MOH's National Public Health Directorate (Direction Nationale de la Santé Publique [DNSP]) oversees those two programs. The PNLMT is responsible for lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), soil-transmitted helminths (STH), and trachoma, as well as HAT, Guinea worm disease (dracunculiasis), and loiasis. The PNLLUB is responsible for Buruli ulcer, leprosy, and yaws.

The MOH strategy for NTD control and elimination is laid out in its National Master Plan for NTD Control 2016–2020, which was approved by MOH leadership in February 2017 and launched in September 2017. This document succeeds the prior Master Plan, which covered the period 2012–2016. The current document addresses LF, OV, SCH, STH, and trachoma, along with Buruli ulcer, Guinea worm, HAT, leprosy, and loiasis. It also mentions yaws, while specifying that loiasis and yaws have not yet shown to be endemic and that both are simply under passive surveillance through the health system. The plan proposes intensified scaling up of interventions and consideration of cross-cutting determinants of health (health education, access to potable water, hygiene, and sanitation). Disease-specific updates to the National Master Plan (2016-2020) include the findings of SCH, STH, and trachoma baseline mapping completed since the previous plan; a more defined strategy for trachoma elimination, based on the trachoma action plan (TAP) developed in 2015; and an updated strategy for OV, reflecting WHO's 2016 OV elimination guidelines. The plan aims for the elimination of LF, OV, and trachoma, as well as HAT and leprosy, by 2020; control of SCH, STH (both by 2020), and Buruli ulcer; and maintenance of the certification of eradication of Guinea worm (certified since 2010). However, the elimination timeline for LF, OV and trachoma has now been pushed to 2025 based on the actual status of activities.

Control and elimination of PC NTDs is the responsibility of the PNLMT, as noted above. Baseline mapping is complete for all five PC NTDs; however, to ensure Benin has fully addressed any areas that need intervention and to allow time for intervention if any other districts require it, the PNLMT intends to conduct a desk review in districts initially not suspected of trachoma but share a border with a northern district classified as endemic.

The PNLMT uses two strategies to reach targeted populations with PC: 1) mass drug administration (MDA) or community-directed treatment, involving community drug distributors (CDDs); and 2) school-based MDA for school-aged children (SAC, 5–14 years of age), involving teachers as drug distributors assisted by CDDs. Typically, the first approach is used for OV and LF (which includes STH, as appropriate), as well as for trachoma; and the second approach is used for SCH and STH. In 2017, the PNLMT piloted use of community-based MDA for SCH and/or STH in selected districts; beginning in 2018, the PNLMT is using this approach in all districts with recurrent low coverage and/or where the Ministry of Pre-school and Primary Education (MEMP)'s peripheral-level personnel (teachers and headteachers) has been reported for school-based MDA. In general, districts where two or more NTDs are co-endemic and based on disease prevalence and the treatment cycle, the PNLMT conducts integrated MDA in the following combinations: OV+LF, OV+LF+STH, LF+STH, and STH+SCH. In line with the standard practice in most countries, trachoma MDA has been conducted separately.

The PNLMT has 13 staff. It is led by one medical doctor - specialized in project management and NTDs—with additional staff including a biologist-entomologist, a data manager, a nurse-epidemiologist, a financial controller, a senior social work specialist (community action technician), a social work specialist, a senior public health specialist, a secretary, two lab-technicians, a storekeeper, and a logistician. The PNLMT includes six units: 1) M&E, managed by the data manager; 2) MDA, led by the nurse-epidemiologist; 3) Biological and Entomological Activities, managed by the biologist-entomologist; 4)

Prevention and Social Mobilization, managed by the senior social work specialist; 5) Financial Management, under the responsibility of the financial controller; and (6) Equipment and Logistics, under the responsibility of the logistician.

The PNLMT Coordinator serves as national OV-LF Focal Point, and another PNLMT staff person (a medical doctor) serves as Venom-related issues' focal point. For trachoma, the PNLMT has designated a specialist who is responsible for TT surgeries at the Departmental Hospital Center as Focal Point. These national-level focal points are involved in PNLMT disease-related meetings, as well as in programmatic decisions and in training whenever their expertise is needed.

In addition to technical support from partners (see below), the PNLMT has drawn on the expertise of institutions such as the National Institute of Statistics and Economic Analysis (Institut National de la Statistique et de l'Analyse Économique, INSAE), the International Institute for Tropical Agriculture (IITA), and the University of Abomey-Calavi to conduct its PC NTD-related activities.

In the context of school-based MDA for PC NTDs, the PNLMT collaborates closely with the Ministry of Pre-school and Primary Education (Ministère de l'Enseignement Maternelle et Primaire [MEMP]), under the Ministry of Education (MOE). The structure of the MEMP is similar to that of the MOH, including a technical department called the Schooling Promotion Directorate (Direction de Promotion de la Scolarisation - DPS). A Departmental Directorate of Pre-school and Primary Education (Direction Départementale de l'Enseignement Maternelle et Primaire [DDEMP]) has been in place in each of the country's 12 regions since 2017. The DDEMPs oversee a total of 85 school districts, which are further subdivided into teaching units, jointly managed by the Pedagogical Unit Chiefs (Responsable d'Unité Pédagogique [RUP]) and Pedagogical Unit Deputy Chiefs (Co-Responsable d'Unité Pédagogique [Co-RUP]). Between FY18 and FY19, each DDEMP has nominated one NTD focal point who will assist the PNLMT in the implementation of all school-based activities (e.g. MDA, transmission assessment surveys [TAS]) in their respective departments. The MEMP is responsible for all 10,015 private and public schools in the country.

Act to End NTDs | West partners will support a wide range of activities in Benin. The coming sections specify Act | West partner responsibilities for program activities in FY2020.

2. IR1 PLANNED ACTIVITIES: LF, TRA, OV

i. Lymphatic Filariasis

The PNLMT's goal, as stated in its Master Plan for 2016–2020, is to eliminate LF in the country by 2020. Specific objectives are to reduce LF prevalence to 2% in endemic districts, to identify cases of LF-related morbidity in endemic districts, and to provide case management of LF-related morbidity. Strategies are MDA, vector control (through the MOH's National Malaria Control Program [PNLP]), hydrocele surgery,

personal hygiene and home self-care for lymphedema patients, social mobilization, behavior change communication and epidemiological surveillance. Channels for service delivery include the community-based drug distribution, long-lasting insecticide-treated nets distribution, care in health facilities, home care, sensitization/communication for behavior change through local radio stations, etc.

There are a total of 48 48 districts endemic for LF in Benin. The ENVISION Project's support for LF started in FY13, assisting the PNLMT in expanding MDA from 13 to 25 districts.

A total of 36 districts progressively initiated LF MDA (IVM+ALB) over the period 2002 - 2011. Twelve other districts launched MDA in 2013.

In cases of DSA failure, the PNLMT is conducting a TAS failure investigation using WHO's Improving TAS Outcomes Checklists for Programme Managers. Findings included a lack of supervision of MDA by nurses and doctors; slight differences (around 5 to 10%) between reported and observed data in certain villages; and prolonged absences of residents in certain sub-districts. Recommendations for strengthening LF MDA in the 4 districts, starting in FY19, include: 1) ensure Health Zone, District, and Sub-district personnel all perform supportive supervision, 2) train and supervise CDDs to ensure directly-observed treatment (DOT), 3) ensure that nurses double-check the data reported by CDDs, 4) ensure that people who are away during MDA are treated upon their return, and 5) Conduct independent monitoring survey along with a coverage evaluation survey. All the activities to be implemented for LF MDA improvements (enhanced MDA) in the 4 districts are included in Table A of Appendix 1. The three districts that registered positives conducted OV MDA in May 2018, as planned; the PNLMT chose also to distribute at the same time ALB[1] (therefore constituting LF MDA), using PNLMT and district funds to separately cover the cost of additional days of MDA. No MDA was conducted in Cove as a result of inability to find required funds, as this district was not planned for any other MDA the program could take advantage of during that year. This FY18 round of LF MDA has not been counted toward the required two rounds of enhanced LF MDA.

In FY19, ENVISION has also supported TAS1 using FTS in 12 districts grouped into 6 EUs. None of the 6 EUs recorded positive cases (out of 9665 children tested). Therefore, as of mid-June 2019, factoring in the findings of the TAS1 survey conducted in FY19, 44 districts have passed a TAS1 and have met the criteria to stop MDA. A total of 4 districts still require MDA for LF, the four districts that conducted (and failed) TAS1 in FY18 and they have been treated in February 2019 (MDA coverage rate between 82% and 86%). A coverage survey was also conducted after that MDA and they indicated that the measured coverage rates from the survey (74.2% for Covè and 76.7% for Zagnanado) are similar to the reported ones (respectively 83.5% and 85%). Of the 4 districts currently on a treatment cycle for LF, 3[2] are co-endemic for STH (baseline STH prevalence rates of ≥20%, the WHO-indicated threshold for MDA). Three of these districts (Ouinhi, Zagnanado, and Za-Kpota) also require MDA for OV.

The PNLMT lacks an estimate of the LF morbidity burden, but LF MDA treatment registers designed in FY16 are helping to estimate the number of people living with LF-related morbidity. In FY18, the number of hydrocele cases reported by CDDs in the registers ranged from 0 cases (Pobè and Abomey) to 45 per district (Za-Kpota and Zogbodomey), while the number of lymphedema cases ranged from 0 cases (Aguégués, Pobè) to 17 per district (Zogbodomey). The financial and technical support of Anesvad for LF morbidity and case management enabled the MOH to start offering services in FY19 in 3 departments. However, the ASCEND project is proposing to assist the PNLMT to conduct burden assessments,

[2] Ouinhi, Covè, and Za-Kpota

healthcare worker training, hydrocelectomy and care for lymphedema patients in this area starting FY20, and this assistance will concern the entire country. This will enable the country to meet its morbidity-related elimination goals in the coming years.

FY20 Planned Activities

During FY20, Act | West will support several training and social mobilization activities in advance of or in support of LF MDA including:

MDA training of departmental trainers (for all NTDs): Act to End NTDs | West will financially and technically support the MOH for pre-MDA training for all diseases and all departmental and health-zone levels staff.

Printing of posters and banners for LF MDA: Act to End NTDs | West will support the printing and distribution of posters and banners as part of social mobilization before the MDA.

Airing of MDA-related TV and radio commercials and announcements for LF MDA: Act to End NTDs | West will procure airtime on radio and TV stations to broadcast commercials and announcements in the 4 districts targeted.

Sensitization meeting to raise awareness among village chiefs for LF MDA: During this one-day meeting, town criers will be briefed on the correct messages to deliver to the population, one of the aspects required to enhance MDA participation.

Community awareness-raising by town criers and Red Cross volunteers for LF MDA: Act to End NTDs | West will support the PNLMT in using 192 town criers to inform remote villages about the MDA campaigns because radio and TV cannot reach those areas.

MDA improvement activities in four LF districts (three of the districts are co-endemic for OV): Act to End NTDs | West will support the PNLMT's enhanced LF MDA in the four districts. Covè district will be implementing its 2nd round of enhanced MDA following TAS1 failure, and the other three their 3rd round (2nd round of MDA considered enhanced). In addition to the measures for TAS failures, the PNLMT is increasing and boosting pre-MDA activities with special emphasis on social mobilization. MDA processes are strengthened (enhanced) with more close supervision, and scrutiny of CDDs performance to ensure high level quality and increase coverage. Recommended activities to ensure the effectiveness of the MDA, based on the TAS failure investigation conducted in FY18 and the first round of enhanced MDA in FY19, are presented in Table A, Appendix 1. In three of these districts, OV MDA is also needed. Similar to FY19, the campaign will last around 12 days, two days longer than the usual (FY13 to FY18).

Act | West will also support training of nurses, C/RAMS, and CDDs as well as trainings/briefings for village chiefs and other key stakeholders. B (see Table A, Appendix 1 for details).

CDDs will distribute the drugs under the supervision of supervisors from different levels of the health pyramid. All supervisors will be trained to use the WHO SCT during monitoring and provide feedback to CDDs and health staff for corrective action such as revisits to households, sections of communities, and communities.

LF MDA SCT: Act to End NTDs | West will technically and financially support an independent monitoring survey of the planned enhanced LF MDA in four districts using the WHO Supervisor's Coverage Tool (SCT). FHI 360 will provide technical assistance as required to ensure robust coverage.

The project will also financially support 6 days of supervision by two supervisors. These supervisors will oversee the implementation of the survey, and ensure the independent monitors are adhering to the protocol. Before the beginning of the survey, the project will technically and financially support a two-day training, in Bohicon. Finally, Act| West will financially support four days of supervision at the beginning of the activity.

LF Pre-re-TAS in 4 districts: The PNLMT will conduct a Pre-re-TAS in the 4 districts that failed TAS1 in FY18 after the two rounds of enhanced MDA with a minimum coverage rate of 65% in each of the MDA.

Act to End NTDs | West will provide financial support for a two-days training in Bohicon (Zou Department), the day before the beginning of the activity, and for three days of fieldwork. All positive cases found during this survey will be treated along with their families and immediate neighbors. Two supervisors will closely supervise the activity during the three days. An additional two central-level teams of two persons composed of both PNLMT and FHI 360 will supervise the activity for two days.

Develop a complete preliminary version of LF elimination dossier: In FY20, the PNLMT with the financial and technical support of Act to End NTDs | West will organize a meeting in order to list the steps for LF dossier development and submission as well as a timetable to achieve this goal. During this workshop, the templates to be completed and submitted in the dossier will be reviewed, and the terms of reference of the consultant who will assist the country in this process (at a specific point) will be developed. Act | West will provide the training on the LF Dossier requirement and support the country to upload existing data into the dossier data template. The country will update the data template as additional data comes with the assistance of FHI 360 staff. Act to End NTDs | West will hire a local consultant who will support the PNLMT in finalizing the LF elimination dossier (draft dossier narrative, finalize Excel file, etc.), on behalf of the PNLMT, which lacks the time, experience, and expertise to complete this task. The Integrated NTD Database will be used to generate data. A small committee composed of PNLMT staff will be in charge of finalizing this dossier (once the consultant's work is done) with the assistance of FHI 360 staff.

Act to End NTDs | West Meeting with all partners offering support for all NTD activities: In order to have a clear idea of the short and long-term support that is or will be provided to the country in terms of NTD, particularly impact assessments, LF and trachoma morbidity cases management, the PNLMT will organize a one-day meeting in Cotonou.

LF TAS2 in 9 districts: Following the WHO protocol for LF elimination, the 9[3] districts that passed TAS1 in FY18 will undergo TAS2 in FY20. The activity protocol will be developed and finalized with support of FHI 360 and submitted to the MOH's Ethical Committee of Research in Health early FY20. RPRG approval will

[3] Agbangnizoun, Zogbodomey, Allada, Ouidah, Kpomassè, Torri-Bossito, Bonou, Adja-Ouèrè, Parakou.

also be requested early FY20. As in previous years, WHO TAS checklists for planning, supervising, and responding in case of failed TAS will be used and the next steps followed.

The 9 districts will be grouped into 5 EUs, according to the criteria[4] suggested by the WHO guidelines. Act to End NTDs | West will financially support a three-day training for 25 people in Bohicon (Zou Department) just before the start of the survey, and per diem for 10 days of fieldwork.

Three teams of 3 persons (PNLMT and FHI 360) will supervise the activity during the first 5 days

ii. Trachoma

The PNLMT's goal is to eliminate trachoma as a public health problem by 2020. Following WHO guidelines, specific objectives are to reduce the prevalence of trachomatous inflammation-follicular (TF) to <5% among children ages one to nine years of age, to reduce trachomatous trichiasis (TT) to <0.2% in adults ages 15 and above, and to provide case management for trachoma-related complications post-validation. The PNLMT aims to implement the WHO-endorsed SAFE (Surgery, Antibiotics, Facial cleanliness, Environmental improvements) strategy. MDA is led by the PNLMT; but until 2019, water, sanitation, and hygiene (WASH) services were mostly provided by city halls and other NGOs; and surgical services have not yet been launched formally as a program.

The PNLMT conducted baseline mapping in 2014–2015 in those 26 districts, following GTMP protocol and with support from ENVISION and Sightsavers. Results across the 11 EUs showed TF prevalence among children aged 1–9 years ranged from 2% to 24%, and TT prevalence among adults aged ≥15 years ranged from 0.1% to 1.9%. A total of four EUs, comprising eight districts, were found to have TF ≥5%. Among these, 4 had TF prevalence of 10-29.9%, requiring three rounds of MDA.

The PNLMT initiated MDA for trachoma in 2016 and stopped MDA in all endemic districts in FY19 based on results of the two Trachoma impact surveys implemented respectively in FY18 and FY19.

The PNLMT's Trachoma Focal Point and another ophthalmologist specialized in eye surgery participated in a multi-country, USAID (via the MMDP Project)-supported TT surgery training-of-trainers in September 2017 and other trainings later on. These national trainers will train the "techniciens superieur en ophthalmologie" (TSOs) for the implementation of the TT surgery program through AcceleraTE.

Presently, the "F" and "E" elements of the SAFE strategy were being addressed on a small scale by NGOs (e.g. Helvetas), the MEMP, and one division of the MOH (under the DNSP) in selected areas.

[4] EU: maximum population of 2 million people, shared epidemiological features, and typically (but not always) geographic contiguity of districts.

FY20 Planned Activities

Trachoma surveillance surveys (TSS) in four districts: Four out of the 8 endemic districts (Nikki, Kalalé, Pèrèrè, Tchaourou) received one round of MDA in FY17 and demonstrated TF <5% among children ages one to nine years in FY18. The WHO protocol recommends a second evaluation two years after this TIS to determine if TF prevalence is still below 5% and re-evaluate TT. With the financial and technical support of Act to End NTDs | West, the PNLMT will implement the survey in those four districts.

Each district will be considered as an EU (as during the TIS) and the PNLMT plans to utilize Tropical Data. A total of 18 surveyors will be trained (it is assumed that 16 will pass the inter grader agreement tests).

The project will also provide financial support for supportive supervision during the activity.

Develop a complete preliminary version of trachoma elimination dossier: In FY20, the PNLMT with the financial support of Act | West will organize a meeting with its partners (including FHI 360 and Sightsavers) to review the steps for trachoma dossier development and submission as well as a timetable to achieve this goal. During this workshop, the templates to be completed and submitted in the dossier will be reviewed, and the terms of reference of the consultant who will assist the country in this process will be developed. The first objective will be reached with the assistance of a qualified individual, for example, an FHI 360 HQ-level staff, in trachoma dossier development and submission, while PNLMT staff assisted by FHI 360 local staff will complete the second. A small committee composed of PNLMT staff will be in charge of finalizing this dossier (once the consultant's work is done) with the assistance of FHI 360 staff. Act | West will support costs for a local consultant to fill out the trachoma elimination dossier (Word template and Excel file). The PNLMT will be heavily involved to ensure the information is correct. The Integrated NTD Database will be used to generate data.

Hospital files review (desk review) in Bantè, Savalou, Dassa-Zoumè, Glazoué, Savè, and Ouèssè districts: To ensure the country has reviewed the epidemiological situation of any potential areas requiring intervention, and avoid any last-minute issues when the country is ready to submit its trachoma elimination dossier, in FY20, the PNLMT intends to conduct a desk review of clinical cases who underwent TT surgery in six district's health zone hospitals (HZ) (district names listed above). Reviewing data from those districts will help in determining if those districts should be considered for baseline mapping or confirmatory mapping. The reason for targeting those districts is the following: they are located in a department that shares a border with one known endemic district (Tchaourou), and because populations leaving in this area are very mobile (with frequent movements in the four northern departments where the disease is endemic), which increases the possibility of disease transmission. Results of the desk review will be discussed with FHI 360 Benin and HQ staff during the decision-making process regarding any further steps.

Mapping of trachoma in Bantè, Savalou, Dassa-Zoumè, Glazoué, Savè, and Ouèssè districts (if indicated by desk review): When conducting the desk review in FY13, the 6 districts were not included in the ones to be assessed for the presence of trachoma. However, Tchaourou (TF between 5-9.9% during baseline mapping) shares a border with Ouèssè, which is in the same department as the other five districts. In case the desk review reveals the necessity to map any of those districts, with the technical and financial support of Act | West, the PNLMT will use the Tropical Data approved protocol, previously used in 2014 and 2015. The updated version will be shared with FHI 360

HQ and Tropical Data staff before implementation. Three supervisors will be following closely their work during the 10 days.

iii. Onchocerciasis

The PNLMT's goal is to eliminate OV in the country by 2025. Presently, the strategy to reach this goal is MDA for people aged ≥5 years (until 2002, under the Onchocerciasis Control Program in West Africa [OCP], larviciding of black fly breeding sites was also part of the country's strategy), with monitoring via entomological and epidemiological assessments (with skin snip microscopy replaced by Ov16 rapid diagnostic tests starting in FY17). Baseline assessments conducted in the 1970s showed 51 districts to be hyper- or meso-endemic for OV (Mf prevalence of ≥60% and 40% - <60%, respectively). Treatment with IVM started in 1988, distributed by mobile teams from OCP headquarters (HQ) in Burkina Faso. In 1997, this was replaced by community-directed treatment with IVM (CDTI), and then annual community-based MDA, integrated with LF and/or STH as appropriate since 2013, both led by the MOH.

The PNLMT has periodically conducted epidemiological and entomological surveys across the 51 districts with support from Sightsavers. In June-July 2017, the PNLMT conducted epidemiological and entomological assessments (impact surveys) in 60 villages of 6 endemic districts (Dassa-Zoumè with 1 village, Savè with 1 village, Kalalé with 7 villages, Pèrèrè with 11 villages, Kandi with 32 villages, and Ségbana with 8 villages), with support from Sightsavers, to help identify districts where transmission is still occurring. Villages were chosen from among those that are located along the river basin.

Samples of adult vector flies were collected from 4 sites in 2017. Two of the sites Alibori Kandi Bensekou and Sota Banite Kandi had positive pools. At both sites, the upper bound of the 95% CI was above the WHO threshold of 0.05% and so both sites fail to meet the WHO entomological criterion for interruption of transmission. Flies from Okpa Save and Agbogbome Dassa Zoume indicate that transmission has been interrupted.

In FY18, no epidemiological or entomological assessment has been conducted as the country wants to comply with the OV expert meeting recommendations. According to those recommendations, black fly breeding sites re-mapping must be completed before proceeding to any of those assessments. In 2018 the PNLMT remapped the breeding sites, per the recommendation of the first meeting of the country's Technical Committee of Experts for Elimination of OV and LF (see below), with technical support from WHO AFRO's Expanded Special Project for Elimination of Neglected Tropical Diseases (ESPEN) and financial support from Sightsavers. The results of this survey have been presented at the first FY19 OV/LF expert committee meeting conducted with the financial and technical support of Sightsavers with technical support of ENVISION Benin team. More than 200 breeding sites have been visited, some were classified as confirmed (112 OCP or others), some as potential (64) and some as non-breeding sites (37). The PNLMT was also able to draw a new list of sentinel villages that can be used for upcoming epidemiologic and entomologic assessments.

Benin's Technical Committee of Experts for Elimination of OV and LF, which is tasked with developing a national guide and roadmap for elimination of both diseases, met for the first time in August 2017, with The meeting report included the following recommendations, which can be taken as a roadmap: updating the map of breeding sites, sentinel villages, and transmission zones; conducting nationwide epidemiological and entomological surveys; developing a national OV elimination plan; increasing intra- and inter-sectoral collaboration within the country and with neighboring countries; requesting missing

data from WHO; and developing written operating procedures. In FY17, a meeting of national members recommended, among others, to: strengthen OV cross-border collaboration with Nigeria; collect entomological data generated by OCP, from its original location in Parakou, and ensure that all available data are stored securely; ensure village-disaggregated data are available at district level; and ensure that community leaders are more involved in MDA.

The MOH's annual cross-border OV meeting with Togo was held in Benin in August 2018. The Togo team brought a detailed map, prepared with CDC's assistance, which helped in identifying corresponding border districts and villages. Recommendations were as follows: i) ensure collaboration between neighboring border sub-districts by organizing preparatory meetings between sub-district personnel right before the MDA, ii) fill any gaps in the list of border villages and their neighboring villages across the border, and add village-level MDA treatment coverage to that list, iii) advocate for increased partner funding to be able to conduct a field visit during the annual OV cross-border meeting, and iv) disseminate the two countries' OV-LF MDA supervision guides to the border sub-districts' field-level staff, to ensure they are familiar with the other country's guide.

FY20 Planned Activities

During FY20, Act | West will support several social mobilization activities in advance of both rounds of OV MDA, including printing of banners, broadcast of television and radio commercials, and community awareness-raising events.

Community-based MDA for OV in 48 districts: Act to End NTDs | West will support two rounds of the PNLMT's community-based MDA for OV in 48 districts (targeting 5,148,074 people) that do not require MDA for LF. Three additional OV districts are co-endemic for LF and receive IVM treatment as part of the enhanced LF MDA activities. CDDs will simultaneously register the population and distribute the drugs, both under the supervision of sub-district nurses, District Medical Officers, and staff from other levels of the health pyramid.

Before each of the MDA campaign implementation, 544 nurses, 28 C/RAMS, and 8,100 CDDs will receive training or refresher training.

OV cross-border meeting with Togo: With Act to End NTDs | West support, the PNLMT will continue its collaboration with Togo to develop and strengthen common strategies for OV control along their shared border areas (which includes 13 OV-endemic districts on Benin's side, and 14 OV-endemic districts on Togo's side). Since 2013, these meetings have fostered successful joint supervision and planning for synchronization of OV MDA in districts on opposite sides of the border, as well as a system to identify mobile persons and to track migrants and other people moving across the border to ensure they take part in MDA organized by either country.

In FY20, the project will support a two-day meeting in Grand-Popo (Mono Department). From Togo's side, it is expected that the NTD program coordination staff and collaborators will attend the meeting, with their own funding. FHI 360 personnel will contribute to the technical conversations during the meeting and work with the PNLMT after the meeting to ensure that the recommendations are followed up, to the greatest extent possible based on funding available. This will include at least one telephone check-in per quarter between the two countries to check in on progress to achieve the proposed actions.

OV/LF expert committee meetings: Act to End NTDs | West will technically and financially support the PNLMT in organizing two meetings of the committee in FY20, the first with domestic participants only and the second adding international participants (apart from the FHI 360 personnel, the 10 personnel from international partners would cover their own travel to attend the meeting). The meetings will assess the progress of the OV elimination strategy and activities (in FY17, FY18, and FY19, the committee focused on OV only). The PNLMT will present a summary of what has been achieved so far (based on recommendations from the previous meeting), and the committee will assist the PNLMT in figuring out the next steps to achieve elimination.

3. SUSTAINABILITY STRATEGY ACTIVITIES (IR2 and IR3)

i. DATA SECURITY AND MANAGEMENT

Data Management System

During the community-based MDA, participants' census and treatment data are collected and transcribed in the CDDs' register made available before the campaign. At the end of the campaign, recorded data are compiled, and total figures of each indicator are recorded in the village report (last page of the CDD's register). This compilation is done by the CDDs under the supervision of sub-district nurses. Once all village reports of one sub-district are final, the nurse compiles them and report the figures in a book (printed by the PNLMT). A copy of this report is sent to the district's senior nurse who, after verification and compilation of all the sub-districts' data, sends a report to the NTD focal point (in service at the health zone). Some of these district staff submit electronic reports to the focal point (Excel file). No matter the mean of submission of their report, they are asked by the PNLMT to keep the paper versions of all received reports as well as the ones they submit to the health zone. In turn, the NTD focal point, after cleaning and verifying MDA data quality, prepares the health zone's report and submits it to the head of Epidemiology and Sanitary Surveillance Division (department level). Finally, the department level staff assesses the completeness and quality of the entire department's data and submits his report to the PNLMT's central level staff, while keeping a paper version of all report received from the lower level of the health pyramid. All the actors of the district, health zone, and department levels control data quality and/or compile it under the supervision of their supervisor (respectively, district head doctor, MCZS, and Head of Departmental Public Health Service).

When it comes to M&E activities, all data collected is directly transmitted by the field teams to the PNLMT coordination and unit's staff. They are then entered into an electronic form at the central level (if the original format was paper) and archived.

The school-based MDA data course is quite similar except that data is collected in schools instead of the community/village. Data is collected by teachers and CDDs using printed forms under the supervision of schools' headteachers and nurses. Once the summary is done at the school level, it is sent to the CRPs (for teachers/headteachers) or nurses (for CDDs) who transmit it after verification and compilation to the health district's senior nurse (district staff). The verification process includes correction of any discrepancies witnessed in either report submitted by CRPs or sub-district nurses depending on the platform. Exactly as for community-based MDA, the district level staff verifies and forwards the data to the NTD focal point who in turn forwards it to the head of Epidemiology and Sanitary Surveillance Division who submits the department's report to the PNLMT central level staff.

Data Security System

Regarding data security, the PNLMT undertook several actions over the last years. Paper-based data collected or transmitted to the PNLMT coordination is securely archived at its premises. Electronic data is archived in one or two passwords- protected computers with an external hard disk backup that is done on a monthly basis and kept in a different place of the computer. Those computers are protected against viruses but not connected to a secured server or an online data system. Finally, since 2016, the PNLMT has been able to set-up its Integrated NTD database containing all historical and current data available at the country level for the 5 USAID-supported NTDs. Also, MDA and survey data from 2004 to date have all been imported into the Integrated NTD database and access to this software has been secured. This database is updated annually based on the results of the MDAs and M&E activities. The updated version is copied to the computers of at least three different PNLMT staff. In 2019, it was agreed with the various sub-district health facilities that a place should be found within their premises to securely store the treatment registers. Those registers could be examined by the commission, which will be mandated by WHO in the verification process for LF/OV elimination across the country. The PNLMT will follow-up on the implementation of this measure during the next annual review of NTD program activities.

At the central level, the PNLMT will approach the Head of the Information and Pre-Archiving Directorate (Direction de l'Information et du Pré-archivage - DIP) to identify the best way to securely archive data that is available as well as those that will be collected in the next years.

Describe any efforts to mainstream NTD data into national HMIS: Over the last two years, the PNLMT has participated in various meetings concerning the management of the country's health information system (DHIS-2). In FY19, the PNLMT was able to advocate for the insertion of some of the NTD program indicators within this platform. This advocacy paid off with a favorable response from the DHIS-2 management team, resulting in a list of 20 indicators which can be inserted in the platform and 10 of them appearing on the dashboard (see table B, appendix 1). However, there is still work to complete in order to start feeding that system with data, which can be consulted by any PNLMT staff in service at any of the health pyramid's level.

Planned activities in FY20

ii. DRUG MANAGEMENT

NTD drug quantification: Each year, the PNLMT produces the list of districts that should be treated based on WHO recommendations and NTD program's decisions. This step is completed with the assistance of FHI 360 staff who provides guidance based on current USAID programmatic decisions. Once this is done, the information is entered into the appropriate tool, allowing estimation of drug needs. CDDs census is used to estimate population size in each of the districts targeted for community-based LF, OV or trachoma MDA. However, demographic projections (2013 DHS figures majored with by population growth rate) are used for districts that conduct only school-based MDA and for which the program has no other possibility to estimate population size.

Preparation of drug donation request forms: Each year, PNLMT staff develops the MOH's JRSM form for submission to WHO for drugs (IVM, PZQ, and ALB) for MDA with the assistance of project staff. Having determined that quantification of needs without the use of the TIPAC resulted in less accurate requests for drugs in CY2018 and CY2019, the PNLMT plans to resume use of the TIPAC for that purpose in preparing the MOH's request for CY2020. For that reason, Act | West will provide support for a TIPAC training/refresher training. Staff from the NTD national program and delegates from MOH has been trained for TIPAC in 2014. However, only a few members of the national staff were present at that training. Refresher training has been requested for the last two years, but it has not been implemented. In 2020, the program aims to extend this training to PNLMT & MOH new staff members (6 persons, including M&E

and MDA officer, Finance officer, Coordination team) and FHI 360 staff (4 persons) by organizing a TIPAC refresher training in Cotonou, with technical assistance from Deloitte, Inc. This is essential as the team was unable to use this tool in FY18 and FY19, therefore the JRSM was filled manually. The PNLMT anticipates using this tool in the upcoming years to plan for PC-NTD activities and drug needs. The tool will also be used to analyze the country's gaps as well as the part of each partner in the fight against PC-NTDs.

As the PNLMT performs its inventory of MDA drugs well after submitting the JRSM each year, the quantity of drugs in stock is given as zero. However, the PNLMT sends stock-remaining updates to WHO as soon as information becomes available, so the order can be adjusted accordingly. In FY20, FHI 360/Act to End NTDs | West will assist the MOH during the preparation of the JAP forms and discuss with the PNLMT any data discrepancies or issues prior to submission to WHO. In FY20, the PNLMT will be able to use the Integrated NTD Database to generate these forms in FY20.

Availability or reliability of storage or transport: Donated and procured drugs, and procured diagnostics, are delivered to WHO Benin, which obtains customs clearance on behalf of the PNLMT. After ALB, PZQ, TEO, and IVM, as well as FTS for LF surveys, clear customs, the drugs are delivered to the central medical store (Centrale d'Achat des Médicaments Essentiels [CAME]). Because the drugs are donated, sent, and/or received through WHO, they do not require further testing.

Act to End NTDs | West will financially support the PNLMT in transporting drugs for supported school-based SCH and/or STH MDA (PZQ, as well as the ALB that is not paired with IVM for LF MDA). This financial support will cover vehicle rental and fuel to transport the drugs from the port to the CAME via two trucks, from Cotonou to the regions, and then to districts targeted for MDA.

Reverse logistics: At the end of all MDA campaigns (SCH/STH, trachoma, and OV/LF), the remaining drugs in each district are counted. A total of six people divided into three teams will carry out the inventory in all targeted districts for each of the MDA campaigns. The inventory for OV/LF and trachoma drugs will be combined. Teams travel and visit all 30 HZ after each MDA. They are in charge of counting the remaining drug supply at the health zone level (number of bottles converted into the number of pills). When needed, districts are also visited to count the remaining supply. This ensures that the remaining drugs are returned to the health zones for proper storage until the next campaign. The information collected during this activity is shared with WHO and the remaining stock at the end of MDA is subtracted from the number of drugs requested through the JRSM for the next year. This adjustment is made by WHO before the drugs are shipped.

The program ensures that all medicines distributed via supported MDA are valid and not expired. The PNLMT's MDA Officer checks drugs before they are shipped from the central level; MOH personnel at health zone, district, and sub-district levels do the same. They are trained on how to avoid wasting drugs by using the remaining, unexpired supplies from previous campaigns before using newer supplies.

None of the drugs/commodities used by the PNLMT require cool storage.

Efforts to mainstream NTDs drugs or diagnostic into national drug quantification system

The national drug quantification system managed by the CAME is not in charge of estimating, ordering or receiving NTD drugs. However, in FY19 several governmental decrees were signed, and one positive consequence was the insertion of all NTD drugs into CAME's drug management system. Only, PZQ, ALB, and Azithromycin are included in the list of essential drugs. As said above, the CAME is only in charge of

receiving, storing NTD drugs and assisting technically (one or two qualified staff made available) when it comes to dispatching drugs among the departments and reverse logistics.

Describe planned technical assistance for monitoring and management of Adverse Events (AEs) and Serious Adverse Events (SAEs), and the verification process to ensure SAE processes are followed in FY20:

During the training of departmental, health zone, district and sub-district level actors a module covers AEs and SAEs and how they should be properly managed. The difference between these two types of side effects is clearly made and the attitude to be adopted by each health worker to whom such cases are notified. The PNLMT recommended that health agents care for all cases of side effects free of charge to the patient, with SAEs being referred to the health zone hospital. The cases of AEs and SAEs are to be notified in the treatment register so that this indicator is documented at the end of the MDA and information transmitted to the central level. For all these cases, health workers who provided care must also complete a specific form to be transmitted to the program for archiving.

Currently, one of the departments of the MOH, the Department of Pharmacy, Drug and Diagnostic Explorations, (Direction de la Pharmacie, du Médicament et des Explorations Diagnostiques - DPMED) is in charge of centralizing information available on MDA campaigns-related cases of AEs and SAEs. The DPMED has a committee (composed of physicians, pharmacists, public health specialists, sociologist, member of the community, etc.) that investigates all the cases of AEs and takes appropriate dispositions whenever applicable. This service receives all AEs cases' information from the DNSP, which collects its data directly from the sub-district health center agents who fill in a reporting form on a regular basis. Data sent by the health centers is compiled by the DNSP and sent to the DPMED (copying the program involved; e.g. the national vaccination agency when it comes to AEs that occurred during vaccination). In 2020, as part of the departmental training, the PNLMT will insist again on the need to fill in the AEs and SAEs' reporting forms occurring during its MDA campaigns. At the same time, the PNLMT's coordination will ask the DNSP to share with them any information reported to their department during the latest MDAs for analysis and decision-making. Following this analysis, a reflection will be made on the AEs and SAEs' case management process to ensure that this is not a stumbling block for community engagement in future MDA campaigns. The reports of SAE will be sent to pharmaceutical companies, drug donation programs, WHO, and FHI 360.

iii. MAINSTREAMING AND HSS ACTIVITIES (IR2)

Since the beginning of USAID support in the fight against NTDs, the PNLMT was willing to identify and implement strategies to ensure the sustainability of its activities. After a brief analysis of the country needs at this date, the NTD program proposes a series of activities, which are believed, can strengthen the health system in charge of NTD activities implementation.

Sustainability Sensitization Meeting: The presentation of the USAID's Strategy and Framework for Promoting Sustainable NTD Control and Elimination during the FY20 work-planning session generated interest for the participants to have a larger discussion on NTD sustainability with high-level MOH, MOE, and other key stakeholders working in areas relevant to NTDs. Act | West, through FHI 360, Deloitte and World Vision teams will support the PNLMT in implementing a one-day sustainability sensitization meeting with stakeholders from civil society, private sector, and public sector in Benin to cultivate ownership and drive messages around sustainability planning. The meeting will be prepared and implemented by several consortium's partners to ensure IR2 and IR3 domain expertise is appropriately represented. The costs of the sensitization meeting are not included in the country budget; it will be supported by technical assistance's budget.

Development of A Sustainability Plan

Act | West will support Benin in developing a sustainability plan for NTD activities. The process will include the following sets of activities. The Act | West team will work to link meetings where possible with particular attention to ensuring efficiency as appropriate:

Joint landscape analysis: The landscape analysis aims at providing an accurate view on the status of NTD programming in the six sustainability outcomes of the USAID sustainability framework. It will include an HSS component and a cross-sector component. The HSS component will assess the gaps and opportunities to mainstream NTDs into the national health policies, plan, and budgeting framework, while the cross-sector component will help the program in conducting a rapid analysis of nutrition, Mother & Child Health, family planning, and community mobilization programs that will offer integration opportunities for NTD activities. Act | West joint team (FHI 360, Deloitte, and World Vision) will work closely with the PNLMT to perform an initial remote desk review, in-country interviews with PNLMT teams and other pertinent government employees (e.g. MOE, Ministry of Finance, Directorate of water), in-country NTDs partners, to gather qualitative and qualitative data to understand where is the PNLMT response to NTDs on programmatic, financial operational levels, services integration with other existing platforms, cross-sector collaboration. This information, along with information obtained in a forthcoming Self-Guided Assessment, will inform the creation of the Sustainability Plan. In addition to the technical assistance, Act | West's support will include a one-day workshop to share and discuss with stakeholders the findings of the landscaping analysis and plan for the in-depth sustainability assessment and cross sector barrier analysis. The costs of this one-day workshop will be supported by the technical assistance partner's budget.

Workshop to conduct Sustainability self-guided assessment/ cross-sector barrier analysis: Using the results of the landscaping analysis and through the application of the sustainability Maturity model (SMM) and the cross-sector barrier analysis tool, Act | West (FHI 360, Deloitte, and World Vision) will technically assist the PNLMT in performing deeper analyses with key stakeholders, identifying gaps and key opportunities in relation with the six sustainability outcomes. The SMM tool will indicate where Benin is situated along a maturity continuum of capacity for NTDs programming. The results, along with the results of the landscape analysis, will inform the creation of the Sustainability Plan that will include an NTD mainstreaming road map and a cross-sector action plan. The costs of the four-day workshop will be supported by technical assistance partner's budget.

Technical validation of the sustainability plans: Following the completion of the in-depth sustainability assessment using the SMM and/cross-sector barrier analysis tool, Act | West (FHI 360, Deloitte, and World Vision) will support the PNLMT in developing a sustainability strategy through the NTD program end and beyond. It will include key objectives, key interventions, and responsible party for each intervention. These interventions along the NTD sustainability maturity continuum of the SMM will move the PNLMT forward. This plan will also ensure cooperation/coordination with other in-country partners which are not part of Act to End NTDs | West regarding technical assistance to be provided.

Act| West will support the PNLMT in organizing a workshop for the technical validation of the sustainability plan's draft. Participants to this workshop will be decision-makers in service at the targeted institutions that participated to the landscaping analysis and the in-depth sustainability/cross-sector barrier analysis workshops. The costs of this technical validation meeting are not included in the country budget; it will be supported by technical assistance partner's budget.

Political validation of the sustainability plan: Once the sustainability plan has been developed, the PNLMT intends to share it with the government authorities and partners during a one-day event. Such event will foster a broader endorsement and create a space for dialogue, allowing the various actors to

understand the MOH's orientations that aim to maintain achievements in terms of the fight against NTDs. This event will also give the PNLMT an opportunity to find partners that will assist in the implementation of the sustainability plan. The process of sustainability plan promotion will include the presentation of the sustainability plan to specific stakeholder groups (MOH's, MOE, and other Minister's offices, local authorities, regional health department staff)

HMIS – M&E Indicator Integration (PNLMT and personnel of Directorate of Programming and Foresight): Following up on the advocacy about inclusion of NTDs indicators into the DHIS2, the PNLMT has organized in FY19, several working sessions and technical discussions with the MoH directorate in charge of the DHIS2 (Directorate of Programming and Foresight (DPP) to discuss and agree on a process to progressively integrate NTD data in the DHIS-2 platform. The directorate came up with a 3-phase- proposition: 1) Implementation of NTD metadata (including information of current year's activities), 2) Collecting and importing NTD data of preceding years, and 3) Analysis of interoperability between DHIS-2 and other platforms. The first phase will be fully implemented in FY20 and the remaining in FY21 with the financial assistance of Act to End NTDs | West.

The first phase will consist of 4 workshops which will end with the integration of the current year's information available on the different indicators previously selected to the DHIS-2 platform and supportive supervision of those in charge of uploading that data. The 1st workshop will last 1 to 2 days and will be conducted in Cotonou (MOH or FHI 360's meeting room). All the media and software used for NTD data collection will be reviewed along with mechanisms of data reporting and quality. The 2nd workshop (5 days) will be held outside of Cotonou with the objective of creating and testing different data collection tools and indicators, as well as setting up the platform for data importation at the periphery level. A total number of 4 DPP staff, 7 PNLMT staff, and 4 FHI 360 staff will take part in those two workshops. The 3rd workshop will last 3 days and gather the 30 NTD focal points, 11 Chief of Planning Information and Health Research Service (Chef Service de Planification Information et Recherche en Santé - C/SPIRS), 4 DPP staff, 4 PNLMT staff, and 4 FHI 360 staff. The NTD focal points will be responsible for importing the data into the platform while the C/SPIRS will be the ones extracting, analyzing that data, and making it visible it in all official departmental reports, facilitating the discussion on NTDs at some instances. During that workshop, the NTD focal points will be trained on data entry, queries and quality in DHIS-2. The last aspect of this 1st phase will consist of supportive supervision (post-training) of NTD focal points. During 5 days, teams composed of 3 DPP, 4 PNLMT, and 4 FHI 360 staff will visit all NTD focal point in order to collect information on challenges experienced during the use of the DHIS-2 in the context of NTD data entry (struggle to enter data, eventual dysfunctions).

TIPAC Data entry and financial gap analysis: The PNMLT will implement a TIPAC data entry and funding gaps analysis. The PNMLT will use the outputs of the financial gaps analysis to i) identify and target, in a better way, opportunities to mobilize public resources within the MOH budget, and ii) develop a domestic resources' mobilization plan that will engage national stakeholders at both central and decentralized levels in supporting NTD activities. The mainstreaming and sustainability components are a bit new to the national team who was not exposed to these approaches under the ENVISION project. The PNLMT needs to be advised, build confidence and capacity with assistance from Act | West to be able to drive the process. The NTD program's coordination has already taken the lead on this, in preparing notes, and exploiting existing opportunities (for example the partnership/agreement between MOH and MOE to financially support and sustain school deworming) that he will be presenting at the NNN conference in Liverpool in September 2019. In FY18, the ENVISION project hired a consultant to develop a resources mobilization plan. The draft of that document is available and will be used, updated with targeted and

realistic gaps coming from the TIPAC and aligning with the needs indicated by the sustainability plan. Act | West will provide technical assistance to the NTD program in implementing TIPAC, performing a financial gap analysis in order to support the development/update of the domestic resources' mobilization intervention as part of the overall country NTDs sustainability plan. Benin team will leverage the development of the sustainability and Act|West technical assistance to identify critical gaps under the financing outcome, identify a clear process and define activities within the sustainability plan. The TIPAC will help to better capture government contribution as the outputs will serve to engage discussion with government about increasing contribution and support argument on needed changes to sustain. Act West may also use the results to inform USAID on areas on discussion while defining process or preparing for negotiation about government commitment (sustainability bilateral agreement)

iv. PLANNED ACTIVITIES: SCH, STH, POST VALIDATION/VERIFICATION SURVEILLANCE (IR3)

Schistosomiasis

The PNLMT's goal is to control SCH in the country. The specific objective is to reduce the prevalence of SCH to <10% among 75% of SAC by 2020. Strategies are MDA in schools and in the community, and behavior change communication. MDA is led by the PNLMT; when cases are diagnosed outside of the MDA period, PZQ treatment is offered free of charge in health centers.

From 2013–2015, the PNLMT remapped all districts for both SCH and STH, all with support from ENVISION and using Kato-Katz and urine filtration as the diagnostic tools. Eight districts were remapped in 2013; 30 districts in 2014; and the remaining 39 districts in 2015. SCH results ranged from 0% to 65.6%, with only one district registering 0%. Endemic districts were classified as follows: 31 districts as low-risk (>0 and <10%); 37 as moderate-risk (≥10% and <50%); and 8 as high-risk (≥50%).

The PNLMT's control strategy for SCH is MDA with PZQ for all in- and out-of-school SAC (ages 5–14 years). Out-of-school SAC are asked to come to the closest school to the village (town criers conduct social mobilization a few days before the beginning of the MDA). Once distribution in school ends, CDDs conduct mop-up sessions in the community for those out-of-school children who were not able to reach the closest school. The PNLMT decided in 2017 that beginning in FY18, it would only target districts with ≥10% prevalence, either at baseline or following a prevalence evaluation survey, because it deems treatment in districts with <10% prevalence, not a priority. In districts with a baseline prevalence of ≥10%, the PNLMT follows WHO guidance for treatment based on prevalence: once every two years in moderate-risk communities (10% to <50% by parasitological methods), and once a year in high-risk communities (≥50% by parasitological methods).

The PNLMT has conducted school-based SCH MDA with PZQ, with support from ENVISION, beginning in 2013, and since 2016 reaching all endemic districts requiring MDA (all districts with a baseline prevalence of ≥10% are on a treatment cycle). To address low coverage and/or lack of collaboration from the MEMP's peripheral-level personnel (teachers and headteachers), the PNLMT has worked to ensure teachers are aware of the decree stating they are drug distributors and involving social partners whenever coverage issues were signaled. This year in addition DDEMP Focal points who play a central role in the implementation of this MDA are included in the trainings and will take actions in advance to sensitize teachers.

<u>Planned activities in FY20</u>

In FY20, Act to End NTDs | West will support the country for the treatment of 34 SCH endemic districts, of which 11 are SCH only (413,880 SAC targeted), and 23 are co-endemic for SCH and STH (991,580 SAC targeted).

Soil-transmitted Helminths

The PNLMT's goal is to control STH in the country. The specific objective is to reduce the prevalence of STH to <20% among 75% of SAC by 2020. Strategies are MDA in schools and in the community, and promotion of hygiene and environmental sanitation.

The surveys conducted between 2013 and 2015 showed that either *Ancylostoma duodenale* (hookworm) or *Ascaris lumbricoides* (roundworm), or both species, were present in all districts. *Trichuris trichiura* (whipworm) was observed in some districts. Overall, two districts were shown to be high-risk (≥50%); 43 districts moderate-risk (≥20 and <50%); and 32 districts low-risk (<20%) for STH.

The PNLMT's control strategy for STH is MDA with ALB for all in- and out-of-school SAC (ages 5–14 years); the entire district is treated. As noted above, out-of-school children are asked to come to the nearest schools during social mobilization events, and CDDs conduct mop-up sessions in the communities to reach those children who were unable to reach the schools. The PNLMT decided in 2017 that beginning in FY18, it will only target districts with ≥20% prevalence, either at baseline or following a prevalence evaluation survey; this decision is based on reductions in USAID funding and the anticipated halt of USAID support for other types of MDA in districts where LF MDA stops. This decision aligns with WHO guidance based on baseline prevalence, but not based on prevalence following prevalence evaluation surveys, for which it is advised that STH MDA should be continued in districts registering STH prevalence of ≥2%. The PNLMT conducts STH MDA once per year in both moderate-risk districts (baseline prevalence of ≥20% and <50%) and high-risk districts (baseline prevalence ≥50%); the former is in line with WHO guidance, while for the latter twice per year treatment is recommended. The PNLMT has conducted school-based STH MDA with ALB, with support from ENVISION, beginning in 2013 and reached full national scale for annual MDA with ALB in all moderate- and high-risk districts (i.e., all districts with prevalence rates of ≥20%) in 2016.

In FY20, all STH-endemic districts which are not co-endemic to LF will be treated through the school-based platform in order to guarantee the sustainability of the STH control program. When the remaining LF-endemic districts pass TAS1 and stop MDA, the PNLMT intends to conduct STH MDA via the school-based platform. In districts that also require SCH MDA, the two will be integrated. At this date, only 3 districts requiring STH treatment are treated through LF MDA. Starting in FY18, one district (Comé) is conducting STH MDA with support from another partner, and no longer requires support from USAID.

In FY20, the Act to End NTDs | West project will support the country for the treatment of 42 STH endemic districts, of which 19[5] STH only (849,894 SAC targeted), 23 co-endemic to SCH and STH (991,580 SAC targeted). This does not include the 3 STH endemic districts that will receive MDA through the LF campaign (214,867 SAC targeted), bringing the total number of USAID-supported districts targeted for STH to 44. The observed increase in terms of the number of districts targeted for STH MDA between FY18 and FY20 (27 in FY18, 34 in FY19 and 44 in FY20) finds its explanation in the number of districts co-endemic to LF, which has stopped treatment as they passed TAS1 (9 in FY18 and 12 in FY19).

Please see TABLE 6a-b: STH (USAID supported STH coverage and DSAs for FY18-FY20) for further information.

FY20 Planned Activities

[5] Including the district of Comé, treated through the DeWorm 3 project.

During FY20, Act | West will support several social mobilization activities in advance of the school-based SCH/STH MDA, including printing of banners, broadcast of television and radio commercials, and community awareness-raising events.

Airing of MDA-related TV and radio announcements for SCH/STH MDA: Act to End NTDs | West will procure communication agencies to arrange for radio and TV stations to air commercials and announcements in the 53 districts targeted for SCH/STH MDA.

Community awareness-raising by town criers for SCH/STH MDA: Act to End NTDs | West will support the PNLMT in using town criers to inform remote villages about the MDA campaigns.

Act | West will also support training for Chef de Région Pédagogique (Head of School District), Conseiller Pédagogique (Pedagogical Advisor), and Co-Responsable d'Unité Pédagogique (Pedagogical Unit Deputy Chief) to support successful implementation.

Post-validation surveillance/monitoring

Between 2013 and 2019, with USAID's and other partners' support, Benin has implemented many activities that bring it closer to eliminating LF, Trachoma, and OV. As of June 2019, LF MDA has been stopped in 44 of the 48 endemic districts (of which 23 have successfully passed TAS3 in FY17), 8 of the 8 trachoma endemic districts with treatment needs have successfully passed their TIS (with four planned for TSS in FY20). Given the results of the latest OV surveys, the country is also well on its way to successfully eliminating this disease. Assistance is requested by the PNLMT to identify/develop the best approach and prepare for its effective implementation in the upcoming years. The experience of the country for other diseases (e.g. HAT), the country's situation along with the other countries' experiences will be used to come up with a protocol that will serve for all staff that will be involved in the post- validation surveillance. No post-validation surveillance activities are planned in FY20; the country expects to begin developing plans in FY21.

Cross-sector coordination

In FY20, Act | West will support the PNMLT towards strengthening the cross-sector coordination component (IR3). This support will focus on reinforcing the integration of SCH and STH MDAs into a sustainable delivery platform and coordination of NTD activities across different sectors, including WASH, health education, maternal and child health, nutrition and/or malaria. Act | West will provide technical assistance and support for activities towards the development of a cross-sector action plan which will be part of the country's overall sustainability plan (see activity on page 23 to 24).

This preliminary list of indicators will be updated by the PNLMT after discussion with the DPP.