USAID's Act to End Neglected Tropical Diseases | West Program FY2020 Annual Work Plan

BURKINA FASO



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I. ACRONYMS

2IE	International Institute of Water and Environmental Engineering (Institut International				
	d'Ingénierie de l'Eau et de l'Environnement in French)				
ALB	Albendazole				
BCC	Behavior change communication				
CDC	U.S. Centers for Disease Control and Prevention				
CDD	Community drug distributor				
CDTI	Community-directed treatment with ivermectin				
CFA	Circulating filarial antigen				
CS	Control (Spot-check) site				
CSM	Community self-monitoring				
CSPS	Center for Health and Social Promotion (Centre de Santé et de Promotion Sociale in French)				
DfID	Department for International Development				
DGAP	General Directorate for Access to Health Products				
DPSP	Directorate of Protection of Population Health (Direction de la Protection de la Santé de la Population in French)				
DQA	Data quality assessment				
DRS	Regional Health Directorate (Direction Régionale de la Santé in French)				
DSA	Disease-specific assessment				
EU	Evaluation unit				
EPIRF	Epidemiological Data Reporting Form				
FHI 360	Family Health International 360				
FTS	Filariasis Test Strip				
FY	Fiscal Year				
HD	Health district				
HKI	Helen Keller International				
HSS	Health System Strengthening				
ICP	Integrated communication plan				
ICP	Infirmier chef de poste (health center nurse)				
ICT	Immunochromatographic card test				
INDB	Integrated NTD database				
IEC	Information, education and communication				
IVM	Ivermectin				
KAP	Knowledge, attitude and practice				
LF	Lymphatic filariasis				
M&E	Monitoring and evaluation				
MDA	Mass drug administration				
MMDP	Morbidity management and disability prevention				
МОН	Ministry of Health				
NTD	Neglected tropical diseases				

NTDP	National Neglected Tropical Diseases Program (Programme National de lutte contre les
	Maladies Tropicales Négligées in French)
OV	Onchocerciasis
PC NTDs	Preventive chemotherapy NTDs
PNDS	National Health Development Plan (Plan National de Développement Sanitaire in French)
SCH	Schistosomiasis
SCM	Supply chain management
SAE	Severe adverse event
SS	Sentinel site
STH	Soil-transmitted helminths
TA	Technical assistance
TAS	Transmission assessment survey
TF	Trachomatous inflammation - follicular
TFGH	Task Force for Global Health
TIPAC	Tool for integrated planning and costing
TSS	Trachoma surveillance survey
TT	Trachomatous trichiasis
USAID	United States Agency for International Development
WASH	Water, sanitation and hygiene
OMS	World Health Organization

II. TECHNICAL NARRATIVE

1. National NTD Program Overview

In Burkina Faso, Neglected Tropical Diseases (NTDs) are a priority of the 2011-2020 National Health Development Plan (*Plan National de Développement Sanitaire* or PNDS in French), whose goal is to improve the overall health of the country population. Burkina Faso's national NTD Program (NTDP) coordinates integrated activities for the control and elimination of preventive chemotherapy (PC) NTDs, including lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), soil-transmitted helminthiasis (STH) and trachoma. The NTDP was established in 2013 to integrate several vertical NTD control programs, including the National Onchocerciases Control Program (established in 1991), the National Program to Eliminate LF (2001), the National Blindness Prevention Program (2002), and the National Schistosomiasis and Soil-Transmitted Helminthiasis Control Program (2004). The NTDP is composed of 11 units, including seven technical units and four cross-cutting units (communication, logistics, laboratory services and monitoring and evaluation).

The NTDP is a part of the Protection of Public Health Directorate (*Direction de la Protection de la Santé de la Population* or DPSP in French), which is situated within the Directorate General of Public Health (*Direction Générale de la Santé Publique* or DGSP in French) within the Ministry of Health. The 13 Regional Health Directorates are responsible for implementing and supervising NTD activities in the 70 health districts (HDs). The HDs are responsible for implementing disease control activities in general, including NTDs, in collaboration with the Centre for Health and Social Promotion (*Centre de Santé et de Promotion Sociale* or CSPS in French) and the community. At the community level, community drug distributors (CDDs) conduct social mobilization, distribute the drugs and report any serious adverse events (SAEs) to their supervisor (for onward reporting to the MOH, HKI, FHI 360, USAID and drug donation companies). The district and regional hospitals are responsible for morbidity management associated with NTDs and management of any SAEs, in collaboration with the NTDP.

The NTDP also benefits from the direction of an NTD steering committee and technical committee, which meet two and four times a year, respectively. These committees were created in 2015 to strengthen the coordination mechanisms for the fight against NTDs in Burkina Faso following a recommendation from the World Health Organization (WHO).

The United States Agency for International Development (USAID) has supported the fight against NTDs in Burkina Faso since 2007, and currently provides support through the Act to End Neglected Tropical Diseases | West program (Act | West), managed by Family Health International 360 (FHI 360) and implemented by Helen Keller International (HKI). In addition to USAID, other partners provide technical and financial support to the NTDP.

2. IR1 ACTIVITIES PLANNED: LF, TRA, OV:

The strategies that the NTDP uses to fight NTDs are those recommended by the WHO. The results obtained, current challenges and activities planned for 2020 are set forth below for LF, trachoma and OV to achieve the program's objectives for each disease.

i. Lymphatic Filariasis

a. Previous and current FY activities and context

Mapping for LF was conducted in 2000 in Burkina Faso using immunochromatographic card tests (ICT) and all 70 health districts (HDs) in the country were found to be endemic. The prevalence of circulating filarial

antigen (CFA) ranged from 2-74%, with the Centre-Est, Est and Sud-Ouest regions having the highest baseline prevalence rates of between 26-74%. Mass drug administration (MDA) for LF began in 2001 under the national LF elimination program, which later became the LF elimination unit of the NTDP in 2013.

The Sud-Ouest HDs were approved for biannual LF treatment by the WHO in 2010, when albendazole (ALB) was integrated with the biannual OV treatment with ivermectin (IVM), to address the high LF prevalence in this region. These are the only four HDs that have undergone biannual MDA for LF. However, this second round LF MDA was not conducted in 2018 in order to conduct OV epidemiological surveys.

Tremendous progress has been made toward LF elimination in Burkina Faso to date. In 2019, **61 of the 70 HDs (87%) have stopped annual MDA** following satisfactory results of the transmission assessment survey (TAS1). One HD (Diebougou) recently passed pre-TAS in FY19 and will go on to conduct TAS1 in FY20. Of these 61 HDs, 24 (39%) have subsequently passed TAS2, and 21 (34%) have passed the TAS3 using ICT or, since 2016, the filariasis test strip (FTS). Additional TAS2 and TAS3 are planned in August 2019 under Act | West, in six and one evaluation units (EUs), respectively.

LF MDA was conducted in four HDs in FY18 with USAID support (the other five LF endemic HDs were treated with World Bank support after the closing of the End in Africa project, in December 2018). Two HDs (Batie and Diebougou) did not meet the epidemiological coverage target in FY18 (42.9% and 64.3%, respectively). The low epidemiological coverage results in these two HDs is due to the fact that OV-endemic villages were excluded from MDA to conduct the OV epidemiological survey in Sud-Ouest region (the eligible population in the excluded villages was omitted from the coverage denominator). The OV survey was funded by World Bank and the methodology used was OV16 and skin snip. In FY19, nine HDs conducted LF MDA from September 2-7th with support from Act | West and supplemental funds from the World Bank for increased CDD motivation and to strengthen supervision.

Nine HDs are still undergoing MDA. Six of these HDs conducted pre-TAS recently in FY19 using FTS. Antigenemia (Ag) prevalence remained above 2% in the majority of sentinel and spot check sites (CS) assessed. Only Diébougou HD is eligible for TAS1 in 2020.

There are several factors which can contribute to the observed persistent LF transmission in the Centre, Est, Sud-Ouest and Centre-Est regions and can broadly be categorized into three areas:

- 1. Insufficient MDA coverage
- 2. DSA implementation quality
- 3. Other factors, including high baseline.

Insufficient MDA Coverage

There is significant internal and cross-border population movement in these HDs and coupled with environmental factors; sociocultural factors and a fear of adverse events, these factors could contribute to poor compliance and insufficient MDA coverage. In addition, issues identified with MDA implementation such as poor compliance with directly observed treatment (DOT) may also be contributing to persistent LF transmission.

Demographic information collected during TAS and pre-TAS shows that cross-border migration is in fact a challenge to reducing LF transmission. From 2015-2017, of 29 children who tested positive on the LF TAS, five had visited Côte d'Ivoire and had returned to Burkina Faso less than three years ago. In 2018, LF control sites showed that nearly 15% (33/225) of FTS positive individuals had spent time in Côte d'Ivoire.

In 2019, a study was conducted in collaboration with the NTD-SC in Atlanta in Batié and Tenkodogo HDs to understand factors contributing to pre-TAS failure. A validation meeting is planned in October to

disseminate the final results for Tenkodogo HD, and to recommend and officially adopt the proposed changes in the MDA strategy for FY20. Preliminary results are outlined below, based on the meeting already held to discuss results for Batie HD:

- 91.80% (2989) of those surveyed had received the drugs, among which 90.79% (2,956) swallowed the drugs. This coverage was also lower than the 2018 reported coverage (103.1%).
- Primary reasons why those who received IVM+ALB but did not swallow the drugs were fear of adverse events (45.45%) and pregnancy and breastfeeding (30%).
- Primary reasons why eligible persons had not received the drugs were absences (46% in Batie and 10.3% in Tenkodogo), refusals/absents not followed up (8.93% in Batie and 13.55% in Tenkodogo) and being uninformed about the campaign (19.64% in Batie and 17.42% in Tenkodogo).
- In general, 38.39% of those surveyed participated irregularly in annual MDAs (32.17% in Batie and 44.84% in Tenkodogo) and the average person had taken the drugs 4.3 times over the last 5 years.

As for the qualitative study in Batie HD, the following results are noted:

- Those surveyed had incorrect perceptions of LF, for example that "LF is less of a concern than
 other diseases, such as malaria, diarrhea, anemia, and hepatitis" and that "the causes of LF come
 from dirty water or food".
- Some CDDs did not follow-up with those who were absent or refused treatment during MDA.
- There were instances where untreated people were marked on the treatment forms (i.e., those who received drugs but did not swallow them).
- The duration of the MDA campaign varies from 2-4 days depending on the community.
- Local religious and traditional leaders are unhappy because they were not involved in the selection of the CDDs.
- Some religious leaders refuse to swallow the drugs considering CDDs as "impure".
- There is mistrust between the CDDs and the health center nurses (ICPs).

Pending the validation meeting, strategies to address these challenges, incorporating the preliminary results from Batie HD study, are outlined in the "plan for FY20" section below.

In terms of operational research, the Task Force for Global Health (TFGH) also funded a study to follow up LF-positive cases recorded during the TAS2 and TAS3 surveys in the three EUs of Central Plateau, Léo-Sapouy and Boromo-Dédougou. The objective of this study is to determine the sampling strategy to follow up positive cases after the TAS2 and TAS3 that optimizes the likelihood of correctly identifying proof of active transmission, while using the fewest program resources. HKI has requested a copy of the results of this study from the PNMTN.

The country's worsening security situation has impacted post-MDA LF surveillance activities. The NTDP has been unable to conduct TAS3 in the Sahel EU (Djibo, Dori and Gorom-Gorom) since 2017. In FY19, LF DSAs were postponed in Sebba (TAS2), Centre-Nord (TAS3), Boucle du Mouhoun 1 and 2 (TAS 3), Diapaga and Gayéri-Pama (TAS2) EUs due to the security situation.

DSA implementation quality

While it is not believed that the pre-TAS already implemented were of poor quality and did not contribute to the pre-TAS failure, efforts will be taken in FY20 to ensure high quality DSA implementation (see below under M&E).

Other

Baseline mapping showed elevated antigenemia before treatment began. This may be a contributing factor in persistent LF transmission and reinforces the need to improve MDA coverage, above.

b. Plan and justification for FY20

LF MDA in 5 HDs

LF MDA is planned in five HDs (Bittou, Ouargaye, Batie, Gaoua and Kampti) in FY20 with support from Act \mid West, targeting 825,368 people of \geq 5 years of age. This will be the first round of MDA for these five HDs following the recent pre-TAS failure in 2019 (see Table A above).

Three districts (Bogodogo, Tenkodogo, Fada N'Gourma) failed pre-TAS in 2018 and have now received two more rounds of MDA, although coverage data for the September 2019 MDA is not yet available. These three HDs will conduct re-pre-TAS in FY20).

CDDs will be trained to distribute IVM and ALB within their communities. Two CDDs per village will be recruited for the drug distribution which is done over a period of at least six days. The campaign duration will be extended without additional cost if the desired coverage is not reached in a village through daily CSPS monitoring and CDD reporting and using the Supervisor's Coverage Tool. The drugs are distributed door-to-door in villages and at fixed locations or distribution points in health centers, barracks, offices and schools. The additional strategies adopted in 2018 (directly-observed treatment, marking of absent/refusal households for targeted follow-up, identifying and treating people who experienced prior adverse reactions) and the strategies that emerge from the recent pre-TAS failure study will be implemented during this MDA.

Additional strategies were adopted in 2018 to improve MDA coverage in LF hot spots. One such strategy that has been successful is marking households with absentees/refusals and recording them in a register for follow-up. Results from the 2018 MDA campaign show an improvement in coverage rates, but above all, an improvement in the quality of MDA implementation, which was observed by the supervisors. There were fewer recorded refusals and less reluctance to take the medications in the HDs that implemented this strategy compared to previous years. This strategy will be reinforced in the upcoming FY19 LF/OV MDA (planned for September 2019) and improved upon in FY20 to ensure CDDs follow up with all absentees/refusals after the official end of the campaign.

The following strategies aimed at improving MDA coverage will be improved upon or newly introduced in FY20 in response to recent pre-TAS failures and results from the study supported by NTD-SC:

- Strict adherence to directly observed treatment (DOT). This will be emphasized during social mobilization, MDA cascade trainings and closely monitored during supportive supervision.
- Training of a new pool of supervisors and refresher training of existing supervisors will be conducted, and those qualified supervisors selected will conduct the WHO-recommended Supervisor's Coverage Tool (SCT) at the end of the six-day campaign to identify villages where coverage may be low. The distribution periods will be extended accordingly.
- The NTDP will establish an official SOP for follow-up of absentees/refusals after the end of the campaign, which will include:
 - Recording those who were absent or refused MDA in a register, and physically marking the households of absentees/refusals for follow-up; and
 - Supervisors will accompany CDDs to ensure people are followed-up and receive DOT.
- During advocacy meetings at HD level, the district manager will emphasize the problems experienced in villages with low treatment coverage or a high number of drug refusals during the prior MDA. District managers will also inform local leaders of the pre-TAS results, explaining the need for their commitment to participating in the MDA and encouraging populations to accept the treatment through DOT.

- An official MDA launch event will be led by community leaders who will swallow the drugs themselves in front of their community to encourage compliance with DOT. These launch events will be held at the district level in FY20 which is a new approach. Previously, only one national MDA launch event was held prior to the campaign. District advocacy meetings will be organized prior to the launch to ensure their buy-in.
- Local leaders will also be engaged to record messages on the importance of MDA and DOT that will be disseminated in the local media.
- Review sub-district (village-level) coverage data and recent pre-TAS results to identify villages for special film screenings as part of the social mobilization strategy.
- Conducting MDA during the dry season (May) and in the early morning and evenings to reach people when they are most available. HKI will use the FAA mechanism to more strongly enforce the opportune time period for MDA, by specifying this in the contract.
- Revision of the CDD selection criteria, and involvement of local leaders in the selection process.
- During post-MDA data validation meetings at the district level, the HDs review village level
 coverage data and identify areas with poor coverage to be addressed during the next MDA. These
 meetings will continue to be a platform to discuss sub-district level results, reasons for poor
 coverage, and targeted corrective actions.
- In FY19-20, HKI intends to support the sub-district level planning process through a retrospective analysis of available sub-district level MDA coverage data, coverage survey data, and pre-TAS results in the remaining eight MDA districts. The analysis will give a more comprehensive overview of the situation in the remaining 8 MDA HDs, where district-level reported coverage (validated by coverage evaluation surveys) has been consistently high. In particular, HKI will support the NTDP to conduct a retrospective analysis of coverage data in the spot check sites assessed during the 2018 and 2019 pre-TAS to be presented at the post-MDA national evaluation meeting.
- The Act | West consortium, along with the NTDP, will support a holistic review of all MDA components including training modules, supply chain management, supervisory tools, data collection tools, etc. to be carried out. From this holistic review, HKI will develop an MDA quality improvement checklist, adapting existing tools or checklists (and identifying/addressing any gaps) from the NTD Toolbox to the Burkina Faso context. The checklist will be used by HKI and NTDP staff for MDA preparation, implementation, and supervision to ensure that all critical steps are followed for quality MDA.

To address the problems encountered during prior MDAs in treating residents of gold-mining sites, the NTDP will target these areas for specific interventions, such as showing videos and increasing the number of public criers and CDDs. In FY20, the NTDP will recruit CDDs and supervisors from within the mining areas. CDDs will be trained to capture non-resident workers using a tally sheet separate from the community register. Supervisors will be trained on the SCT to quickly assess coverage in the mining site and extend the drug distribution period as needed.

Coverage Survey

The NTDP will carry out post-LF MDA coverage evaluation surveys in one HD (Kampti) in FY20 following WHO guidelines. Act | West will provide TA for development of the protocol and training of surveyors. The results will be used to validate reported coverage, evaluate social mobilization strategies and better understand reasons for missed treatment. The coverage survey will be conducted in Kampti HD in early FY20 for the September 2019 LF MDA. The results will be used to assess potential coverage gaps and district-specific changes to the MDA strategy before the next round of treatment.

Supervisor's Coverage Tool

In order to improve LF MDA coverage, the NTDP plans to implement the WHO-recommended SCT in all five LF HDs in FY19 and FY20. The SCT is a new tool for Burkina Faso NTDP and effectively an enhancement to the rapid coverage survey that was previously implemented. This tool allows to take corrective measures for the current campaign to ensure coverage targets are met.

LF DSAs

LF DSAs planned in FY20 are described below.

Pre-TAS in 3 HDs

Three districts will conduct re-pre-TAS at sentinel and control sites in early FY20 according to WHO guidelines using FTS. These include Bogodogo, Tenkodogo and Fada N'Gourma HDs (in the Centre-Est and Est regions, respectively). Fifteen sites will be evaluated, as follows:

- Bogodogo HD: three sites (one with Ag prevalence >2% and two new sites to be evaluated)
- Tenkodogo HD: six sites (four with Ag prevalence >2% and two new sites to be evaluated)
- Fada N'Gourma: six sites (four with Ag prevalence >2% and two new sites to be evaluated)

The results will determine if the HDs are eligible for TAS1. Demographic data on positive cases will also be collected during the survey in order to conduct special follow-up visits during the MDA and ensure that these individuals and their family members receive treatment. Positive cases are followed up regularly by the health center nurse for treatment.

Although Fada N'Gourma is currently an insecure zone, the pre-TAS has been included in the work plan in hopes that the security situation will improve (however, this is extremely unlikely in the short term).

TAS1 in 1 HD (1 EU)

Following satisfactory results of the pre-TAS in 2019, TAS1 is planned in Diebougou HD in FY20.

TAS2 in 12 HDs (7 EUs)

In accordance with WHO guidelines, post-MDA surveillance surveys will be conducted in EUs that passed TAS1 in 2018 to confirm the sustained interruption of LF transmission. The results of these evaluations will help to confirm that transmission remains at a level where the disease is unlikely to recur. A total of 16 HDs (10 EUs) are due for TAS2 in FY20, but due to insecurity in some areas, we have only budgeted TAS2 in secure zones in 12 HDs (7 EUs). Six of these EUs were originally planned in FY19 but could not be implemented due to the health workers' strike. The same EU configuration proposed in FY19 in the approved survey protocol has been maintained for FY20 (please see the table below).

Districts	District	Number	EU Population	Status
	Population	of EUs		
Boulmiougou	1 031 732			
Nongremassom	394 045	1	1 801 699	Secure zone (green)
Signoghin	375 922			
Garango	237 955	1	467 167	Secure zone (green)
Pouytenga	229 212			
Manga	357 923	1	357 923	Secure zone (green)
Kombissiri	209 756	1	327 090	Secure zone (green)
Saponé	117 334			
Pô	234 668	1	234 668	Secure zone (green)
Bogandé	412 760	1		Secure zone (green)
Manni	201 650		614 410	

Koupéla	265,681	1	265,681	Secure zone (green)
Pama	135,991	1	266,632	Insecure zone (red)**
Gayéri	130,641	1		
Sebba	213,958	1	213,958	Insecure zone (red)**
Diapaga	539,953	1	539,953	Insecure zone (red)**

^{**}red (insecure) zones not budgeted in FY20.

TAS3 in 5 HDs (1 EUs):

A total of 18 HDs (11 EUs) are due for TAS3 in FY20, but due to insecurity in some areas, we have only budgeted TAS3 in secure zones in 5 HDs (1 EU). This EU was originally planned in FY19 but was not evaluated due to the strike among state health workers. The table below shows all TAS3 that are due in FY20, for context. The same EU configuration proposed in FY19 in the approved survey protocol has been maintained for FY20.

Districts	District Population	EU	EU Population*	Status	
Koudougou	415 873				
Nanoro	185 160	•	1 140 980	Secure zone	
Réo	220 400	1			
Sabou	118 556				
Tenado	200 991				
Nouna	399 032	1	399 032	Insecure zone (red)**	
Solenzo	393 167	1	393 167	Insecure zone (red)**	
Tougan	310 919	4	544.400	, / 1144	
Toma	233 189	1	544 108	Insecure zone (red)**	
Barsalogho	215 836	4	455 730	, , , , , , , , , , , , , , , , , , , ,	
Boussouma	239 894	1		Insecure zone (red)**	
Boulsa	235 664	4	400.003	/ 1144	
Tougouri	254 419	1	490 083	Insecure zone (red)**	
Кауа	431 146	1	431 146	Insecure zone (red)**	
Kongoussi	410 123	1	410 123	Insecure zone (red)**	
Dori	397 198	1	397 198	Insecure zone (red)**	
Djibo	532 121	1	532 121	Insecure zone (red)**	
Gorom-Gorom	306 614	1	306 614	Insecure zone (red)**	

^{**}red (insecure) zones not budgeted in FY20.

Act I West will continue to monitor the security situation in these EUs throughout the fiscal year. HKI Burkina Faso is recruiting a Security Officer in FY20 to better assess the security situation on a regular basis. This position will help to assess whether a window of opportunity may arise for quick and safe implementation of surveys in insecure zones. Survey protocols for these in secure EUs can be developed

in advance to be on "stand by" for implementation and supervision strategies will be adapted accordingly in consultation with FHI 360 (for example, emphasizing remote supervision by HKI and NTDP through daily communication with the survey field team).

Ensuring Quality DSA Implementation (LF)

Act | West will support the quality implementation of LF TAS and pre-TAS through training, monitoring and field supervision. While we do not believe that poor quality DSAs are contributing to the pre-TAS failures seen in Burkina Faso, DSA implementation will be strengthened. The pre-TAS and TAS protocols will be developed by the NTDP LF unit in collaboration with HKI and FHI 360, who will approve all protocols prior to implementation (protocol approval is a FAA requirement). The NTDP in Burkina Faso has solid experience in conducting LF surveys. NTDP in collaboration with Act | West technical staff will ensure that LF survey protocols outline proper quality control measures, including:

- The use of positive control to test FTS upon arrival in country and prior to field use;
- Proper storage of FTS in a cool and dry setting;
- Use of the WHO LF Diagnostic feedback form to document FTS performance in the field;
- Confirmatory re-testing of positive cases;
- Use of the TAS supervisor's checklist;
- Plan for follow-up and treatment of positive cases (see below).

Training/refresher training of field supervisors and survey teams will be led by the NTDP with technical support from Act | West (HKI-HQ/AFRO and FHI 360). Data will be collected with Android devices, using the ESPEN Collect platform. Lastly, HKI and NTDP staff will supervise the survey in the field to see that survey teams follow the protocol and quality control measures. When security permits, HKI-HQ/AFRO and/or FHI 360 will also directly observe TAS implementation in the field. All these new activities will be incorporated into the quality improvement strategy.

Follow-up of positive cases during TAS

In 2019, the NTDP received financial and technical support from the Task Force for Global Health (TFGH) to conduct a follow-up study of children who tested positive during TAS2 and TAS3. The conclusions of this study could help the WHO to provide directives to endemic countries on following up positive cases detected during TAS. In keeping with the recommendations of the technical committee on NTDs and pending the WHO directives, the NTDP will test the immediate family of a positive child and provide treatment free of charge. NTDP will also follow-up and treat the positive cases recorded in the EU during previous TAS surveys.

ii. Trachoma

a. Previous and current FY activities and context

Baseline mapping surveys conducted between 2007 and 2010 showed that trachoma was endemic in 30 HDs (prevalence of trachomatous inflammation-follicular or TF ≥10% among children ages 1-9 years¹). In 2016, per the new WHO guidelines, 18 HDs with TF prevalence between 5–9.9% were also considered endemic, giving a total of 48 HDs endemic for trachoma at baseline out of the 69 HDs that underwent baseline mapping. The urban district of Baskuy (central Ouagadougou) is not suspected to be endemic and the only HD in Burkina Faso that has not been mapped for trachoma.

The NTDP has set 2020 as the target for reaching the criteria to eliminate trachoma as a public health problem. The NTDP implements the WHO-recommended SAFE strategy (surgery, antibiotics, facial

¹ At the time of this mapping, the MDA treatment threshold was 10%.

cleanliness and environmental improvement) in addition to capacity building and behavior change communication (BCC) strategies toward the achievement of the elimination goal.

As of 2017, all 48 formerly endemic HDs have reached the stop-MDA criteria with TF <5% per the most recent impact assessment. Therefore, no USAID-supported trachoma MDA was planned or conducted in FY18-20.

Post-MDA surveillance has been underway since 2017, with support from USAID and the World Bank. To date, 27 HDs have conducted trachoma surveillance surveys (TSS) and TF prevalence was below 5% in all HDs. In FY19, TSS were planned in 16 HDs (22 EUs). However, TSS have been postponed in two HDs due to insecurity. Another five HDs re-scheduled the TSS for FY20 because the survey must start after September 30th, 2019 to respect the two-year timeframe after TIS. Therefore, nine HDs (12 EUs) will conduct TSS in FY19, from September-November 2019.

In addition to the TSS, trachomatous trichiasis (TT) surveys were conducted in two HDs (Orodara and N'Dorola) through USAID's Morbidity Management and Disability Prevention (MMDP) project in April 2019 (final results are not yet available). Additional TT only surveys are planned in 12 HDs in 2019 (Gourcy, Ouahigouya, Séguénéga, Thiou, Yako, Boromo, Nouna, Solenzo, Toma, Diapaga, Dano and Diébougou) with support from Sightsavers.

b. Plan and justification for FY20

TSS in 5 HDs (8 EUs)

TSS are planned in 5 HDs (8 EUs) in FY20. A total of 12 HDs (19 EUs) are due for TSS in FY20, but TSS in insecure zones have not been included in the FY20 work plan and budget given that these areas are currently inaccessible for the surveyors (please see table below).

Region	District	# EUs	Status	
Davida du Maribaria	Dédougou	2	Planned (green)	
Boucle du Mouhoun	Tougan	2	Insecure zone (red)	
Cascades	Sindou	1	Planned (green)	
Est	Fada	2	Insecure zone (red)	
	Gayéri	1	Insecure zone (red)	
	Manni	1	Planned (green)	
	Pama	1	Insecure zone (red)	
Hauts Bassins	Houndé	2	Planned (green)	
Sahel	Djibo	2	Insecure zone (red)	
	Sebba	1	Insecure zone (red)	
Centre-Nord	Kaya*	2	Planned (green)	
Centre-Nord	Kongoussi	2	Insecure zone (red)	
Total planned FY20	12 HDs	19 EUs		

Of the remaining HDs requiring TSS, seven were initially planned in FY19 and were postponed either due to the security context (Kongoussi and Kaya HDs in Centre-Nord region) or to respect the two-year timeframe since the last TIS, which were done after September 30th, 2017 (Gayeri, Pama, Manni, Fada, and Hounde HDs). Unfortunately, the security situation in Gayeri, Pama and Fada HDs means these districts are no longer accessible. The four HDs of Dedougou, Sindou, Tougan and Sebba were initially planned under World Bank funding for the 2019 calendar year but will now shift to Act | West given the imminent closure of the World Bank's NTD project. Dedougou and Sindou HDs are due for TSS in December 2019 (TIS was in December 2017) and Tougan and Sebba HDs could not carry out TSS in 2019 due to insecurity. It is important to note that the security situation in some areas remains fluid and thus

the distinction between "green" and "red" zones may change during the fiscal year (for example, Kaya HD was deemed insecure in FY19 but there is hope the situation is improving in this HD to allow for survey implementation).

Ensuring Quality DSA Implementation (trachoma)

The NTDP trachoma unit will develop the TSS protocol in collaboration with HKI-HQ/AFRO, FHI 360 and Tropical Data. FHI 360 will approve all protocols prior to implementation as specified in the FAA contract. HKI will support the training of eye technicians which is conducted by master graders and recorders who are certified by Tropical Data. An intergrader agreement exam is administered to each trainee (graders and recorders) to ensure the graders can properly identify the clinical signs of trachoma. HKI will verify the training scores of the graders prior to starting data collection in the field (this will be newly added as a FAA requirement).

No TSS are planned in insecure zones. However, Act I West will continuously monitor and assess the security situation in "red" or insecure zones. If a window of opportunity arises where it is safe for implementation, HKI will consult with the NTDP, Act | West technical team (HKI and FHI 36) and USAID on whether to proceed with the survey. HKI would then request approval for the additional EU during the fiscal year if financial resources are available. In this case, the supervision strategy would be modified as needed for insecure zones, emphasizing remote supervision support from HKI and NTDP for field supervisors through daily communication (i.e. WhatsApp group chats). In the case where a selected cluster or village is inaccessible, the NTDP will consult with Tropical Data on the selection of replacement villages. The survey training will outline the process that survey teams should follow when in the field, if this is deemed necessary. This is a recent lesson learned from Cameroon.

iii. Onchocerciasis

a. Previous and current FY activities and context

OV is endemic in two HDs in the Cascades region (Banfora and Mangodara) and four HDs in the Sud-Ouest region (Batié, Gaoua, Diébougou and Dano). The NTDP's objective is to interrupt transmission of OV by 2025 through the following strategies: community-directed treatment with ivermectin (CDTI); CDTI community self-monitoring (CSM); BCC; epidemiological and entomological surveillance; vector control; and capacity-building.

In 2019, Sightsavers is supporting two rounds of CDTI in the two Cascades HDs (Banfora and Mangodara). and Act | West is supporting the first round of CDTI in the four Sud-Ouest HDs (Batié, Gaoua, Diébougou and Dano) in September 2019. Act | West will also support CSM whereby the community supervises and monitors CDTI performance. The World Bank previously planned to support the second round CDTI in Sud-Ouest region in FY20 but with the close of the World Bank's NTD project in December 2019, this is currently a funding gap.

In 2018, only one round of OV CDTI was conducted in the Sud-Ouest region (December 2018) with support from World Bank. The second round was not conducted due to the epidemiological survey that was planned at the time of MDA and the need to meet the June close-out date for the END in Africa project. Future OV DSAs will be conducted prior to the MDA campaign to avoid missing the second annual round of treatment in OV-endemic villages. HKI will enforce this critical timing through the FAA mechanism. The FY19 OV CDTI campaign was conducted from September 2-11th, 2019, in conjunction with the LF campaign. Coverage results are not yet available. For FY20, Act | West will continue supporting one round CDTI and CSM in the four HDs in Sud-Ouest region.

In 2018, epidemiological surveys were conducted with support from the World Bank in 29 villages in Sud-Ouest region using OV16 rapid diagnostic test (RDT) and skin snip. The protocol involved skin snip biopsy for 250-300 people ages five and above per village and OV16 RDT for 2,000 children 2-9 years old. Results showed that OV16 and skin snip prevalence was below 5% in all villages. An entomological survey was also conducted in 2018 at 24 capture points in seven formerly endemic basins. A total 110,601 blackflies were captured, and analysis is still underway at the ESPEN/Ouagadougou laboratory. Twice annual CDTI will continue toward achievement of the elimination objective by 2025.

In 2019, with support from the World Bank, an epidemiological evaluation is planned for 30 villages located along the Léraba and Comoé basins. An epidemiological evaluation (skin snip and OV16 RDT) is also planned for the seven former endemic basins. These surveys were originally planned for July 2019 but have been postponed to later in 2019. No OV DSAs have been conducted with USAID support in FY18-FY19.

Burkina Faso has established an oncho elimination technical sub-committee to strengthen the coordination mechanisms for the fight against oncho. The last meeting was held in January 2018. The main recommendations included synchronizing the CDTI campaigns with Côte d'Ivoire and creating a framework within which Burkina Faso's two endemic regions can share experiences and lessons learned in the fight against OV. A national onchocerciasis elimination plan does not currently exist, but a draft was created under the End in Africa project. Sightsavers plans to support the next OV elimination sub-committee meeting before the end of calendar year 2019.

Based on recommendations from the upcoming OV elimination sub-committee meeting, additional entomological evaluations (PCR O-150 test) may be planned in FY20 with support from Sightsavers. Sightsavers will also support epidemiological evaluations (skin snip and OV16 RDT) in the two Cascades HDs in FY20 to assess the prevalence after three years of CDTI in the Cascades region. Epidemiological and entomological evaluations were last conducted in Cascades region in 2016.

b. Plan and justification for FY20

OV MDA in 4 HDs

The CDTI is implemented in endemic villages within a given district, i.e., treatment does not concern the entire HD. In FY20, Act | West will support the first round CDTI in Sud-Ouest targeting 167,017 people. The door-to-door distribution strategy is used with households in villages and farming hamlets where the disease is endemic. Each CDD uses an OV treatment register, which lists the names of all members of the community to distribute IVM and observe the treatment. The distribution lasts 10 days.

Updating of OV MDA registers

CDTI treatment is based on the population census list. During the treatment, the CDDs also record all population events that have occurred between the prior and current treatment. It is thus essential to update the register in order to obtain up to date village populations. The update of the registers involves determining which individuals have moved away permanently or have died, completing missing information and registering new members of the household. When that process is complete, the Centres for Health Information and Epidemiological Monitoring (CISSE) in the HDs that are endemic for OV will enter and analyze the data. When the treatment registers are updated after each CDTI, the actors will offer suggestions and recommendations to improve management of the treatment registers and, thus, OV control.

Community self-monitoring (CSM)

During FY20, CSM activities will be conducted as part of CDTI implementation in six HDs of two regions (Cascades and Sud-Ouest). Act | West will support implementation of CSM in the four HDs of the Sud-Ouest. CSM enables communities to take ownership of CDTI. Selected community members are trained to conduct the monitoring. They will use the result to inform their community (under the supervisory guidance of the local supervisor, HKI and NTDP) on importance of MDA and how to reduce exposure to NTDs. When these recommendations are made from the community members themselves, there is a likelihood of buy-in by the community

Post-CDTI coverage survey (2 HDs)

In FY20, the NTDP will conduct post-CDTI coverage evaluations following WHO protocol. These evaluations will be conducted at least three weeks after the CDTI is implemented. The results will be used to validate reported coverage and identify corrective measures to improve coverage during future campaigns. The coverage surveys will be conducted in Batié et Gaoua HDs. These two HDs had the highest number of positives during the last epidemiological survey and also border Ghana and Cote d'Ivoire. Act | West will provide technical support for the development of the protocol and training.

iv. Integrated IR1 Activities

N/A

a. Social mobilization

To obtain the population's buy-in for the LF MDA, the NTDP, with support from Act | West, will implement communication activities nationally, as well as activities specific to regional, district, health facility and community levels in the hot spot districts. Proposed activities are based on data collected during coverage surveys and rapid surveys during MDA. Data collected from the LF campaign conducted in August 2018 showed that 593 (97.85%) of the 606 respondents were present in their villages at the time of MDA and of these, 509 (85.83%) were informed of the campaign (ranging from 83.62% in Fada and 88% in Tenkodogo). The main information channels cited were CDDs (41.06%), followed by town criers (40.67%), radio (35.17%) and health workers (some people cited more than one source). However, there are disparities by HD, for example, in Fada the most common communication channels were (in order) health workers-criers-radio while in Tenkodogo it was CDDs-criers-radio.

c. Supervision during the LF MDA

Cascade supportive supervision is carried out at all levels of the health system during the LF MDA and OV CDTI. Supervision tools by level will be used to assess preparation, implementation, training of the actors, drug management and the MDA data collection and reporting process. The main goal of these supervision visits is to ensure that the campaign organization and implementation comply with national directives. The supervision will be integrated for LF and OV in the Sud-Ouest region. The FY20 budget includes two supervisors at the health center level compared to one supervision per health center in FY19. The Act | West team will supervise the MDAs in all regions and HDs concerned, as well as the trainings and preparatory meetings.

Supportive supervision of the CDDs will ensure CDDs adhere to treatment guidelines, i.e. correct use of the dose poles, eligibility criteria, enforcement of the DOT protocol, corrected recording of drugs administered in the village register, supply chain management (reporting of stock-outs), and identification/referral of serious adverse events (SAE) cases to the supervisor.

As part of MDA supervision, the national-level team and the DRS/HDs will be trained to implement the SCT (rapid survey) to quickly assess coverage in their catchment area. Act | West will support training of a new pool of supervisors and refresher training of existing supervisors to implement SCT. Qualified supervisors will be selected to conduct the SCT at the end of the six-day campaign to identify villages for MDA mop-up.

Activities shared with other partners:

- Sightsavers will support CDTI implementation, the CSM and updating of the registers in the two OV-endemic HDs in Cascades region.
- Sightsavers will support any epidemiological and entomological OV surveys in the Cascades HDs following recommendation from the OV technical sub-committee.

The following funding gaps are noted in FY20 that do not currently have support from any partner:

- CDDs receive six days' stipend during the OV and LF campaign. In line with previous years, Act |
 West will support the cost of one days' stipend. In FY20 there will be a gap of five days' stipend,
 which was previously supported by the World Bank. HKI will support the NTDP to search for
 other immediate funding for the 2020 fiscal year to fill this gap, while also working closely with
 Deloitte to find sustainable financing solutions for the long-term.
- Act | West will support the first round of CDTI and CSM in Sud-Ouest region. World Bank funding for the second round will lapse in FY20 and NTDP will solicit funds from another partner to cover this cost.

vi. Dossier activities (both LF and trachoma)

a. Lymphatic Filariasis

Current validation timeframe

Five HDs failed LF pre-TAS in FY19; currently these HDs are projected to complete TAS1 in FY21, and TAS3 in FY25. Despite completing many TAS2 and TAS3 on time, the worsening security situation has negatively impacted progress in this regard. TAS3 in the Sahel region has been postponed since 2017, and additional EUs were postponed in FY19 due to insecurity.

Data security and completeness

The data on NTD control activities (including LF and trachoma) are secure and are the responsibility of the monitoring and evaluation unit of the NTDP. This unit stores the data, including the CIND, in password-protected computers and on external hard drives. For trachoma surveys, Tropical Data also maintains an online database of survey results. The LF- and trachoma-related morbidity data are gradually integrated into the national HMIS, i.e. the District Health Information Software 2 or DHIS2 (see "data security" section). The NTDP and the other actors at all levels will handle the ongoing process of updating the MDA and survey data.

In addition to these actors, the heads of the NTDP units have a copy of the data in their computers, which are also password-protected. Last, some data are stored on paper, in addition to the other storage methods referred to above.

Status of the dossier

The NTDP is in charge of LF dossier development with technical and financial support from Act | West. The NTDP has a considerable quantity of historical data on LF and the evaluation surveys conducted to date. The WHO_LF_elimination_dossier_template_data_annexe form was updated using the 2015 format. In 2018, the WHO published a new form that is used today. To date, only the monitoring and

evaluation (M&E) tab is incomplete. The other tabs have been filled in and are updated regularly. The NTDP has not yet started to draft the narrative portion of the LF elimination dossier.

A workshop to update LF morbidity data and present the LF elimination dossier is planned in FY19. The NTDP requests support from Act | West in FY20 for a second LF elimination dossier workshop to review and validate the historical LF data collected since 2001.

b. Trachoma

Current validation timeframe

In FY20, the NTDP will conduct TSS in the five HDs (8 EUs) to verify whether TF remains below the elimination threshold in the absence of treatment. Due to ongoing insecurity, some TSS will be postponed beyond FY20, or until the situation improves. Results from TT only surveys funded by Sightsavers and the MMDP Project will provide updated TT prevalence by EU to plan surgical interventions accordingly. TT surgeries will be funded by Sightsavers through the Accelerate project.

Data security and completeness

Same as LF (see above). In addition, with support from HKI and ITI, the NTDP has inputted all available TF and TT survey data into the trachoma excel dossier template.

Status of the dossier

The NTDP is managing the trachoma dossier development with technical and financial support from HKI through Act | West and Sightsavers. A trachoma dossier workshop was supported by the MMDP Project in May 2019 with participation from the Act | West program team. The workshop provided an opportunity to assess the data available, identify the steps to be completed and assign responsibility to the actors involved under the direction of the trachoma unit of the NTDP. Per this plan, the first draft of the trachoma elimination dossier is anticipated by December 2019. As part of next steps, Sightsavers is supporting an analysis of the F&E component of the dossier in collaboration with the water, sanitation and hygiene (WASH), education and environment sectors, to help collate the necessary F&E data. HKI, Sightsavers and ITI are supporting the NTDP to update the dossier excel file with all recent survey data while the NTDP is drafting the narrative portion. Act | West originally planned to support a second trachoma dossier workshop in FY19; however, the NTDP and HKI decided to postpone this meeting to FY20 once the first draft of the dossier is completed for review.

A five-day trachoma dossier review workshop is proposed in FY20 with support from Act | West to review the draft and update the F&E section of the dossier with data from Sightsavers who is conducting a landscape analysis on the F&E activities in the country. This meeting will also be an opportunity to discuss a general plan for surveillance while the national program awaits the completion of remaining TSS and TT only surveys. Participants will include the Ministry of Health, DPSP, members of the NTDP, the dossier development committee, and technical and financial partners such as HKI, FHI 360, USAID, Sightsavers, WHO, Tropical Data and ITI.

3. SUSTAINABILITY STRATEGY ACTIVITIES (IR2 and IR3)

i. Data security and management

Current status of data management

Data collection and transmission system

NTD data management is modeled on the national health information system (HMIS). The CDDs collect MDA data at the community level using registers or tally sheets. The data collected at the peripheral level

is transmitted to the program coordination in accordance with the national health information flow. MDA data are compiled and validated at three intermediate levels:

- The first level is the CSPS, which compiles data from village health volunteers or CDDs;
- The second is the HD, which compiles data from the CSPS; and,
- The third is the health region, which compiles data from the HDs.

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Data is transmitted through summary reports, using templates created at the national level. The DRS are responsible for transmitting the data to the NTDP coordination. After processing and analysis, the NTDP shares data with the WHO and partners including HKI under Act | West.

The same system is used to produce, collect, transmit and store NTD morbidity management data. Data collection is integrated into the national HMIS, which is managed by the directorate in charge of sectoral statistics. The NTDP has a use account that provides access to and the ability to track the data collected. A guide exists for data collection and reporting templates.

Data quality control

A quality control process is established at each level, overseen by the data managers. The reports are verified using a monitoring template set up by the NTDP. The completeness, timeliness, consistency and matching of the data are confirmed at each reporting level. The forms at HD and DRS levels are programmed to identify input errors.

All of these data control mechanisms are included in a data management procedures document that is provided to the data managers.

Feedback on data quality is also provided during the post-MDA data review meetings and validation sessions (see below). Feedback is also provided regularly on morbidity data using the data monitored through DHIS2.

WHO Country Integrated NTD Database (CIND)

Burkina Faso currently uses the CIND at the national and regional levels. National-level personnel have been trained and have received computer equipment so that they can enter MDA data into the CIND. A training for the regional data managers was also held in 2017.

CIND updates began in 2014 and the current national-level database contains data from 2001-2019. The "demography", "distribution" and "intervention" modules are up-to-date in the CIND for the years 2001-2018. Regarding the survey data, the LF and SCH mapping is current and the data from the other surveys are partially integrated. Data on the case management of NTDs and on the process indicators have not yet been entered.

Overall, the CIND is currently used to: store NTD-related data; create certain joint WHO reports (EPIRF: Epidemiological Data Reporting Form and Joint Reporting Form); monitor progress in NTD elimination; and create NTD dashboards. Burkina Faso has the capacity to manage and update the database in country and the NTDP will continue to update the data annually.

Procedures for securing NTD data

Procedures for securing data exist at every level at which data are accumulated. For levels 2 and 3 and the national level, data managers are responsible for overseeing the NTD data. In addition, the program set up a dashboard at all levels of the system. It is, above all, a tool for communication and for the promotion and visibility of the progress made to combat NTDs at every level. Given staff changes, this tool also serves as an institutional memory for new employees.

The data storage and security processes for each level are as follows:

- **CSPS level:** Treatment registers and reports are archived within the health center, where only health workers have access to them. However, the lack of document storage furniture does create major problems in terms of preservation of data at this lower level.
- HD and DRS levels: The physical documents (reports) at these levels are archived in document storage furniture accessible only to the data managers. Electronic data are stored in the office computers, laptops and external drives; all are password protected. Regular backup procedures have been created for these data.
- National level: In addition to archiving the physical documents, NTD data are stored in the databases available (including the CIND, Joint Application Package form, CIND, statistical yearbook, annual NTD report and Excel, Access and other databases). The data are stored on computers and hard drives. Copies of the databases are also available from the unit heads.

The CIND is backed up regularly and password-protected, with three kinds of users: administrators, data entry staff and reviewers. The other databases are protected by macros and passwords. The computers in which the data are stored are protected by antivirus software that is updated regularly. Burkina Faso's NTD data are also available on WHO websites and HKI maintains the USAID workbooks and copies of all survey and MDA reports.

Proposed FY20 activities:

- Post-MDA validation meetings: With the goal of obtaining quality MDA data, the program has been holding post-MDA validation sessions at the national level with DRS actors since 2016 and at the HD level since 2017 with head nurses. These consultation frameworks have helped to improve data quality. In FY20, the program will continue to hold these data validation sessions at every level with support from Act | West. The results of MDA data validation will be discussed during the DRS review meetings. An annual review of the data will be carried out at the national level with the health region participants.
- Data Quality Assessment in two regions: In FY17, the national level conducted an NTD MDA data quality assessment (DQA) for the first time in the Centre-South and Sud-Ouest regions. The DQA was extended to the Est, Centre-Est, Boucle du Mouhoun, Hauts Bassins and Sahel regions in 2018 with World Bank support. During 2017-2018, all the regions also received training on the DQA tool. For FY19, the DQA was planned at the national level for the LF MDA and by the regional level in the Centre-West, Plateau Central, Cascades and Hauts Bassins regions. Since 2016, a total 119 people have been trained on DQA thanks to technical and financial support from USAID/HKI, and additional TA for the DQA is not needed. For FY20, a DQA will be implemented after the LF MDAs for the Sud-Ouest and Centre-Est regions with support from the Act | West. These two regions will be on their second round of DQA implementation and the results will help to evaluate changes in data quality since the last assessment.

Integrating NTD data into the national health information system (HMIS)

NTD data that is currently integrated into the HMIS includes data on hydrocele, lymphedema and TT. A process to integrate other NTD indicators into the country's DHIS2 began in 2018. A pilot phase is underway in 2019 with support from the World Bank. WAHO plans to support the country in adapting campaign data collection tools for integration into national DHIS2 by 2020.

Since 2014, the NTD MDA campaign data have been integrated into the Ministry of Health statistical yearbook, which is prepared and published annually. Since 2017, these yearbooks have included specific

tables on NTD classifications, hydrocele surgery activities, TT surgery and NTD surveillance (identifying *Wuchereria Bancrofti* and SCH and STH parasites).

ii. Drug management

The NTDP's logistics and pharmaceutical products unit is responsible for managing drugs and other supplies. The program uses a logistics procedures manual that was issued in August 2014 and developed with support from JSI. Currently, the main supply chain challenges are:

- The procurement process managed by WHO has not permitted drugs supply to arrive in country in timely manner
- More training and support are needed at the Regional Directorate of Health and HD levels to improve drug logistics;
- The NTDP Health Product Management Manual needs to be updated; and,
- Training on reverse logistics is needed.

The below sections explain these challenges in more detail and the activities proposed in FY20 to address them.

Quantifying NTD drugs and preparing joint drug request forms

The joint application package (JAP) is submitted annually in accordance with WHO procedures. The JAP includes the joint request for preventive chemotherapy medicines (JRSM); joint reporting form (JRF); preventive chemotherapy EPIRF; and annual workbooks. Drug requests (quantification) are prepared based on the NTDP's annual objectives, the number of persons targeted for treatment, the average consumption/distribution data by drug and the inventory available in the country.

A meeting on preparing the joint drug request form was held in early April 2019. The 2020 drug request was submitted before April 15th, 2019 to enable NTDP to receive the drugs before January 2020. A similar meeting will be held in FY20 to support the NTDP to prepare the JAP for 2021. HKI will request to be copied on exchanges with the WHO to support NTDP in addressing any questions on the drug application in a timely manner.

Availability or reliability of drug storage and transport

Once received in country, NTD drugs are stored at the national level in secure warehouses before being transported to the health regions. Given the insufficient storage space at the national level, the MDA drugs are quickly sent to the regions once they are received. At the regional level, they are stored in secure warehouses before delivery to the HDs just prior to implementing the MDAs. The HDs also have secure warehouses to store drugs. At the CSPS level, drugs are stored in the essential generic drug sales warehouses.

Act | West supports the costs of transporting all drugs and medical consumables used by the NTDP from the national level to the regional agencies, and them from the regions to the HDs. The drugs are transported in secure trucks and delivered to the distribution sites by qualified personnel.

In FY20, the NTDP will ensure that the inputs necessary to implement the SCH MDA are supplied to 11 regions (Boucle du Mouhoun, Cascades, Centre, Centre-Est, Centre-Nord, Centre-Ouest, Centre-Sud Est, Nord, Hauts-Bassin and Sud-Ouest) and for the LF/OV MDA to five regions (Cascades, Centre, Centre-Est, Est, Sud-Ouest and Ouest).

Storage and transport will comply with the PNMTN's NTD drug logistics management manual's directives. The purpose of this manual is to provide all actors in the health pyramid the information needed to better

understand and more easily implement all aspects involved in managing the pharmaceutical logistics of NTD inputs in Burkina Faso. However, adjustments to the manual are necessary given the weaknesses identified during the input management audits, the evolving context of efforts to combat NTDs, and the revision of certain MDA directives and management tools. The last version of the manual was issued in 2014. HKI will liaise with FHI 360, USAID and ESPEN to review the current manual in FY20 to see if updates may be needed in FY21.

Reverse logistics

In FY19, actors from the 11 regions implementing the MDAs will benefit from reverse logistics training as part of skills-building in NTD drug management. This training will help to improve the quality of logistics data.

In 2018, the NTDP conducted a post-MDA drugs logistics audit to evaluate the performance of NTD products management in the HDs after the MDA campaigns. The main findings were the absence of procedural manuals at some DRS and, HD and HC levels; there were significant gap between reported (on papers) remaining drugs quantity and actual (physical) remaining quantities. It was also found that the existing procedural manuals are outdated. This activity took place in 2018 and is planned again in 2019 with World Bank support. No support is requested for reverse logistics training in FY20.

iii. Mainstreaming NTD drugs into the national system

In Burkina Faso, the drug supply system is handled by a central purchasing and management unit for generic drugs (*CAMEG*, in French). The MDA drugs and diagnostic inputs used during the surveys are donations that the NTDP receives directly; they are not integrated into the CAMEG distribution flow. The WHO manages the procedures for obtaining these drugs. However, some – such as PZQ and ALB – are on the national list of essential generic drugs that the CAMEG may purchase and distribute. The drugs distributed by the CAMEG are currently used in the routine health care system. However, in 2018, the CAMEG purchased PZQ tablets for high-risk adults for the NTDP with World Bank financing to implement the SCH MDAs.

A technical committee manages the health programs' priority disease inputs. The committee is revising the list of inputs for the health programs' priority diseases; the revision will take into account certain drugs used during MDA. To date, efforts have not been made toward mainstreaming NTD drugs into this current system. Per the sustainability assessment planned in FY20 (see "IR2 section"), an advocacy plan and next steps may be identified toward achieving this aim.

Monitoring and management of adverse events (AE) and serious adverse events (SAE)

In the event of an SAE, the following treatment and notification procedures apply:

- When the CDD learns of or observes an SAE, he/she refers the individual to the CSPS;
- The CSPS health worker evaluates the patient, treats him/her and/or directs the patient to the
 nearest medical center or hospital for appropriate follow-up care, based on existing capacity and
 the severity of the reaction;
- The district manager evaluates and treats the patient and informs the DRS, which in turn informs the national NTD program coordinator;
- The NTD program coordinator then informs WHO and partners including HKI, FHI 360 and USAID.

In cooperation with the health products vigilance center of the country's drug regulatory authority, a joint mission, composed of the General Directorate for Access to Health Products (DGAP), the NTDP, the

technical and financial partners and the DRS, travel to the field to investigate the suspected case. If an SAE is confirmed, the Ministry of Health's NTDP manager must notify the technical and financial partners, the execution partner and the manufacturer or supplier, based on the terms of the donation. The program receives support from the DGAP to manage adverse reactions. Care is provided free of charge to the patient.

This process for managing adverse reactions is triggered for every suspect case of an SAE. The CSPS health worker records every such case on a pharmacovigilance form that is transmitted to the employee's supervising health district. The form is also sent from that level to the DRS, which then transmits it to the NTDP and, subsequently, to the national drug regulatory authority to determine causality.

iv. Integration and HSS activities (IR2)

Overall, technical assistance is sought for FY20 to help Burkina Faso conduct a full assessment of the NTD program relative to the six sustainability or health systems strengthening (HSS) outcomes included into 'USAID's framework and strategy for sustainable NTDs programming'. This will help identify where the country sits on the "sustainability continuum." Following the initial assessments, technical assistance will be sought from Act | West to support the Burkina Faso MOH/NTDP to develop a sustainability plan.

The following sustainability related activities are planned in FY20 towards achievement of the six HSS objectives with technical assistance from Deloitte, HKI and FHI360:

Develop an NTD sustainability plan and support implementation (TA from Deloitte, HKI)

In FY20, Burkina NTDP will develop a sustainability plan that will set forth a plan for arriving at an achievable, more sustainable state for the NTDP program. Sustainability strategies can serve as a roadmap for achieving sustainability goals and establish milestones over a multi-year period, which can then be incorporated into health and other sector policies and strategies. Act | West will support the NTDP efforts in including influencing the integration of sustainability objectives into the upcoming NTD Master Plans or health sector operational plans.

The sustainability plan will reference the six sustainability outcomes and will provide a comprehensive overview of goals, activities, and progress needed towards a more sustainable and mainstreamed response to eliminating and controlling NTDs. NTDP will lead implementation of the sustainability plan and can request technical assistance from Act | West where needed. The development of the sustainability plan will include the following activities:

• Conduct a joint landscape analysis. NTDP will work with the Act | West team to identify and highlight sustainability challenges and priorities. The analysis will include an HSS component and a cross-sector component. The HSS component will help the NTDP assess gaps and opportunities to mainstream NTD programming into national health policies and the planning and budgeting framework. The cross-sector component of the landscape analysis will support NTDP to conduct a rapid analysis of nutrition, MCH, family planning, and community mobilization programs that will offer integration opportunities for NTD activities, building upon the country's SCH/STH transition plan created with support from the End in Africa project. The landscaping will be conducted in two phases: (i) a desk /literature review, and (ii) in-country key informant interviews. This landscape analysis will include the tool for integrated planning and costing (TIPAC) update scheduled for Q4 FY19 with TA from Deloitte. Inputs from a comprehensive landscape analysis will inform the content, timeline, and TA activities set forth in the sustainability plan. HKI Burkina Faso (implementing partner) will coordinate the process with

- the MOH and other Ministries while FHI 360 cross-sector coordinator and Deloitte will provide technical assistance for the joint landscape analysis.
- National IRS partners team building meeting. This will be a two-day workshop at country level led by
 HKI. The goal of this IRS team building meeting will be to provide the Act | West country team and IRS
 partners (Deloitte, WV, Americares, HSS team) opportunity to develop an integrated timeline looking
 to all planned activities and identify the most appropriate period for IR/S activities that will not distract
 IR1 activities.
- Cross-sector landscape analysis: Act | West will provide TA to the Burkina Faso NTPD to understand barriers, gaps and opportunities for cross-sector collaboration and integration of NTDs with existing platforms. The barrier analysis will aim to understand structural and infrastructural factors associated with the lack of integration of the PC-NTD interventions with sectors such as WASH, Malaria, School Health, Nutrition, Education, Environment etc. The inputs from the barrier/landscape analysis will support the development of a cross sector action that will be part of the country NTDs sustainability plan.
- Workshop to share findings of landscape analysis: Two-day workshop to share and discuss with stakeholders the findings of the landscape analysis and plan for the in-depth sustainability assessment and cross-sector barrier analysis.
- Perform in-depth sustainability assessment: Four-day workshop using the results of the landscaping and through the application of the Sustainability Maturity Model (SMM), Act | West will provide technical assistance to the Burkina Faso NTDP in defining sustainability gaps and targets in each area of the sustainability outcomes. Inputs from the in-depth sustainability assessment will inform the development of an actionable sustainability plan.
- Workshop for technical validation of the sustainability plan: Three-day workshop for technical validation of the draft of the NTD sustainability plan. Participants in this workshop will be decision-makers from the entities that participated in the workshops on landscaping, sustainability, and cross-sector barrier analysis. The plan for the three days is to dedicate two days to discussing the sustainability plan and reach agreement of the interventions and use the third day as an opportunity for the PNMTN to present the roadmap to MOH decision makers (for example a presentation to the cabinet).
- Engage in targeted advocacy efforts linked to sustainability outcomes: With financial data acquired through a TIPAC data analysis scheduled for September 2019, the NTD Program will engage in advocacy efforts for sustainable financing. Efforts will be targeted towards both the public and private sectors, with a focus on the former. An integrated advocacy/resource mobilization plan, or roadmap, will include resource mobilization objectives, policy changes, cross sector partnership and will support NTDP in reaching sustainability objectives. This plan will help the NTD Program to prepare for advocacy meetings with public and private entities, and to advocate for greater opportunities and funding for the program. Act | West partners will support the NTD Program in capacity building and development of advocacy materials, while it will be up to the country team to run the process and own implementation of the roadmap.

Specific advocacy activities may include:

NTD Program will advocate for an increase of government resources included in the budget line dedicated to PCT-NTDs control activities. Government entities will include DAF of the Ministry of Health (MOH), the Ministry of the Economy and Finance and potentially parliamentary officials or committees. Deloitte will support the NTDP to develop supporting documents and key messages for high-level advocacy. The advocacy materials will be developed based on the costing analysis generated by the TIPAC to highlight the value of investments in an MDA and the significant success achieved to date in eliminating LF and trachoma.

• In 2020, advocacy sessions will be conducted to call for integrating efforts to combat NTDs into regional and communal development plans.

v. SCH, STH, Surveillance post-validation / Verification (IR3)

a. Schistosomiasis

Previous and current FY activities and context

Burkina Faso began SCH control activities in the 1990s, focusing treatment in those areas considered to be at highest risk such as those near hydro-agricultural developments. The national program to combat SCH was established in 2002. Baseline mapping using the Kato Katz and urine filtration methods was conducted between 2004 – 2005 and showed that all 70 HDs were endemic for SCH. This led to the implementation of MDAs in all HDs. In 2013, the program became the SCH and STH elimination unit within the NTDP. The national goal is to eliminate SCH as a public health problem by 2025 (i.e., to reduce the prevalence of high intensity infections to <1% in all sentinel sites). In addition to MDA, other support strategies are implemented, including hygiene promotion, environmental sanitation efforts, information, education, and communication (IEC)/BCC, monitoring and evaluation, and capacity building.

In 2013, a national SCH review meeting was held and a committee of experts decided on the national treatment strategy based on prevalence data, WHO guidelines and considering local specificities. The country was classified into three endemic zones, which were divided according to ecological and environmental specificities at the regional level, not district level.

This treatment strategy, which has been implemented since 2015, has resulted in significant reductions in SCH prevalence at most sites. SCH MDA in FY20 has been planned according to this strategy (i.e., MDA once per year, once every two years, or once every three years according to prevalence, as indicated in Table 5a). SCH MDA was implemented in 44 HDs in FY18 and all HDs met coverage targets. The FY19 SCH MDA was conducted in 22 HDs in June 2019 but coverage data has not yet been validated by the NTDP.

In 2017 and 2018, control site evaluations were conducted in 39 HDs with World Bank support. The results showed that SCH prevalence had dropped significantly in all the sentinel and control sites. A total of 45 of the 72 sites (62.5%) had zero prevalence. However, sites with prevalence of high-intensity infection persisted, such as Panamasso in Dafra district, Tougouri in Tougouri district, and Nagbigou in Manni district. In-depth analysis also revealed sites where high-intensity infections are elevated relative to infection prevalence (for example, the Boromo site).

With a view to eliminating SCH as a public health problem by 2025, a second strategic review meeting was held in May 2019, with participation from HKI, FHI 360, WHO, USAID-Burkina and multiple other partners including IRSS, the International Institute of Water and Environmental Engineering (2iE), the Ministries of Environment and Education, and universities and research centers. The main recommendations from that meeting are as follows:

- Implement focused treatment in endemic villages;
- Update the SCH mapping of the entire country;
- Implement additional strategies at high-intensity sites (strengthen IEC, implement snail control strategies, support WASH activities including community-led total sanitation);
- Conduct treatment coverage surveys in areas with persistent high-intensity infection to validate the coverage reported;
- Conduct qualitative surveys in areas with persistent high-intensity infection to understand the reasons for this persistence; and,

Conduct operational research on the clinical efficacy of PZQ (with assistance from the WHO).

The NTDP intends to gradually implement these recommendations starting in 2019.For FY20, USAID support is requested for SCH MDA in 33 HDs, and for coverage surveys in 2 HDs with persistent high-intensity infection

Plan and justification for FY20

SCH MDA in 33 HDs

In FY20, 48 HDs in 11 regions will conduct SCH MDA. Act | West will support MDA in 33 HDs with a target population of 3,383,590 people, including 2,850,373 school-aged children (5-14 years). The NTDP is working with WHO and partners to secure PZQ for adults per the treatment strategy in areas with high endemicity. The drug distribution strategies will vary based on the target population: door-to-door within communities and at fixed locations (markets, health centers, schools, and public and private entities). The PNMTN has previously noted that AEs are most commonly seen with PZQ distribution compared to the other NTD drugs, and this can cause people to be reluctant to take PZQ. Therefore, the PNMTN trains health professionals as drug distributors for SCH to minimize side effects and reduce the number of refusals. To ensure effective implementation, CDDs living in the target community will accompany the health workers. Information is also disseminated to school teachers and by town criers, CDDs and health workers to encourage children to eat before school to help reduce AEs that may occur due to empty stomach.

Social Mobilization for SCH MDA

The social mobilization activities will be carried out during FY20 at the various levels of implementation, with financing from Act | West.

Training for SCH MDA

Training to implement the SCH MDA follows the same design and covers the same major points as the LF MDA, from the national level to the CSPS level.

Supervision during the SCH MDA

Cascade supervision is carried out at all levels of the health system during implementation of the SCH MDA. The main goal of these supervision visits is to ensure that campaign organization and implementation comply with national directives.

Post-MDA integrated coverage + KAP survey for SCH

Another recommendation from the SCH review meeting was to conduct post-MDA coverage surveys in areas with prevalence of persistent high-intensity infection to validate the coverages reported.

b. Soil-transmitted helminths

Previous and current FY activities and context

According to the results of the 2004 integrated STH mapping, STH were endemic in all 70 of Burkina Faso's HDs. Preventive chemotherapy is the main strategy used to address this problem, with treatments integrated into the LF and SCH MDAs. At the national scale, the objective is to reduce the rate of STH prevalence to less than 5% by 2020. The STH evaluations have been integrated with SCH and LF (integrated TAS) since 2016. The STH surveys continued until 2018, with the goal of obtaining prevalence data that could guide strategies to fight the disease during the transition phase. Given the low prevalence (<5%) in

all districts evaluated, the WHO recommendations do not call for implementing STH MDAs. To consolidate the gains in the battle against STH, the following recommendations from the 2019 review will be implemented gradually, in collaboration with the Nutrition Directorate and the Family Health Directorate:

- Integrate systematic deworming of the target population (pregnant women, women of childbearing age and children under 5 years) at the health facilities;
- Strengthen communications actions on the systematic deworming of the target groups.

In FY18, USAID-supported STH MDA was integrated with LF MDA in 4 HDs. All districts met the target program coverage, but one HD did not meet the epidemiological coverage target due to the exclusion of OV-endemic villages from the MDA to conduct the OV survey (see LF section). No STH-specific DSAs have been conducted in FY18 or FY19; however, the NTDP typically conducts integrated TAS+STH assessments. TAS+STH assessments were conducted in six EUs in FY18.

Plan and justification for FY20

STH MDA (N/A)

In Burkina Faso, STH treatment has historically been integrated with LF MDA (IVM+ALB) or SCH MDA (PZQ+ALB). The results of recent impact surveys revealed satisfactory progress and no STH MDAs are planned in FY20.

Activities shared with other partners:

- Sightsavers will fund the SCH mapping in 15 HDs.
- Act | West will support the post-treatment coverage survey for SCH in two HDs and Sightsavers will support this activity in three HDs.
- Act | West will support the cost of drug distribution (CDD stipend) for one day and other funding will be solicited to support the additional five days' stipend originally covered by the World Bank for the six-day campaign duration.