

ANNUAL WORK PLAN

Act to End NTDs | West Program

Cote d'Ivoire

October 1, 2019—September 30, 2020



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LIST OF ACRONYMS

AE	Adverse Event
ALB	Albendazole
APOC	African Programme for Onchocerciasis Control
BMGF	Bill & Melinda Gates Foundation
BCC	Behavior Change Communication
CDC	Centers for Disease Control and Prevention
CDD	Community Drug Distributor
CDTI	Community-Directed Treatment with Ivermectin
CEMV	Center for Medical and Veterinary Entomology
CENI MTN CP	Committee of National and International Experts for PC-NTDs (equivalent to an OV expert committee)
CIND	Integrated NTD Database
CMFL	Community Microfilarial Load
CNCAM	National Commission for Coordinating Supplies of Essential Medicines and Strategic Health Products
CNER	National Committee on Ethics and Scientific Research
COGES	Management Committee
CSAS	Head of Health Service
CSE	Epidemiological Surveillance Manager
CSR	Rural Health Center
	Swiss Center for Scientific Research
CSU	Urban Health Center
DGS	Office of the Director General of Health
DHIS2	District Health Information System 2
DOLF	Death to Onchocerciasis and Lymphatic Filariasis
DPML	Department of Pharmacy, Medicines, and Laboratories
DPPEIS	Department of Forecasting and Health Information Planning and Evaluation
DQA	Data Quality Assessment
DR	Regional Directorate

ECD	District Management Team
ERS	Regional Health Team
ESPC	Front-Line Health Facility
ESPEN	Expanded Special Project for Elimination of Neglected Tropical Diseases (WHO)
FAA	Fixed Amount Award
FHI 360	Family Health International 360
FTS	Filariasis Test Strip
GET	Global Elimination of Trachoma
GSK	Glaxo Smith Kline
GTMP	Global Trachoma Mapping Project
HD	Health District
HKI	Helen Keller International
HSS	Health Systems Strengthening
ICRC	International Committee of the Red Cross
ICT	Immuno-Chromatographic Test
IDA	Triple Drug Therapy with Ivermectin, Diethylcarbamazine, and Albendazole
IEC	Information, Education and Communication
IVM	Ivermectin
LF	Lymphatic Filariasis
LNSP	National Public Health Laboratory
LOE	Level of Effort
LSTM	Liverpool School of Tropical Medicine
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MDP	Mectizan Donation Program
MRU	Mano River Union
MSHP	Ministry of Health and Public Hygiene
NPSP	New Public Health Pharmacy
NTD	Neglected Tropical Disease
OCP	Onchocerciasis Control Programme

OV	Onchocerciasis
PC	Preventive Chemotherapy
PGP	Pharmacy Preparer-Managers
PNDAP	National Program for Development of Pharmaceutical Activity
PNLMTN-CP	National Program for Control of Preventive Chemotherapy-Neglected Tropical Diseases
PNLSGF	National Program for the Control of Schistosomiasis, Soil-transmitted Helminthiasis and Lymphatic Filariasis
PNSO-LO	National Program for Eye Health and Onchocerciasis Control
PZQ	Praziquantel
RAFET	Francophone African Network of Expertise on Trachoma
RDT	Rapid Diagnostic Test
RGPH	General Census of Population and Housing
RPRG	Regional Programme Review Group
SAC	School-Age Children
SAE	Serious Adverse Event
SAFE	Surgery, Antibiotic therapy, Facial cleanliness, Environmental improvements
SCI	Schistosomiasis Control Initiative
SCH	Schistosomiasis
SOP	Standard Operating Procedure
STH	Soil-Transmitted Helminths
TAS	Transmission Assessment Survey
TBD	To Be Determined
TEO	Tetracycline Eye Ointment
TF	Trachoma – Follicular
TIPAC	Tool for Integrated Planning and Costing
TR	Trachoma
TT	Trachomatous Trichiasis
UFR	Training and Research Unit

WAHO	West African Health Organization
WASH	Water, Sanitation, Hygiene
WHO	World Health Organization

NARRATIVE

a. OVERVIEW OF THE NATIONAL NTD PROGRAM

Neglected tropical disease (NTD) control and elimination efforts in Côte d'Ivoire started around 2000. The Ministry of Health and Public Hygiene (MSHP)'s current NTD Master Plan is for the period 2016-2020, and covers five preventive chemotherapy (PC) (lymphatic filariasis [LF], onchocerciasis [OV], schistosomiasis [SCH], soil-transmitted helminthiasis [STH], and trachoma [TR]) and five case-management NTDs (Buruli ulcer, Guinea worm disease, human African trypanosomiasis, leprosy, and yaws).

In December 2016 the MSHP merged two existing PC-NTD programs - the National Program for the Control of Schistosomiasis, Soil-Transmitted Helminthiasis and Lymphatic Filariasis (PNLSGF) and the National Program for Eye Health and Onchocerciasis Control (PNLSOLO) – to create a single National Program for Control of Preventive Chemotherapy-Neglected Tropical Diseases (PNLMTN-CP), under the Office of the Director-General of Health and Public Hygiene (DGSHP). The Committee of National and International Experts on PC NTDs (CENI MTN-CP), which in practice is focused on OV, was established in January 2018. This committee provides technical oversight for activities with technical and financial support from partners.

The United States Agency for International Development (USAID) initiated support for NTD control and elimination in Cote d'Ivoire in 2016, first via END in Africa (fiscal year [FY]16-FY18), then via the Act to End NTDs | West program (Act | West) (FY19-FY23). Act | West consortium partners in Cote d'Ivoire in FY20 are FHI 360 as lead implementer with technical assistance (TA) from the AIM Initiative (AIM), Deloitte, and HKI.

Other partners supporting PC-NTD control and elimination are WHO Cote d'Ivoire, which provides technical support; END Fund (via Sightsavers) for LF and OV; Accelerate (via Sightsavers) for trachoma; and ASCEND (via Schistosomiasis Control Initiative [SCI] as lead organization, with Liverpool School of Tropical Medicine [LSTM]), for LF morbidity management as well as SCH and STH. In addition, the Bill & Melinda Gates Foundation (BMGF) is funding the REACH project, for azithromycin MDA for prevention of childhood mortality.

The MSHP's goal is to eliminate LF, OV, and TR, and to control SCH and STH. Act | West's support aligns with these goals, with the distinction that support for OV is focused on control rather than elimination. Mapping for LF, OV, SCH, and STH was completed prior to FY16, while TR mapping is still underway. The number of health districts [HDs] in need of mapping for TR could change as a result of redistricting in 2019, which increased the country's total number of health regions from 23 to 28, and the number of HDs from 86 to 101.

2. IR1 PLANNED ACTIVITIES: LF, TRA, ONCHO

i. Lymphatic Filariasis

Previous and current FY activities and context:

LF mapping took place from 2000 to 2014. In 2016 the MSHP remapped HDs that were considered non-endemic, where the number of villages surveyed was less than two and/or the number of people tested was less than 100. This remapping showed that 98 of the 112 HDs (from recent health redistricting) are endemic. All endemic HDs receive MDA and the country follows the WHO guidelines for LF MDA and elimination. 89 HDs are co-endemic for LF and OV received the combination ALB-IVM treatment during

MDA. Six (6) other HDs are endemic for LF only and 3 other HDs are co-endemic for LF and STH. These 9 HDs received ALB treatment during MDA. In 2019, before the new health redistricting, 60 HDs endemic with LF conducted LF-OV-STH MDA with support from Act | West.

Management of LF morbidity is in its early stages. In FY19, the PNLMTN-CP is conducting a situation analysis on LF-related morbidity management with support from Act | West via AIM Initiative; and the MSPH will conduct surgery for hydrocele and lymphedema cases with support from ASCEND via LSTM.

Plan and justification for FY20:

MDA

MDA for LF (and for OV and/or STH, as required) will be needed in all 98 LF-endemic HDs, using the WHO-recommended combination of IVM and ALB. In all, this will consist of LF MDA in 98 HDs, OV MDA in 96 HDs, and STH MDA in 40 HDs (as supported by all partners).

Surveys

Pre-TAS (pre-Transmission Assessment Survey) will take place for the first time. This activity will involve 46 endemic HDs that have received at least six regular rounds of MDA with an epidemiological coverage rate of at least 65% and geographic coverage of 100%. The pre-TAS will examine a sentinel site and a spot-check site in each evaluation unit (EU) (and each HD will constitute an EU). In each district, 300-500 people 5 years or older will be tested in each sentinel or spot check site using filariasis test strip (FTS). Training of the NTD Program and field staff for the pre-TAS and implementation of the surveys in all 46 HDs will be supported all by Act West based on recent partners discussion and agreement regarding synergy.

Technical assistance for the pre-TAS will also be required. This assistance will consist of capacity-building at the central level to implement these assessments. The technical support will come from both FHI 360 and Sightsavers, with technical assistance from CDC-Atlanta and ESPEN (these latter without Act | West funding) prior to the launch of the first pre-TAS organized by the PNLMTN-CP (regardless of the partner supporting this survey). This capacity-building will occur in two phases; the first will be a three-day theoretical workshop and the second will be a one-day practical workshop in a selected HD.

Regarding the Death to Onchocerciasis and Lymphatic Filariasis (DOLF) Project's planned BMGF-funded clinical trial comparing Moxidectin-DA, IDA, and IA, FHI 360 will contact the head of the PNLMTN-CP (who is also the project's Principal Investigator), for clarification on which HDs are targeted for the trial, which is planned to start in the next few months.

Act | West will technically and financial support the following activities:

- MDA for LF (and for OV and/or STH, as required) in 74 LF-endemic HDs, using the WHO-recommended combination of IVM and ALB. In all, this will consist of LF MDA in 74 HDs, OV MDA in 66 HDs, and STH MDA in 27 HDs. Please also see iii. OV, iv. IR1 Integrated MDA Activities, and IR3/STH.
- LF pre-TAS in 46 HDs.
- Review the LF morbidity situation analysis findings and develop a strategic morbidity management plan based on the situational analysis findings. In supporting Cote d'Ivoire to develop this plan, via Act | West may support the PNLMTN-CP to develop detailed maps with available data.

ii. Trachoma

Previous and current FY activities and context:

Trachoma remains the only PC NTD in Cote d'Ivoire whose initial mapping has not yet been completed. A total of 20 suspect HDs were mapped from 2015 to 2017 using the Tropical Data Platform, which identified 14 endemic HDs (TF \geq 5% among children ages 1 to 9).

- The PNLMTN-CP was unable to conduct a trachoma MDA in 2018.
- In 2019, 10 HDs (14 evaluation units, EU) were mapped with the financial support of USAID through FHI 360 under Act | West, showing that 6 HDs have one or more endemic EUs (the total number of endemic EUs is 9 EUs). Fourteen EUs in an additional 8 HDs were mapped with financial and technical support from Sightsavers; 9 EUs in 5 HDs were endemic.
- Twelve trachoma-endemic HDs (18 EUs) were treated in 2019. These were the same HDs as planned for the FY18 MDA that did not take place due to a lack of funding. In addition, three HDs with prevalence $>10\%$ that previously received at least one round of treatment will be treated again. 15 HDs that were identified as during the FY19 mapping will be treated in FY20.

The MSHP held a trachoma action planning workshop in 2016. The TAP document that resulted will be updated in 2020 and should be assessed beforehand. This was originally planned for FY19 but due to redistricting and substantial ongoing mapping, it was judged better to reschedule to FY20.

In 2017 some MSPH personnel participated in a training of trainers on trachomatous trichiasis (TT) surgery provided by USAID's Morbidity Management and Disability Prevention (MMDP) project via Helen Keller International (HKI).

Plan and justification for FY20:

In FY20, Act | West (FHI 360) will technically and financially support the PNLMTN-CP to conduct:

- Trachoma MDA in 11 HDs, including training and supervision of training, of supervisors and of CDDs; drug distribution; and supervision. [FAAs]
- Trachoma impact surveys (TIS) in 15 HDs (10 EUs): Bloléquin, Toulepleu (Cavally Region), Dabakala (Hambol Region), Minignan, Kaniassou (Folon Region) Madinani, Odienné (Kabadougou), Touba, Koro, Ouaninou (Bafing Region), Bocanda, Kouassi-kouassikro (N'Zi Region), Ouangolodougou (Tchologo), Tengréla (Bagoué Region), Man 1 (Tonkpi Region). It should be noted that at baseline, Madinani and Odienné were a single HD; the same is the case for Koro, Ouaninou and Touba, Minignan and Kaniassou, Bocanda and Kouassi-kouassikro. [FAA#15]

The PNLMTN-CP will use the Tropical Data system for EDC for both trachoma mapping and for TIS.

- Trachoma Action Planning workshop.
- Review the TR morbidity situation analysis findings and develop a strategic morbidity management plan based on the situational analysis findings. In supporting Cote d'Ivoire to develop this plan, via Act | West may support the PNLMTN-CP to develop detailed maps with available data.

iii. Onchocerciasis

Previous and current FY activities and context:

Mapping was carried out in part by the Onchocerciasis Control Programme (OCP) from 1974 to 2002 and by the African Programme for Onchocerciasis Control (APOC) in 2014. At this time, following the FY19 redistricting, 96 HDs are endemic for OV, including 89 co-endemic for LF.

The country has aligned itself with the WHO guidelines for stopping MDA and checking for the elimination of human OV. To this end, all hyper-, meso- and hypoendemic HDs receive MDA.

The combination ALB-IVM treatment is used in HDs that are co-endemic with LF. IVM alone is used in the three HDs that endemic for OV without LF.

An analysis of epidemiological evaluation and treatment data for OV (Koudou et al, 2018, in PLoS NTD) showed that:

- 49 HDs were surveyed from 1975 to 2018;
- The number of sites selected for assessment per HD (sometimes only one or two) was not sufficient to accurately estimate the disease prevalence in the HD;
- The WHO/APOC strategy used until 2015 did not cover villages with populations over 2,000 so the estimated prevalence of OV and the community microfilarial load (CMFL) could be biased;
- Spraying with larvicides was discontinued in Côte d'Ivoire in 1992 and villages may have been subject to vector-borne reinvasion;
- Suspending larvicides, for a period of time, may have contributed to increased productivity of black fly breeding sites and maintained vector densities at a level that could support the transmission of *Onchocerca volvulus* (Boussinesq et al., 1992).
- When OCP closed in 2002, no prevalence was less than 1% (elimination level) (Koudou et al)

USAID (via END in Africa) supported epidemiological impact surveys using Ov16 rapid diagnostic tests (RDTs) in four HDs in FY16 and six HDs in FY17, surveying 300-500 people per village, in ten villages, in each HD. These surveys showed that OV prevalence was low but that it remained above the MDA-stopping threshold of 0.1%.

The current guidelines on eliminating OV (WHO, 2016) recommend starting with an OV situation analysis in most of the former OCP/APOC-supported countries by simultaneously implementing a national epidemiological and entomological survey to definitively confirm the status of each HD.

The CENI MTN CP, which as noted is focused on OV, was created by Order No. 0001 MSHP / CAB of January 22, 2018. This committee held its first meeting on November 2018, issuing the following recommendations:

- Map OV breeding sites
- Map for OV elimination in HDs that have not yet initiated OV MDA (will necessitate the availability of OV16 rapid tests)
- Integrate epidemiological assessments of OV during LF TAS
- Advocate to WHO to make OV16 and bplex tests available to Côte d'Ivoire.

In 2019, before the new health districting, 52 HDs co-endemic with LF conducted LF and OV MDA with support from Act | West.

Plan and justification for FY20:

In FY20, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

- Please see iv. IR1 Integrated MDA Activities, for information on LF, OV, and STH MDA.
- Organize a meeting of the CENI MTN CP (OV expert committee). This will be jointly supported by END Fund (via Sightsavers) and should be helpful in coordinating support from partners with different goals for the disease in the country (elimination for END Fund, control for USAID). As noted above, the MOH's goal is elimination.
- Submit request to ESPEN for a complete set of the country's historical OV data.

iv. IR1 Integrated MDA Activities**Previous and current FY activities and context:**

Mass Drug Administration

MDA encompasses several components: (i) capacity-building; (ii) awareness-raising and social mobilization; (iii) free distribution of medicines; and (iv) supervision. For the capacity building component, HD-level personnel train local supervisors, and local supervisors train community-level distributors.

Drugs are distributed over five days and target:

- LF plus OV and/or STH MDA: All persons >90cm by dose pole except for those who are pregnant or sick.
- Trachoma MDA: The total population.

Plan and justification for FY20:

In FY20, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

- Training, and supervision of training, of supervisors and of CDDs for LF (plus OV and/or STH) MDA.
- Drug distribution, and supervision, for the LF plus OV and/or STH MDA in 74 HDs.

v. Dossier status (LF and TR):**Previous and current FY activities and context:**

The MSHP has not yet started preparing its LF and trachoma elimination dossiers and plans to begin this process in FY20 to allow sufficient time for submission. In FY20, outcomes supported by Act | West for each disease will be limited to i) orienting the PNLMTN-CP to the elimination dossier template documents, ii) beginning some initial data entry during the orientation sessions, and iii) developing a preliminary plan to complete entry of all available data currently available.

Plan and justification for FY20:

In FY20, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

- Organize a two-day meeting, for training on the use of the WHO TR elimination dossier templates (narrative and datasheet), initial entry of available data into the datasheet, and development of a plan to continue data compilation, data entry, and writing as appropriate. FHI 360's HQ-based technical advisor will serve as facilitator. Act | West will collaborate with AccelerateTE, which will also be providing support for dossier development.
- Organize a two-day meeting, for training on the use of the WHO LF elimination dossier templates (narrative and datasheet), initial entry of available data into the datasheet, and development of a plan to continue data compilation, data entry, and writing as appropriate. FHI 360's HQ-based technical advisor will serve as facilitator. Act | West will collaborate with ASCEND, which will also be providing support for dossier development.

vi. IR1 DSA activities

For all Act | West-supported DSAs, the PNLMTN-CP in collaboration FHI 360 will draft survey protocols per WHO guidelines and submit these to the National Committee on Ethics and Scientific Research (CNER) for approval; Tropical Data (for TR-related surveys) and ESPEN (for LF-related surveys) will also be involved in protocol development prior to CNER review. The CNER is the body that oversees research practices in Côte d'Ivoire.

All assessments generate data that need to be collected, compiled, and analyzed to support decision-making. In Act | West-supported surveys, the PNLMTN-CP will use electronic data capture (EDC) platforms where feasible, namely Tropical Data for trachoma-related surveys, and a platform to be determined later for LF-related surveys.

Supervision for M&E and DSA

Plan and justification for FY20:

For Act | West-supported assessments and M&E-related activities, PNLMTN-CP and Act | West will provide joint supervision of the personnel conducting the surveys. They will conduct field visits in the survey sites to ensure adherence to the survey protocol and to standard operating procedures, to assist in problem-solving, and to ensure availability of necessary supplies. Additionally, Act | West will provide technical support for compilation and analysis of the data collected.

In FY20, Act | West will provide technical and financial support for the following activities:

- Supervision of training of 28 district-level CSEs and 10 regional CSEs on CIND.
- Supervision of CIND workshops in 70 HDs.
- Supervision of Trachoma mapping in seven HDs.
- Supervision of LF pre-TAS in 46 HDs.
- Supervision of TIS in 15 HDs.

3. SUSTAINABILITY STRATEGY ACTIVITIES (IR2 and IR3)

The PNLMTN-CP has a PC-NTD-focused Master Plan for the period 2016-2020; this PC-NTD-focused document is a component of the overall NTD Master Plan, which covers all NTDs. The DGSHP plans to update that overall NTD master plan in CY20; separate working groups will develop the PC-NTD and case management components, which will then be merged into a single overall document. Act | West's financial support is needed for the meeting in which the new overall NTD master plan will be validated.

Plan and justification for FY20:

In FY20, Act | West (FHI 360) will provide technical and financial support for the following activities:

- Workshop to validate the NTD Master Plan for 2021-2025.

I. DATA SECURITY AND MANAGEMENT

Data collection, analysis, and transmission procedures

MDA data are collected by CDDs in registers. They summarize the village/community data. These summaries are then forwarded to the front-line health facilities (ESPCs), who in turn forward them to the HD data managers (epidemiology surveillance staff, epidemiological surveillance managers [CSEs]) after verification and compilation at the health area level. These latter then fill in the appropriate Excel data entry forms and prepare District Summary Reports which they will send to the regional CSEs within the given time frame. A data validation workshop is held in each health region with members of the regional health teams (ERS) and district management team (ECD) before these data are sent by the PNLMTN-CP to Act | West. In addition, these validated data received by the PNLMTN-CP are summarized and sent to the MSHP and local health and administrative authorities for feedback and information. These reports are sent to the DGS to make any necessary decisions. In 2020, with a view to ensuring sustainability of NTD control activities, the PNLMTN-CP will share the results of MDA and surveys more broadly with other ministries and private entities (such as agricultural councils [coffee-cocoa, cashews, palm oil], banks, private companies' foundations, mining firms, and agro-industrial complexes).

Data from Act | West-supported surveys are collected directly by the PNLMTN-CP in the field, analyzed in collaboration with Act | West, and endorsed by a report. The results are then made available to the MSHP for decision-making.

Plan and justification for FY20:

In FY20, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

- 24 regional data validation workshops for the LF plus OV and/or STH MDA in 74 HDs.
- 6 regional data validation workshops for the trachoma MDA in 11 HDs.
- Annual review meeting of Act | West-supported FY20 PC-NTD activities. Other partners typically attend and are welcome to participate and present, but because of the timing they often do not yet have data available. The findings of this activity will also inform Act | West's annual work planning for FY21.

Data Quality Control

The data quality control process includes verification, validation, and comparison. The data collected by CDDs are verified by comparing the information collected during the MDA with the information in the various data collection tools. Validation allows the various actors to compare the data available at different levels of the system and produce a single information source at the central level. This happens during a regional workshop with the ECDs and ERSs that are coordinated by the PNLMTN-CP. Data matching is

sanctioned by a report and a table to check the accuracy of the data collected; the Data Quality Assessment (DQA) tool is used for this.

DQAs are implemented by health region CSASs, region and district data managers and pharmacists, nurses/midwives responsible for the health areas concerned, and CDDs in the selected localities. In FY19, DQA was conducted in the health regions of Poro-Tchologo-Bagoué and Gbêkê, and the health districts of Boundiali and Sakassou. The health areas visited in Boundiali were the CSU of Siempurgo and the DR of De Nondara; in Sakassou, the DR of De Konankro and the CSR of Alloco-Djekro. The overall picture revealed that the recounted data are superimposed on the reported data. The system evaluation showed that there is no physical version of the input forms as recommended, and that deviations are not documented. Recommendations from the FY19 DQA were to print and archive documents, establishing a log to document any discrepancies; present the results at the annual review meeting; and provide feedback to the regional and district health management (DRS and DDS).

Plan and justification for FY20:

No DQA is planned with Act | West support in FY20.

Data Security and Storage

Regional and HD data managers supervise data collection to ensure the quality and timeliness of post-MDA data at the peripheral level. The communication focal point is responsible for MDA-related communication in the HD (local radio, informational meetings with the prefectural entity). All the above-mentioned actors are supervised by the regional and HD directors, the PC NTD focal point, and regional and HD-level heads of health services (CSAS).

The PNLMTN-CP is using CIND for data security and storage and plans to integrate this data into the national DHIS2 database. Physical data collected during the MDA are stored at the district level. However, data from the specific assessments are stored at the PNLMTN-CP.

Training on CIND took place at the central level in 2016; since then, as it has been deployed, the CSEs of 42 HDs have been trained, increasing their knowledge of IT tools for data processing. The CIND was key in managing PC NTD data.

In FY19, the process of integrating the PC NTD data into the DHIS2 (national database) was initiated under Act | West. DIIS assisted with pre-testing and setting the parameters of the PC NTD data collection tools in the DHIS2, as well as training central level actors to use the national DHIS2 tool. The current finding is that not all indicators are integrated into the DHIS2. This process is underway and will be effective in the medium term. For the time being, the PNLMTN-CP relies on the CIND to manage the other indicators. At this time, the selected indicators relate to mass treatment: the geographic and therapeutic coverage by disease, totaling ten PC NTD indicators. However, routine morbidity indicators will be integrated during FY20. One of the challenges of the PNLMTN-CP in this context is to ensure the quality of the data entered in DHIS2, and the storage and the security of those files which are not incorporated into DHIS2.

Plan and justification for FY20:

In FY20, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

- Assess PC-NTD data storage and security needs.
- Train the CSEs of 32 HDs and 12 regions on the use of the CIND.

- Workshop for data entry in HD-level CIND, and export of files to the PNLMTN-CP for capture in the central-level CIND, in 74 HDs. [FAA#4] These 74 HDs were trained with USAID support.
- Organize a workshop to verify and monitor the PC-NTD data entered in DHIS2.

II. DRUG MANAGEMENT

The target population to be treated for each disease is determined by extrapolating populations from the 2014 General Census of Population and Housing (RGPH) using the national annual growth rate (2.5%). The necessary medicines are quantified from this target after subtracting the residual stock in the country, and an order is sent to WHO-CI for IVM, ALB, and praziquantel (PZQ); to ITI for Zithromax; and to Act I West for 1% tetracycline eye ointment (TEO).

NTD drugs are quantified through an internal process implemented by the PNLMTN-CP. To better integrate this activity into the national medicine supply system, the PNLMTN-CP plans to organize a yearly workshop to finalize and validate the quantity of PC NTD medicines with the National Program for the Development of Pharmaceutical Activity (PNDAP); in particular, the National Commission for Coordinating Supplies of Essential Medicines and Strategic Health Products (CNCAM).

Managing and Procuring Essential Medicines and Products

General background:

The PNLMTN-CP quantifies needs based on (1) the target populations in endemic health districts, and (2) the available stock of drugs in PNLMTN-CP stockrooms, the new Public Health Pharmacy (NPSP), and HD pharmacies. Donated medicines are exempt from customs duty on arrival in Côte d'Ivoire. The PNLMTN-CP then arranges for the medicines to be delivered to the endemic HDs at least two weeks prior to the MDA. Zithromax and TEO are stored on the premises of the NPSP, which is responsible for transport to HDs.

All stages along the supply chain are overseen by the PNLMTN-CP, from reception in NPSP or PNLMTN-CP warehouses, to distribution to populations in villages and city neighborhoods. In addition, pharmacists or pharmacy preparers-managers (PGP) perform supervision at several levels (regions, HDs, health areas) to ensure sufficient drugs and consumable supplies, as well as proper storage conditions and distribution to populations. Regional pharmacists supervise drug distribution in HDs. HD pharmacists supervise drug distribution in health areas and the community. The central level collaborates with these actors to schedule and conduct their supervision missions to ensure that supervisory activities are high-quality and properly performed. Important problems are identified and discussed in their meetings, and solutions are proposed.

Health area supervisors provide CDDs with the necessary quantities for the MDA in their villages/neighborhoods. The amount of medication received by each CD is recorded on a management card that they sign before being served.

In 2019, through the PNDAP and by decree, the MSHP created the National Commission for Coordinating Supplies of Essential Medicines and Strategic Health Products in Côte d'Ivoire (CNCAM-CI). This commission comprises five technical committees, including one for other essential medicines and strategic health products that includes the PNLMTN-CP.

After MDA, all Zithromax waste must be returned to the HD. This waste must be disposed of in the presence of a police officer, a representative of the Department of the Environment, and members of the PNLMTN-CP district management team and community distributors.

Various PC NTD products are being added to the National List of Essential Medicines (LNME) as part of the National Supply Chain Strategic Plan (NSCSP) 2016-2020 implementation.

Waste from distribution (empty bottles and packaging) is destroyed in each district in the presence of an officer of the judicial police and an officer of the Ministry of the Environment, after which a report signed by the parties concerned is issued. Expired drugs are first counted, then referred by the PNLMTN-CP to the Department of Pharmacy, Medicines, and Laboratories (DPML) for removal and destruction.

Supply chain challenges for NTD drugs or diagnostics:

- Capture by the health system of the value of drugs used in MDA for NTDs:
 - The PNLMTN-CP plans to address this issue at the MDA launch event, and to improve communication about the value of drug donations.
 - Conducting a workshop (see Plan and justification for FY20, below) to validate quantification of NTD MDA drugs with the CNCAM and PNDAP will enable the information to be captured in the DPML's system. This should make it easier to receive authorization for the document to retrieve the drugs from the customs warehouse, resulting in shorter storage times and consequently reduced costs for storage.
- Reducing the time needed for the exemption process at local level and, by extension, of storage costs prior to MDA.
- Availability of standard operating procedures specific to PC-NTDs, making it possible to anticipate the different steps in advance.

Plan and justification for FY20:

In FY20, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

- Organize a workshop, in coordination with the PNDAP and the CNCAM, to finalize and validate the quantity of PC NTD drugs to be ordered from WHO (IVM, ALB, PZQ), ITI (ZTH), and FHI 360 (TEO). Involving the PNDAP and CNCAM will help to ensure that quantification and management of PC-NTD MDA drugs are in line with standard practices for the wider public health pharmaceutical system, and that those drugs are counted in the annual reports of those institutions. (Previously the PNLMTN-CP quantified all PC-NTD products on its own, and this quantification was not captured in the national supply system. Contributions by partners, including Act | West, were not captured accurately.)
- The return of empty vials from villages to the HD (reverse logistics) for the trachoma MDA.
- Financial and technical support for PNLMTN-CP supervision of reverse logistics of trachoma MDA drugs at HD level in 11 HDs.
- Technical support to develop a strategy for reverse logistics to return all PC-NTD MDA drugs (not only Zithromax, as is presently the case) to central level, starting in FY21.
- Technical support to adapt supply chain SOPs for PC NTD drugs for MDA, using the national MSHP manual for logistic management.

Monitoring Adverse Events and Serious Adverse Events

LF and OV are endemic in Côte d'Ivoire, but loais is not. The drug used to control both LF (plus ALB) and OV is IVM. WHO judges the risk of SAEs during LF and OV MDA to be relatively low.

The drugs used to treat trachoma are Zithromax and TEO. No serious side effects were observed during previous MDA. For trachoma MDA in FY19, the PNLMTN-CP used the new guidelines from RAFET 2018.

Minor side effects that may occur during MDA are managed at ESPCs. Populations are informed of possible minor side effects and how to manage them. In addition, the PNLMTN-CP trains all ESPC health care providers on the side effects of all drugs used in MDA.

All cases of side effects or adverse reactions lasting longer than 72 hours are recorded on report forms prepared by the PNLMTN-CP and managed by the districts concerned. The information is then sent up to the central level for follow-up.

Plan and justification for FY20:

In FY20, Act | West will financially support the PNLMTN-CP to conduct the following activities:

- Provide HDs supported by Act | West for MDA, with a supply of drugs for management of cases of serious adverse events. [FAA#5, FAA#6, FAA#7]

III. MAINSTREAMING AND HSS ACTIVITIES (IR2)

SUSTAINABILITY

In the interests of sustainability, maintaining results, and sustainable financial stability, USAID support will be sought to help the PNLMTN-CP develop strategies to effectively respond to changes in disease epidemiology and scarce resources. With financial support from USAID, the PNLMTN-CP began the process of integrating the PNLMTN-CP's data into DHIS2. Efforts will continue to improve CNCAM-CI's participation in the drug quantification/validation process, and data on the volume and value of drugs received from the donation programs will be captured in the HMIS.

WHO has supported the establishment of a platform for coordinating NTD activities that could strengthen collaboration and multi-sectoral partnership by involving the various ministries involved in NTD control. In addition to inter-sector collaboration, the goal is to achieve effective participation by encouraging relevant sectors to consider NTDs and include them early on in their policies and planning. Given the importance of collaboration and multi-sectoral partnership among programs to control NTDs, Act | West will join efforts with WHO to technically support the PNLMTN-CP's review and align the initial Terms of Reference (TOR), mandate and membership of the existing cross-sector mechanism with the current context and ensure that coordination body is properly institutionalized

In line with the PNLMT aim to develop and implement sustainability interventions and maintain NTDs gains for the long term, Act | West will technically and financially support the PNLMTN-CP to conduct the following activities:

Developing and Implementing a sustainability plan

Actions begun in FY19 will continue with a view to adopting a sustainability plan. The PNLMTN-CP shares USAID's vision and the sustainability approach based on strengthening the health system through health

and multi-sectoral collaboration. The PNLMTN-CP aims to develop a holistic sustainability plan to guide interventions, support, and funding from the government and its partners. Developing a single plan will help the PNLMTN-CP to better coordinate partners and government initiatives in creating sustainable NTD interventions. A single plan will provide an effective lever and appropriate framework for negotiating specific and complementary support with the government, program partners, and national public and private entities likely to support the PNLMTN-CP. In Q4 of FY19, Act | West will support the PNLMTN-CP in organizing a high-level sustainability sensitization meeting to “USAID’s Strategy and Framework for Promoting Sustainable NTD Control and Elimination” and share ideas on how to strengthen sustainability of NTD programming in Cote d’Ivoire, involving national actors, partners, and civil society organizations. In FY20, the PNLMTN-CP will develop and begin implementation of an NTD sustainability plan.

- Conduct a joint landscape analysis relating to the sustainability outcomes: Act West will provide technical assistance to the PNLMTN-CP to perform a landscape analysis through remote desk review and in-country meetings and focus group discussions. The results of the landscape analysis will be a key input for the sustainability strategies, and effectively capture a current-state understanding of each country program along the six outcomes detailed in the USAID framework. The cross-sector component of the landscape analysis will include an assessment of the barriers and structural factors associated with the lack of integration of NTD programs with various related sectors, using the six outcomes from the Sustainability Framework as the primary domains of the analysis. The barrier analysis, which is part of the overall landscaping, will consist of four-day workshops with national stakeholders from various sectors. The barrier analysis will inform the cross-sector (IR3) action plan that will be finalized with the PNLMTN-CP as a component of Cote d’Ivoire’s overall sustainability plan under Act | West. The results of the joint landscape analysis will serve as input for the country sustainability plan.
- Develop a NTD sustainability plan. Using the landscape analysis as the main input, Act West will support the PNLMTN-CP conduct an in-depth sustainability self-assessment will help Cote d’Ivoire establish a baseline and clarify priority short-, medium-, and long-term sustainability milestones. Deloitte will facilitate the organization of a 4-day workshop to implement the sustainability maturity model (SMM) which will guide country national counterparts to reach consensus on where PNLMTN-CP currently is and where they want the PNLMTN-CP to be in the future for each of the six outcomes developed under the USAID sustainability framework. At completion of the one week assessment, Act | West will provide remote support to the PNLMTN-CP in drafting the sustainability plan as a key document to inform future project years. The goal of the sustainability plan is to document an action plan for making progress against the sustainability framework.
- Workshop to validate the PC-NTD sustainability plan: Once the draft of the sustainability plan is completed the PNLMTN-CP will organize a one-day validation workshop with the aim to share that document with relevant authorities and partners to gain wider buy-in as well as create policy dialogue to enable different stakeholders to understand the country’s sustainability goals as well as opportunities to support different activities included in the sustainability strategy. This first step of mobilizing various stakeholders around sustainability of NTD programming will start a process of political dialogue that will lay the foundations for stakeholder engagement and identify the most appropriate levers to solidify the bilateral agreement supporting the implementation of the sustainability plan.

Advocacy for a Sustainable National NTD Program

The 2016-2020 NTD Master Plan calls for the strengthening of resource mobilization strategies and the sustainability of funding for the PNLMTN-CP. In FY19 a resource mobilization plan was developed and validated with the support of the End in Africa project through Deloitte. Implementation of this plan

resulted in initial meetings with two private banks and one international organization; further meetings are necessary to encourage greater interest.

In FY20, the PNLMTN-CP will continue to advocate with the agricultural councils (coffee-cocoa, cotton-cashew nuts, food crops, etc.) for material and financial support for PC-NTD activities. The PNLMTN-CP also intends to expand advocacy with the government to create a PC NTD budget line item; with local private companies, local elected officials (town halls, districts, regional councils, etc.) to develop the public-private partnership to mobilize additional resources; and with DGS to (i) include PC NTD in the minimum package of activities (MPA) of initial contact health centers, (ii) set up a common exchange platform with the National Malaria Program (PNLP) and other platforms to integrate vector control activities, and (iii) organize a national PC NTD day.

The new approach to advocacy will integrate not only resource mobilization but also aspects related to policy changes. The PNLMTN-CP also intends to align advocacy with the priorities of the sustainability plan.

- In FY20, Act | West will technically and financially support the PNLMTN-CP to: Organize a workshop to revise and update the PC-NTD advocacy plan and include key advocacy interventions into the sustainability plan to support advocacy for resources mobilization, policy changes, cross-sector collaboration and integration of SCH/STH services with existing platforms. As Act | West is supporting Cote d'Ivoire to define a morbidity management strategy, the needed advocacy interventions to support the implementation of the plan will be included into the advocacy approach. By identifying gaps, this activity will help to create an integrated approach. This technical assistance will help the PNLMTN-CP through the process of aligning the interventions defined into the previous advocacy plan with the sustainability plan.

HSS strengthening and sustainability of control programs

- Support The country to co-lead the 2020 World Health Assembly Side Meeting on NTD Sustainability

Act West will continue to technically support USAID effort in engaging global community and country leadership in developing, implementing and monitoring an NTD sustainability agenda. As part of the key interventions, Act I West will provide technical and financial support to the Cote d'Ivoire MOH to co-lead the organization of the 2020 World Health Assembly Side Meeting on NTD Sustainability planned during the WHA 2020.

In FY20 the following activities will be implemented and supported by Act West:

- Assist the MOH/NTDP preparing the event
 - Set up a preparation committee led by the MOH/NTDP
 - Organize a committee preparation workshop in Abidjan with 10 participants (members of the committee)
 - Sensitize through regular meetings the NTDP, the Health Authorities and the Government for a country buy-in
 - Prepare country application to the event and identify and influence key stakeholders to participate
 - Prepare the country statement to share during the side event
 - Organize monthly check points with FHI 360 and the NTDP
 - Develop an action plan to translate the WHA event commitment into concrete actions.
- Strengthen In-country Partners' Coordination Mechanism/Meetings

At country level, several partners support the NTDP in various areas. From FY20, Act West countries will engage substantial efforts on the Policy side through development of the Sustainability plan, adoption of

WHO roadmap, development of master plans. As per NTDs sustainability agenda, there are ongoing effort in some Act West countries to mainstreaming in a progressive way immunization services provision into the health system. Partners coordination and communication will help leverage ongoing and upcoming opportunities. Act | West will initiate consultations with WHO to set up partners coordination mechanism. The lessons learned from this first group of countries will serve to roll out the int. Q1 will be used to set up the coordination mechanism, leveraging the development of the sustainability plan

In FY20, Act West will support through FHI 360 the following activities:

- Two-day Workshop to develop synergy plan and a matrix to coordinate interventions among partners and support to the NTDP including WHO
- Three Quarterly meetings

IV. PLANNED ACTIVITIES: SCH, STH, POST-VALIDATION / VERIFICATION MONITORING (IR3)

i. Schistosomiasis

Previous and current FY activities and context:

The End in Africa project supported the PNLMTN-CP from 2016 to 2018, funding SCH MDA for adults in three hyperendemic HDs (Touba, Zouan hounien, and Bangolo); SCI supported SCH MDA for school-age children (SAC) in the same HDs. A total of 505,107, 376,785, and 402,555 people were treated in 2016, 2017, and 2018 respectively.

SCI has supported all SCH MDA nationwide since 2019 and this will continue in FY20.

Plan and justification for FY20:

Act | West will support the PNLMTN-CP's effort in strengthening the environment through reinforcing cross-sector collaboration and partnership but also supporting the country to identify and use cost effective and long-term delivery platforms. Act | West support will also be extended to supporting Cote d'Ivoire to include NTD SBCC messages into IEC materials (*see Cross sector section below for details on planned activities*).

ii. Soil-Transmitted Helminths

Previous and current FY activities and context:

STH mapping has been linked to SCH mapping and has shown that all 112 HDs in the country have endemic STH. Per the WHO-recommended strategy for STH control, the 40 HDs with prevalence >20% require MDA. Of these 40 districts, 35 are co-endemic for LF and two are co-endemic for SCH and OV (Bocanda and Mankono).

The 35 HDs co-endemic with LF will be treated during the LF/OV/STH MDA. Fifteen of these HDs will undergo pre-TAS.

Plan and justification for FY20:

- Please see iv. IR1 Integrated MDA Activities, for information on LF, OV, and STH MDA.
- In 27 HDs where STH is co-endemic with LF, Act | West will support the PNLMTN-CP in conducting STH MDA.

iii. Post Validation/Verification Surveillance

Epidemiological surveillance of PC NTDs helps to assess the impact of MDA on populations and to detect pockets where transmission is ongoing.

Surveillance activities have not yet started in Cote d'Ivoire, and validation/verification of elimination are still several years away. For LF, the pre-TAS that are planned in FY20 may demonstrate that LF TAS1 can take place in FY21; this would be the beginning of surveillance for that disease in certain HDs. For TR, the TIS that are planned in FY20 may mark the beginning of the surveillance period for that disease in certain HDs. Please see the LF and TR sections, above, for more detail on those activities.