



# End Neglected Tropical Diseases in Africa

**END in Africa**

## Semi Annual Report

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*Submitted by:*

FHI 360

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

## Acronyms and Abbreviations

ADT	Associate Director, Technical
Ag	Antigen
ALB	Albendazole
ASTHM	American Society of Tropical Medicine and Hygiene
CDC	Center for Disease Control
CDD	Community Drug Distributor
CDTI	Community-directed Treatments with Ivermectin
CHW	Community Health Worker
CMS	Central Medical Stores
CSI	Integrated Health Center (CSI in French)
CSPS	Health Center (CSPS in French)
DHMT	District Health Management Team
DQA	Data Quality Assessments
DSA	Disease Specific Assessment
END in Africa	End Neglected Tropical Diseases in Africa Project
EU	Evaluation Unit
FHI 360	Family Health International 360
FPSU-L	Filarial Programmes Support Unit-Liverpool
FTS	Filariasis Test Strip
FOG	Fixed Obligation Grant
FY	Fiscal Year
GHS	Ghana Health Service
GOEC	Ghana Onchocerciasis Elimination Committee
HD	Health District
HDI	Health & Development International
HKI	Helen Keller International
HRA	High Risk Adult
ICCC	Intra-Country Coordinating Committee
IEC	Information, Education and Communication
IVM	Ivermectin
LF	Lymphatic Filariasis
M&E	Monitoring and Evaluation
MDA	Mass Drug Administration
MEC	Mectizan
Mf	Microfilaremia
MMDP	Morbidity Management and Disability Prevention
MOH	Ministry of Health
MoHS	Ministry of Health and Sanitation
NTD	Neglected Tropical Disease
NTDP	Neglected Tropical Diseases Program
OAA	Office of Agreements and Acquisition
OEC	Onchocerciasis Elimination Committee
Oncho	Onchocerciasis
ONPPC	The National Office of Pharmaceutical and Chemical Products (ONPPC in French)
Ov16	Onchocerciasis tests

PCT	Preventative Chemotherapy
PHU	Peripheral Health Unit
PNLMTN-CP	National Program for the Control of Preventative Chemotherapy NTDs
PNLSGF	National Program for Schistosomiasis, Lymphatic Filariasis and Soil-transmitted Helminthiasis (PNLSGF in French)
PNSOLO	National Program for Eye Disease and Onchocerciasis (PNSOLO in French)
PPMED	Policy, Planning, Monitoring and Evaluation Department
PZQ	Praziquantel
RISEAL	Réseau International Schistosomiase Environnement Aménagement et Lutte
RPRG	Regional Program Review Group on LF
RWA	Rural Western Area
SAC	School-age Children
SAR	Semi-Annual Report
SCH	Schistosomiasis
SCI	Schistosomiasis Control Initiative
SCM	Supply Chain Management
SOP	Standard Operating Procedures
STH	Soil-transmitted Helminthiasis
STTA	Short-term Technical Assistance
TA	Technical Assistance
TAS	Transmission Assessment Survey
TEC	Trachoma Elimination Committee
TEO	Tetracycline Eye Ointment
TF	Trachomatous Inflammation Follicular
TIPAC	Tool for Integrated Planning and Costing
TIS	Trachoma Impact Assessment
TSS	Trachoma Surveillance Survey
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UWA	Urban Western Area
WA	Western Area
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization

## Executive Summary

This semi-annual report (SAR) outlines the progress made during the third and fourth quarters in year seven (FY17) of the eight-year Cooperative Agreement No. AID-OAA-A-10-00050, “End Neglected Tropical Diseases in Africa,” or “END in Africa.” The six countries chosen by the United States Agency for International Development (USAID) for the operational portfolio include: Burkina Faso, Niger, Togo, Ghana, Sierra Leone, and Cote d’Ivoire. These countries have remained in the portfolio with no changes during the period under review. During this reporting period, FHI 360 and its partners undertook the activities outlined in the FY17 work plan (October 2016–September 2017).

FHI 360 worked with other partners in the END in Africa consortium to support and monitor the execution of activities of all sub-grantees and Neglected Tropical Disease Control Programs (NTDPs) within the Ministries of Health (MOHs) to ensure all work plan activities were executed per technical expectations and that USAID policies and regulations were observed. This included making periodic site visits, reviewing the sub-grantees’ monthly progress reports, monitoring project expenditures and cost-share contributions, handling project coordination, and addressing implementation issues.

FHI 360 continues to support the work of the NTDPs in the six END in Africa implementing countries toward the elimination of trachoma, lymphatic filariasis (LF) and onchocerciasis (oncho), and the control of schistosomiasis (SCH) and soil transmitted helminthiasis (STH) as public health problems. This goal is facilitated by robust monitoring and evaluation (M&E) systems. FHI 360 also works closely with implementing partners to guide mass drug administration (MDA) activities and ensure that program impact assessments are implemented in accordance with World Health Organization (WHO) guidelines and sound data are collected and reported to USAID in a timely manner.

The biggest project accomplishment to highlight this reporting period is the WHO approval of Togo’s dossier verifying the elimination of LF as a public health problem. Togo is the first sub-Saharan African country to have achieved this global target established by the 50<sup>th</sup> World Health Assembly. *“Togo’s achievement is a milestone for Africa”* said Dirk Engels, Director, WHO Department of Control of NTDs. *“It demonstrates how the co-implementation of large-scale treatment of affected populations and management of morbidity can be addressed to eliminate another avoidable neglected tropical disease.”*

Other key highlights include the 2017 END in Africa Partners’ Meeting in Accra, Ghana April 26–27, 2017. The meeting focused on sustaining achievements, program sustainability and local financing, and STH/SCH transition strategies for the six portfolio countries. The meeting was attended by program managers and officers from all 6 countries supported by the END in Africa Project, sub-grantees – HKI, HDI, Deloitte; USAID NTD team from USA, Task Force for Global Health, Centers for Disease Control and Prevention (CDC), WHO, Merck, and the Missions Director of USAID/West Africa who gave the welcome remarks. Also, the project shared the Sustainability Framework handbook with the project stakeholders. It was designed to help influence NTDP teams in how they are thinking about the trajectory of their programs as they work towards elimination and control targets and how they are sustaining impact in a post-elimination environment.

The END in Africa M&E Advisor continued to liaise with the country programs and other NTD partners to ensure appropriate execution of M&E activities. All six countries have submitted their FY17 SAR2 workbooks, which have been reviewed by FHI 360, USAID and RTI International. The outstanding issues from the FY16 workbooks have been addressed and MOH approval has been received for some countries. The final review process is still ongoing for Ghana and Niger.

Disease specific assessments (DSAs) conducted in the six countries for the period under review included: transmission assessment surveys (TAS) and pre-TAS for LF; epidemiological (epi) and entomological (ento) surveys for oncho; trachoma surveillance and impact assessment surveys; and SCH/STH sentinel site surveys:

- *Pre-TAS and TAS for LF:* Burkina Faso conducted pre-TAS in 12 sentinel and control sites in four health districts (HDs). Results show one of the four HDs has a microfilaremia (mf) prevalence of <1% and can proceed with TAS 1 in FY18. The other three HDs will continue with MDA. TAS 1 and TAS 2 were completed in 11/15 HDs and 3/11 HDs, respectively, while the remaining surveys are still ongoing. Preliminary results for the completed TAS 1 surveys indicate all HDs were below the critical cut-off and can stop MDA. Niger conducted TAS 1 in 4/7 HDs in April 2017 and results indicate all four passed TAS and may now stop MDA and begin surveillance. Results of the other three surveys conducted in September 2017 are not yet available. In addition, an mf survey was conducted in Arlit HD and results are still pending. Sierra Leone conducted TAS 1 in four evaluation units (EUs) covering eight HDs and all four EUs were well below the critical cut-off value for number of positives and LF MDA has since stopped in these eight HDs. In February 2017, pre-TAS was conducted in five HDs and all failed the pre-TAS. A follow up of this failure was conducted in May 2017 and indeed results confirmed the five HDs failed the pre-TAS with four failing for the second time to meet the criteria for conducting TAS.
- *Trachoma impact and surveillance surveys:* Burkina conducted trachoma impact surveys (TIS) in 13/15 HDs using Tropical Data. Available preliminary results of 9/13 HDs show a trachomatous inflammation follicular (TF) prevalence of <5% among children 1–9 years. The TIS is ongoing in the remaining two HDs. Cote d'Ivoire conducted TIS in Bouna HD and 3/26 villages examined had a TF prevalence of >5%, but the overall district TF prevalence among children 1-9 years dropped from 8.6% to 1.4%. Niger conducted TIS in three HDs and results show MDA is no longer necessary in Aguié HD, but the other two HDs both require an additional year of MDA. The results of the 3/5 trachoma surveillance surveys (TSS) conducted show surveillance will continue in 2/3 HDs, while Ouallam HD requires one round of MDA. The results of the remaining two TSS are not yet available.
- *Oncho epidemiological & entomological surveys:* Ghana completed the epidemiological survey aspect of the oncho impact assessment by surveying 304 communities (sites) in 155 HDs. Preliminary results show 41 HDs previously classified as non- or hypo-endemic have been recommended for MDA starting FY18. In Sierra Leone, an oncho impact assessment was conducted in children aged 5–7 years alongside the TAS 1 in eight HDs and separately in four HDs. Results indicate a significant decrease in prevalence, however, it also shows there is ongoing transmission of *onchocerca volvulus* hence the need to continue MDA. Togo conducted a stop-MDA survey in Maritime, a region thought to be hypo-endemic for oncho and preliminary data suggests maybe the region is ready to stop MDA.
- *SCH/STH impact assessments:* Ghana conducted a SCH and STH assessment in two HDs in the catchment area of the recently constructed Bui Hydroelectric power plant. The results indicated SCH prevalence >50% in both HDs. Only *Schistosoma mansoni* species were

found and no STH was identified in all sites surveyed.

Overall, about 55.9% and 69.8% LF-endemic and trachoma-endemic HDs have stopped MDA, respectively. This brings the number of districts to be treated in FY18 to 130 for LF and 39 for trachoma. The reported numbers include all six program countries. Additionally, oncho is now targeted for elimination of transmission in Africa, and 5 of the 6 END in Africa implementing countries have formed Onchocerciasis Elimination Committees (OECs), independent technical oversight committees that support oncho-elimination efforts in these oncho-endemic countries, based on recent WHO guidelines on oncho. The END in Africa, Associate Director, Technical (ADT) is a member of the OEC in 3 countries (Burkina Faso, Ghana and Sierra Leone and an observer of the OEC in 2 countries (Niger and Togo).

In this reporting period, 34,253<sup>1</sup> people were trained to conduct and/or supervise MDAs, or to perform M&E-related activities. Training sessions were cascaded and organized mainly around MDA or DSA activities. All countries disaggregated trainee data by gender. Available data shows that about 42.54% of the trainees were female.

As of September 2017, the treatment numbers that have been vetted and reported in FY17 SAR 2 workbooks include Cote d'Ivoire (all diseases), Burkina Faso (SCH, STH, and oncho), and Togo (one round of SCH). Based on this data, the total number of people treated for at least one NTD and the number of treatments provided in FY17 was 19,032,983 and 34,535,401, respectively. This brings the cumulative number of people treated for at least one NTD through END in Africa from 2010 to date to 221,586,381 and the cumulative number of treatments provided is 464,484,942. The cumulative numbers appear to taper off compared to FY16, but this is due to the incomplete FY17 MDA data. Ghana, Niger, and Sierra Leone planned their MDAs in the last quarter of FY17, hence their respective vetted results are still pending.

Over the past six months, END in Africa conducted the following main MDA activities:

- Burkina Faso – The NTDP conducted 3 MDAs: SCH MDA in 5 regions which achieved a program coverage of 97.95%. The Sud-Ouest region implemented its second round of LF and oncho treatment for FY17 in four HDs for each disease, and preliminary results show program coverage of 81.41% and 80.26%, respectively. And, Centre-Est region conducted the second round of SCH MDA, but results are not yet available.
- Cote d'Ivoire – The 2 NTD programs conducted 3 MDAs with USAID funding: LF/oncho MDA in 57 HDs with an overall program and therapeutic coverage of 89.79% and 71.83%, respectively. And given LF MDA is also treatment for STH covering all those ≥5years, the STH results for the 22 HDs which were among the 57 HDs treated for LF/oncho show a therapeutic coverage of 71.26% and program coverage of 90.24%. END in Africa supported SCH treatment of adults only (≥15 years) in the 3 HDs with a baseline SCH prevalence of ≥50% and obtained a therapeutic coverage of 83.62%. The trachoma MDA conducted in 5 HDs achieved a therapeutic coverage of 93.97%.
- Ghana – Due to a nation-wide oncho impact assessment, all MDAs were delayed allowing for the required time to elapse between the last MDA and the impact assessments to have valid results. Results for the community-based LF/oncho/STH MDA and the community-

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<sup>1</sup> Total number of trainees for the period under review only includes complete data for Cote d'Ivoire and partial data for Ghana, Niger, Sierra Leone and Togo. Burkina data only appears in the narrative and not in the FY17 SAR 2 workbooks.



based treatment for SCH in adults conducted simultaneously with the school-based MDA will be available in the next reporting period.

- Niger – The NTDP conducted its second FY17 MDA campaign in the next set of 4 regions. Preliminary results are only available for Agadez region and show the region achieved program coverage of 86.1% and 86.5% for LF and trachoma, respectively.
- Sierra Leone – SCH MDA was conducted in 7 HDs and NTDP reports showed a program coverage of 80.5%, which is higher than the 60% independent monitoring reported coverage rate. The identified poor coverage was due to falling disease burden, malaria bed net distribution, mother and child health week and the Muslim month of Ramadan all of which coincided with the MDA. Additional MDAs included LF/STH MDA in the Western Area (WA), LF/oncho/STH in 4 HDs, and Oncho/STH in 8 HDs, however treatment data is not yet available.
- Togo – A nationwide integrated MDA to treat STH, SCH, and oncho was conducted in August 2017. Data collection, entry, cleaning, and analysis are planned and coverage numbers and final reports are expected in November 2017.

For the financial management and capacity building component, the END in Africa team, specifically Deloitte Consulting LLP, continued to demonstrate progress in building more sustainable NTDPs in three of the six program countries. END in Africa's sustainability approach continues to look beyond resource mobilization, toward strengthening the NTDPs' financial management, advocacy, strategic social partnerships, and organizational capacity. In addition, END in Africa continued to transition its support from workshops to mentoring and coaching, further institutionalizing NTDP tools and procedures, and empowering NTDP teams.

Key activities over the past six months demonstrating the connection between END in Africa's activities and sustainability:

- Tool for Integrated Planning and Costing (TIPAC) update and data use for policy and program decision-making:
  - *Cote d'Ivoire & Togo*: Deloitte analyzed updated TIPAC data outputs for both countries to support the respective NTDPs in data use for decision making.
  - *Ghana*: Deloitte worked with the NTDP to help it leverage analytics and visualization tools and to develop a summary of findings from the TIPAC. The TIPAC results and findings shared with stakeholders at the END in Africa Partner's meeting in April 2017, in Accra, provided evidence for discussions around resource allocation.
- Partnership engagement and development:
  - *Cote d'Ivoire & Togo* – Each country has identified two priority partners and developed tailored business cases outlining the value that both the NTDP and the private sector partner will gain. The NTDPs in Cote d'Ivoire and Togo have requested meetings with potential partners and plan to submit their proposals in early FY18.
  - *Ghana*: Deloitte worked with both the NTDP and the Policy, Planning, Monitoring and Evaluation Department (PPMED) to apply the concepts and knowledge acquired from an April 2017 "Sustainability Planning and Business Case Development" workshop. The skills gained from the workshop enhanced the ability of the NTDP and PPMED to engage CAL Bank, Ecobank Foundation, uniBank, and Stanbic Bank Ghana to provide additional resources for NTDs.

- Advocacy strategies:
  - *Cote d'Ivoire*: The NTDP leadership team is currently conducting final reviews of the advocacy strategy and resource mobilization plan. With Deloitte's advice and mentorship, the team has developed key messages for the program and developed a value proposition that will be tailored to different audiences.
  - *Togo*: Deloitte helped the NTDP develop a tailored advocacy strategy and a supporting resource mobilization plan, which were approved and adopted by the program's leadership in July 2017.

In the next six months, FHI 360 and its partner, Deloitte, will continue to implement END in Africa project activities as outlined in the FY18 annual work plan. The two entities will support Helen Keller International (HKI) and Health & Development International (HDI) in the implementation of activities in each of their respective countries, plus Ghana & Cote d'Ivoire, including MDAs and second tier sub-agreements. Lastly, FHI 360 will continue to ensure that sub-grantees and partners remain compliant with all approved sub-agreements regarding financial reporting and project implementation.

## Project Management

During the period under review, FHI 360 executed various activities to ensure continued progress toward the goals outlined in the FY17 END in Africa work plan. This section outlines some of the key activities related to project management:

- Weekly conference calls and/or meetings were held between the USAID NTD team and the END in Africa team to exchange information, consult on various issues, and keep all stakeholders up-to-date on project implementation.
- The END in Africa team finalized and submitted the first FY17 semi-annual report (October 2016 – March 2017) to USAID.
- The END in Africa team facilitated FY18 in-country work planning sessions all six program countries – May (Burkina, Niger), June (Ghana, Cote d'Ivoire, Togo), and July (Sierra Leone) 2017.
- The project submitted all six FY18 country workplans and the overall HQ project workplan to USAID for review in FY17 Q4 and all approvals were obtained by the end of FY17.
- The project convened a partners' meeting in Accra, Ghana (April 26 & 27, 2017) to discuss among END in Africa national NTD programs, strategies for sustaining SCH/STH MDAs after treatment for LF is stopped, and strategic implications of elimination versus control programs; to share lessons learnt and best practices to foster sustainability of NTDPs and local resource mobilization based on a pilot initiative in Ghana, and to discuss how to sustain country program achievements through cross border collaboration and introduce a Geographic Information System (GIS) tool to facilitate coordination between countries.
- The Associate Technical Director participated in the 6<sup>th</sup> meeting of the Preventative Chemotherapy (PCT)-NTD Regional Program Review Group (RPRG) as an observer in Dakar, Senegal (April 10–12, 2017). The WHO representatives updated participants on the current global situation of the PC NTDs including a report that Togo has become the first country in Africa to achieve verification of elimination of LF as a public health problem.
- On May 2–3, 2017, the ADT participated in a two-day Trachoma Expert Committee (TEC) meeting in Accra to review the first draft of the Trachoma Elimination Dossier. Current program plans indicate the dossier may be ready for submission to WHO in October 2017.
- The END in Africa project team conducted routine monitoring and planning visits in Ghana (Apr 1–6, 2017) and Sierra Leone (May 14–20, 2017):
  - The project director and the ADT observed an oncho assessment at the Twifo-Adi-Mokwa, Central region of Ghana. A key observation made by all the those with whom discussions were held during the field visits is that the NTD actors are in general motivated by such visits by the project leadership. The visits are used to encourage field actors to continue their commitment towards the control of PC NTDs in the respective countries.
  - The ADT conducted a field visit in 2 districts of Sierra Leone to identify possible causes of a second LF pre-TAS failure with relatively high antigenaemia prevalence: The purpose of the field visit was: to interview district health workers, community drug distributors (CDDs), community leaders and community members of the villages used as sentinel/spot check sites during the last pre-TAS in the 2 districts that had the highest LF antigenaemia prevalence; and to identify possible reasons for the pre-TAS failure and the very high antigenaemia prevalence detected (25.9% and 16.7% in Bombali, and 19.4% in Koinadugu).

## Project Implementation

This section details the major accomplishments in project implementation in the past six months. It highlights activities related to the issuance and management of grants, summaries of sub-grantees, technical assistance/capacity building, collaboration and coordination, and M&E activities in each country.

### Issuance and Management of Grants

During the period under review, the FHI 360-led team executed the following activities in support of sub-grantees and MOHs:

- Monitored all sub-agreements to ensure compliance with USAID reporting, spending and cost-share requirements and regulations.
- Processed sub-grantee monthly financial reports and accruals.
- Reviewed budgets and fixed obligation grants (FOGs) submitted by sub-grantees. There are 45 FOGs to be issued in FY18 – 12 first-tier FOGs (in Ghana and Cote d'Ivoire) and 33 second-tier FOGs (in Niger, Burkina Faso, Sierra Leone, and Togo). The table below lists each country's estimated FY18 cumulative FOG totals:

Country	Number of FOGs	Total (USD)*
Burkina Faso	13	\$1,321,114
Cote d'Ivoire	7	\$1,996,208
Ghana	5	\$1,995,781
Niger	12	\$1,645,336
Sierra Leone	5	\$763,867
Togo	3	\$661,813

*\*The combined total FOG amounts for each country are likely to change.*

Ghana and Cote d'Ivoire FOGs are FHI 360 first-tier sub-awards and require approval from USAID; second-tier sub-awards for Togo, Niger, Burkina Faso, and Sierra Leone are reviewed and approved by FHI 360.

### Summary of Sub-Grantee Activities by Country

Competitively selected sub-grantees are currently supporting the NTDPs/MOHs of the six END in Africa countries: HKI in Burkina Faso, Niger and Sierra Leone; HDI in Togo; and FHI 360 in Ghana and Cote d'Ivoire.

#### Burkina Faso

- SCH MDA was conducted in five regions (28 HDs) May 11–15, 2017 and a total of 4,524,424 people were treated.
- The Sud-Ouest region conducted its second round of FY17 LF and oncho MDAs from July 17 – 26, 2017. LF and oncho MDAs were conducted in 4 HDs each, reaching a total of 480,070 and 155,590 people, respectively.
- Second round of SCH MDA was implemented in the Centre Est region in September 2017, but results are not yet available. The MDA did not integrated STH, as originally planned, since the albendazole (ALB) was not supplied in time by WHO.

- LF Pre-TAS was conducted in 12 sentinel and control sites in 4 HDs. END in Africa supported pre-TAS in 3 HDs and FPSU-L provided support in 1 HD. Results showed *mf* prevalence >1% in one or more sites in Bittou and Ouargaye HDs in the Centre-Est region.
- TAS 1 was completed in 11 of 15 HDs with preliminary results showing the number of positives are below the critical threshold. The remaining 4 surveys were still ongoing in the Centre-Sud region at the time of writing this report.
- TAS 2 was completed in 3/11 HDs in the Central Plateau region; TAS 2 in the other 8 HDs (Centre and Sahel regions) is ongoing. END in Africa support was provided for only 7 HDs.
- TIS was completed in 13/15 HDs supported by END in Africa; the remaining 2 surveys will be completed by October 6, 2017. The preliminary results from the nine districts that completed the TIS show TF prevalence below 5% among children aged 1-9 years.
- A post-CDTI coverage survey was conducted in the Sud-Ouest region, but the results are not yet available. A post-MDA coverage survey is underway in 2 HDs (World Bank funding).
- A workshop for the NTDP and technical and financial partners was held in Ouagadougou to finalize the NTD campaign data collection tools (May 18–20, 2017).
- A 2017-2020 NTD integrated communication plan was adopted over the period April 9 – 21, 2017, with support from the World Bank. The general objective of this plan is to promote behaviors that support NTD prevention and treatment between now and 2020.

Further details on activities in Burkina Faso are noted in Appendix 2.

#### **Cote d'Ivoire**

- The NTDP conducted mapping of 9 out of the 23 trachoma-suspect districts in March-April 2017 with financial support from USAID and Sightsavers, and technical support from the Tropical Data group. Four of the 9 HDs were declared endemic for trachoma, bringing the total number of trachoma endemic districts to 14.
- Nationwide LF/oncho/STH MDA was conducted on May 20–24, 2017 in 57 HDs (48 oncho-endemic districts, 57 LF-endemic districts, and 22 districts treated for STH). A total of 11,822,333 people were treated for LF/Oncho and 3,144,612 for STH.
- In May 2017, the END in Africa project supported SCH treatment of adults only ( $\geq 15$  years) in 3 HDs with a baseline SCH prevalence of  $\geq 50\%$ . A total of 376,785 adults were treated with a therapeutic of 83.62%.
- In July 2017, the NTDP conducted Trachoma MDA in 5 HDs treating 948,274 people.
- Implementation of a TIS in Bouna HD to assess the impact of MDA in the district after one round of treatment and to decide if MDA can be stopped per WHO recommendation.
- A data quality assessment (DQA) was conducted after the integrated LF/oncho/STH and trachoma MDA campaigns to evaluate the quality of the data management system involved with both MDAs at national, regional and district levels.
- The Cote d'Ivoire MOH (MSHP) created an integrated national program for the control of preventative chemotherapy NTDs (PNLMTN-CT), to replace the previous two programs that were responsible for PCT NTDs – PNLSGF (National Program for the Control of SCH, STH and LF) and PNSOLO (National Program for Eye Health and Onchocerciasis Control). The integrated program is led by the former director of PNLSGF, Dr. Aboulaye Meite.

Further details on activities in Cote d'Ivoire are noted in Appendix 2.

## Ghana

- The NTDP held a two-day Trachoma Expert Committee meeting in Accra on May 2–3, 2017 to review the first Draft of the Trachoma Elimination Dossier. Current program plans indicate the dossier may be ready for submission to WHO in October 2017.
- With funding support from AIM Initiative, the NTDP held an international workshop in Ghana on May 3–9, 2017, to develop an integrated NTD morbidity mapping protocol for Ghana and Liberia. The protocol will be used to conduct an integrated mapping of morbidity associated with LF, leprosy, yaws, and buruli ulcer in the two countries.
- The second meeting of the Ghana Onchocerciasis Expert Committee (GOEC) was held in Accra on May 31 – June 2, 2017. The key issues discussed included refining transmission zones in Ghana, analysis of historical oncho data for Ghana, and review of nationwide oncho impact assessment survey preliminary results.
- The NTDP held LF advocacy meetings in the Northern, Upper West and Brong Ahafo regions on May 18, 23 and 26, 2017 respectively. The meetings were used to inform the health managers on progress made in LF elimination, the post-treatment surveillance strategy, and to seek their support on this phase of the intervention.
- The NTDP held a 3-day residential Technical Review Meeting on August 14–16, 2017 to develop intervention and assessment strategy for oncho for 2018–2025.

Further details on Ghana's activities are noted in Appendix 2.

## Niger

- The official launch of the second FY17 MDA campaign took place on May 13, 2017 in Zinder.
- The second FY17 MDA campaign was successfully implemented in four regions (Agadez, Tahoua, Maradi, and Zinder) between April 20–August 24, 2017. At the time of this report, preliminary coverage rates are only available for Agadez region, which achieved 86.1% program coverage for LF and 86.5% program coverage for trachoma.
- TAS 1 surveys were implemented in 7 HDs in April and September 2017. However, results are only available for the 4 HDs (Matamaye, Magaria, Mirriah and Zinder) that conducted TAS in April 2017. Results indicate all 4 HDs passed TAS and may now stop MDA and begin surveillance.
- All three FY16 TIS in Aguié, Bilma and Tchirozérine were conducted from May – June 2017. The survey results show that MDA is no longer necessary in Aguié, but Tchiro and Bilma districts both require an additional year of MDA.
- All three FY16 TSS in Ouallam, Say and Filingue HDs were conducted from May – June 2017 as well. Results show surveillance will continue in Say and Filingué, while Ouallam HD requires one round of MDA. The FY17 TSS in Tera and Tillabéri HDs were held in August 2017 and results are still pending.
- The FY18 END in Africa work planning workshop was held from May 31 – June 2, 2017 in Niamey. Participants reviewed preliminary results and problems related to the FY16 MDA campaigns, the proposed NTD activities for 2018, and the financial contributions of USAID and other partners. The FY18 END in Africa work plan has since been approved by USAID.

Further details on activities in Niger are noted in Appendix 2.

## Sierra Leone

- MDA for SCH in seven HDs was conducted by community health workers (CHWs) from May 15 – 21, 2017 and later extended for another two weeks from June 27 – July 6, 2017 due to competing health priorities and the Muslim month of Ramadan.
- TAS 1 using filariasis test strips (FTS) was conducted alongside the Oncho epidemiological surveys in eight HDs grouped into four EUs from March 15 – April 14, 2017. All four EUs were well below the critical cut-off value for number of positives and LF MDA has subsequently stopped in these eight HDs.
- An oncho epidemiological survey using OV16 rapid diagnostic test was conducted in children 5-9 years alongside TAS 1 in eight HDs (April 2017), and separately in four HDs (Bombali, Koinadugu, Kailahun & Kenema) from June 26 – July 5, 2017.
- A follow-up *mf* survey in the 5 HDs (Bombali, Koinadugu, Kailahun, Kenema & Rural Western Area) that failed the pre-TAS was held from May 23 – 28, 2017. The results show the 5 HDs failed the pre-TAS, with four failing for the second time to meet the criteria for conducting TAS per the FTS results (Antigen (*Ag*) prevalence should be <2%).
- A national STH transition meeting was held on July 10, 2017. Discussion focused on updates on STH status in the country and the transition of LF MDA in 8 HDs.
- Social mobilization for the LF/STH MDA in Western Area (WA) commenced on March 8, 2017 in some communities, but was put on hold because ivermectin (IVM) did not arrive in-country in time to commence MDA. This activity was rescheduled to commence in the first week of September 2017.

Further details on activities in Sierra Leone are noted in Appendix 2.

## Togo

- In August 2017, the MOH implemented their eighth large scale integrated MDA to treat oncho, SCH, and STH with USAID funding. Results are not yet available, however, overall, the program expects the data will demonstrate high treatment coverage and minimal drug losses, as in Togo's previous MDAs.
- A stop-MDA survey was implemented in July 2017 in Maritime, a region hypo-endemic for oncho and preliminary data suggest may be the region is ready to stop MDA. These data will be used to determine the future of oncho treatment in the Maritime region.
- In April 2017, international stakeholders met to determine what additional trachoma mapping is needed in support of Togo's dossier demonstrating elimination of trachoma as a public health problem.
- Mapping of the HDs (Assoli, Dankpen, Keran, Tchamba, Tchaoudjo, Anie, Est Mono) likely to have prevalence of trichiasis above the elimination threshold began at the end of August 2017 and will continue through September 2017.
- The MOH implemented an investigation into 18 villages with continued high oncho prevalence despite ongoing IVM treatment. A team visited villages on the Benin and Ghana borders to determine the barriers to oncho control and elimination.
- HDI is currently facilitating several research efforts in Togo, not all of which are funded by USAID. HDI and the MOH are collaborating with the CDC on an add-on study to the USAID-funded trachoma survey, using rapid test prototypes and ELISA on dried blood spots to assess prevalence of antibodies to *C. trachomatis*.

Further details on activities in Togo are noted in Appendix 2.

### **Technical Assistance/Capacity Building**

As the lead partner in the END in Africa consortium, FHI 360 was responsible for coordinating technical and administrative support related to capacity building with all the sub-grantees and NTDPs. It took the lead in providing assistance on compliance with USAID requirements. In this regard, it strengthened the NTDPs' and sub-grantees' capacity to manage projects, work planning, M&E, data management, supply chain management (SCM), and quality assessment. Deloitte is the lead partner in financial management systems and reporting, including budgeting.

### **NTD Technical Assistance**

Throughout the period under review, FHI 360 and its partners assisted MOHs in identifying technical assistance (TA) requirements, creating assessment plans, and implementing a variety of capacity building activities. The main activities planned and/or executed by the FHI 360-led team are outlined below:



**Table 1**  
**Technical Assistance Requests in FY17**

Country	TA requested	Justification	Technical skills required	Number of days required	Suggested source	Status
<b>Burkina Faso</b>	Implementation of DQA	The NTD program has indicated the need of technical assistance on implementation of DQAs	Expertise on DQAs	2 weeks	END in Africa	Done
	Develop a trachoma elimination program	To provide the NTD program a road map to achieve trachoma elimination by 2020	Expertise in trachoma and experience facilitating planning discussions	8 days (FY17 Q3/Q4)	ITI/HKI	The NTDP no longer considers this a priority and will work with the Tropical Data consortium to determine the way forward for trachoma elimination in the country.
	Provide support to the technical/ elimination committees for NTDs targeted for elimination	Support needed to build technical expertise in NTDs and improve the NTDP's experience in coordinating technical committees that will help the NTDP make sound technical decisions to achieve elimination	NTD expertise	2 days (FY17 Q4)	END in Africa	An OEC meeting was conducted in February 2017. The NT DP will work with the Tropical Data consortium on trachoma.
<b>Cote d'Ivoire</b>	TIPAC data entry of NTDP annual plan for planning and decision-making	The TIPAC should be updated annually to help the Cote d'Ivoire NTDPs' support program sustainability	Expertise on the TIPAC	2 weeks	END in Africa (Deloitte)	Done
	Capacity building on research methodology and development of articles and abstracts for publication	There is a need for strengthening capacity of NTD PROGRAM on research methodology and development of articles and abstracts	Expertise on research methodology and development of articles and abstracts	1 week	University of Ivory Coast, local research institution & CDC	Not done. This is no longer a priority for the NTDP who had many activities to complete before the end of the fiscal year.
	Technical assistance on local resource mobilization	There is a need to start planning for sustainability of NTDP activities	Expertise on local resource mobilization	1 week	END in Africa (Deloitte)	Done and still ongoing
	Implementation of DQA	This is the second year of activities and DQA is needed to find ways of improving quality of data submitted on NTDs	Expertise on DQAs	2 weeks	END in Africa (Deloitte)	Done
<b>Ghana</b>	Assist NTDP in the transition from oncho control to oncho elimination program	TA is needed to guide activities including assessments, transmission zone demarcation and provide supervision and quality control.	WHO, Noguchi Memorial Institute for Medical Research/CSIR/School of Public Health	4 months	END in Africa	Done. An OEC was established to guide the NTDP on this.
	Develop strategy for STH treatment after LF elimination	LF treatment platform used for STH treatment is now reduced from 98 to 17 districts and expected to end before 2020. There is need to support the NTDP to determine the strategies for STH after LF treatment.	STH program implementation and technical expertise	Up to 2 months	END in Africa	Discussion ongoing. END in Africa technical team is working with the NTD program to develop a transition plan.
<b>Niger</b>	Provide training on completing and analyzing Workbooks' data	Errors in workbooks have led to slow reviews and multiple revisions; TA may alleviate the overall workload for all parties.	Expertise in workbooks	2 days (FY17 Q3)	END in Africa (FHI 360)	Done
	DQA training	Shortcomings in Data collection, quality assessment and processing that need addressing	DQA expertise	1 week	END in Africa	Done
	Integrated NTD database	Need assistance on how to use the Integrated NTD database. Activities relating to this new tool includes initial cascade training on the tool (for countries to know how to use it and the purpose) from central level, to regions, then districts.	Expertise in databases	1 week	END in Africa	Done
<b>Sierra Leone</b>	DQA Implementation	NTD indicated the need of technical assistance on DQA implementation after the training	DQA expertise	2 weeks (FY17 Q3/Q4)	END in Africa (FHI 360)	Done

Country	TA requested	Justification	Technical skills required	Number of days required	Suggested source	Status
Togo	Follow-up training from Deloitte to update the TIPAC for FY17	The NTDP would like assistance in the analysis and utilization of the data emerging from the TIPAC	Expertise on TIPAC	3 days (FY17 Q1)	Deloitte	Done
	Capacity building in supply chain management	The NTDP requests training on supply chain management to improve the movement and flow of drugs and data at all levels, with an emphasis on the district level.	Expertise in supply chain management	1 week (FY17 Q2)	TBD	Not done
	Organize a stakeholder meeting for mobilizing resources	The NTDP needs technical assistance on advocacy and stakeholder outreach.	Expertise on advocacy	3 days (FY17 Q1)	Deloitte	Done
	Training on WHO Integrated NTD database (M&E)	The NTDP needs to improve on current data management strategies and integrate data management across all individual NTD programs.	Expertise in WHO Integrated NTD database	2 weeks (FY17 Q1)	END in Africa (FHI 360)	Done
	Training on NTD Data Quality Assessment (DQA) Tool	The NTDP needs understand and use the DQA tool to assist with program M&E.	Expertise on NTD DQA	2 weeks (FY17 Q1)	END in Africa (FHI 360)	Done
	Training on ArcGIS and graphic presentation of data	The NTDP needs to have the capacity to independently graph their epi and entomology data, particularly to help with onchocerciasis elimination.	Expertise in training on ArcGIS; can train in French	5 days (FY17 Q1)	END in Africa (FHI 360)	Not done. This activity was dropped because of change in program leadership and the long duration of the absence of a program coordinator after the last program coordinator retired in January 2017.
	External expert participation at Togo's OEC meeting	Although Togo has many highly accomplished oncho experts, additional expertise from WHO, MDP and entomology and oncho elimination experts is needed at one OEC meeting during the year.	Expertise in onchocerciasis and onchocerciasis elimination (WHO/CDC, MDP, Carter Center)	1 week (FY17 Q3)	Consultants	Planned OEC meeting of September 2017 was postponed by the NTDP because the NTDP was unable to complete OV16 ELISA analysis of blood samples collected in Maritime Region to determine whether oncho MDA can be stopped in oncho-endemic districts of the Region.

## Supply Chain Management

END in Africa undertook the following activities to strengthen and institutionalize supply chain and drug management systems and accountability, which are essential for successful MDA.

### **Burkina Faso**

The second shipment of PZQ for FY17 was received on March 31, 2017 accounting for a total of 6,657,000 tablets; this was not reported in the SAR 1. The FY18 PZQ needs were also quantified and submitted with the WHO joint request for medicines. During the period under review, the NTDP received 14,278,500 IVM tablets for its LF and oncho control activities. And, in anticipation of trachoma MDA (pending TIS results), 9,000 tubes of tetracycline eye ointment (TEO) were received as well. If trachoma MDA is not warranted, the TEO may be distributed during future trachoma impact and surveillance surveys.

In addition, the NTDP obtained inputs (office furnishings, laboratory equipment and consumables and smartphone accessories) to be used to conduct the LF and trachoma surveys. The WHO also provided 20,700 FTS for the TAS. HKI worked with the NTDP to project the FTS needs for FY18 LF surveys: a total of 23,900 FTS (TAS + pre-TAS) are expected from the WHO donation program.

To date, the ALB shipment has not yet arrived in country because there was a delay in processing the request that was sent to WHO. The Burkina MOH, in collaboration with WHO-AFRO, is exploring the option of obtaining 4.9 million leftover ALB from Cameroon to conduct the pending FY17 LF MDA, which will probably be conducted in December 2017. If the transfer is unsuccessful, the WHO will supply ALB in November 2017.

### **Cote d'Ivoire**

A national committee was set up within the MSHP to coordinate effective SCM of essential NTD drugs and supplies/medical logistics. The committee representation draws from the NTDP, the Directorate of Pharmacy and Medicines Laboratories, the National Program for the Development of the Pharmaceutical Industry, and the National Warehouse (NPSP). This committee organized two annual meetings (one during the reporting period) to (i) develop and implement the annual SCM plan for PCT NTD medicines and logistics; (ii) monitor the plan on a quarterly basis; (iii) implement an information feedback system at all levels of the supply chain; and (iv) conduct critical analysis (strengths and weaknesses) of the supply chain system.

As stipulated in an agreement signed in May 2016 between the NTDPs (PNSOLO and PNLSGF) and the NPSP, NPSP continued to provide storage for PCT NTD medicines and logistics and monitoring of manufacturing dates to avoid drug expiration. This support includes package of the right quantity of drugs per region and district based on instructions received from the NTDPs.

In terms of drug donations, the NTDP used the WHO Joint Application Package (before 15 April 2017) to request for ALB, IVM and PZQ, while the ITI application form was utilized to request Zithromax tablets and suspension. Both applications were used to request required drugs for planned FY18 MDA campaigns.

## **Ghana**

For the ongoing community and school-based MDAs, the Central Medical Store (CMS) delivered medicines to all 10 Regional Medical Stores.

In July 2017, PATH presented draft copies of supply chain management standard operating procedures (SOP) developed with NTDP and partners in February 2017 for review. Draft copies of the following were reviewed and expected to be finalized by the end of September 2017, however staff changes at PATH have affected this timeline:

- ✓ SOP for NTD Medicines Management: From CMS to district level
- ✓ SOP for NTD Medicines Management: Health Centers and Community Health Planning Services (CHPS) facilities
- ✓ SOP for Logistics Management of NTD Medicines
- ✓ Training Curriculum
- ✓ SOP for NTD MDA

## **Niger**

Drug delivery for the second MDA campaign (specifically Mectizan – MEC) was delayed due to problems with transit and customs declarations. The customs clearance service (Bolloré) required that an insurance policy be purchased for the drugs, which remained at the Roissy airport in France for two months, and refused to remove them immediately when they arrived in Niamey because an exemption had not been obtained for the MEC. It took three weeks to complete those formalities, which caused the date of the campaign launch to be postponed to mid-May (originally, the MDA was scheduled for March 2017). A total of 21,494,500 MEC tablets were delivered.

In relation to preparing the NTD drug order for 2018, HKI supported the PNDO/EFL and PNLBG to complete the WHO Joint Drug Request Form, which includes the results of the previous MDA campaign, epidemiological data, and the drug needs for the next year's MDA. The form was signed by one of the coordinators and then sent to WHO Regional Office for Africa (AFRO) for review by April 15, 2017. The PNSO also sent the 2018 request for Zithromax to the International Trachoma Initiative (ITI) and subsequently submitted the results of the most recent trachoma surveys to ensure the proper amount of Zithromax would be available for the FY18 campaign.

Given the problems Niger has experienced in NTD drug management, particularly regarding drug expiration, an emergency plan was developed in FY16 to improve the situation. Implementation of this emergency plan has been successful, and the program is working hard to improve drug management and minimize drug loss. Drug wastage has been reduced considerably, now that health workers in charge of handling drugs have greater accountability. In terms of drug expiry, Niger has instituted a “first expired, first out” system. This involves checking expiry dates to ensure that drugs expiring first are consumed first. And, although the national FY17 MDA evaluation has not yet been conducted, we can confirm that no major expiration was noted during MDA supervision this year. A post-campaign inventory is underway following the second FY17 MDA campaign and will provide precise, updated information on remaining MDA drug stocks.

Drug redistribution has been one of the key solutions to the problem of drug expiration. HKI's support was critical in redeploying drugs in the districts to avoid stock-outs and increase coverage rates during the FY17 MDA campaigns. This was done in cooperation with the national NTD END in Africa SAR: April 1, 2017 – September 30, 2017

programs. After the MDA campaign, remaining drugs were returned from the integrated health centers (CSI in French) to the districts. A post-campaign physical drug inventory is then conducted to obtain an up-to-date count on the remaining MDA drug stocks. As mentioned above, this physical inventory is currently ongoing.

### **Sierra Leone**

The country received two shipments of drugs during the period under review: 7,845,800 tablets of ALB and 16,969,000 tablets of IVM, in March and August 2017, respectively. There was no issue with warehouse and stock management during the reporting period. All the necessary drug requisition and MDA forms were provided through the district pharmacists. Drugs were distributed based on the “First to Expire, First out” rule, hence the issue of expiration or wastage did not arise. However, 813 tablets of PZQ were lost/spoiled during the distribution per the MDA reports received from the NTDP. No physical inventory was conducted after the SCH MDA.

A recurring major challenge for various District Health Management Teams (DHMTs) continues to be the lack of operational vehicles to transport drugs to the various peripheral health units (PHUs). Most of the vehicles supplied to the DHMTs are engaged in surveillance activities for post-Ebola and other diseases, making it difficult to distribute drugs in a timely manner. To address these problems, motor bikes and boats were hired for MDA activities, to help the focal persons transport drugs where there was a shortage of vehicles.

Lastly, HKI supported the NTDP to complete the joint request for selected preventive chemotherapy medicines (JRSM) forms to request all NTD drugs. The drug application for FY18 MDA using the WHO forms was submitted by April 15, 2017 with support from HKI.

### **Togo**

The ALB needed to conduct the nation-wide MDA in April 2017 was delayed due to a late delivery in-country that was caused by incomplete drug request information. The NTD RPRG met in October 2016 to discuss Togo's drug requests and had some questions that were sent to the former NTD Focal Point who did not respond. A new NTD Focal Point was appointed in February 2017, and did not learn of the questions from the RPRG until he inquired in early April 2017 about the shipment date for the requested ALB. The NTD Focal Point responded to the RPRG's questions in May 2017, but the ALB was not received until July 2017, and was released from Customs in early August 2017. These problems were primarily due to a change in Integrated NTD Program management and team; however, they underscore the need for frequent communication with the RPRG and drug donors to determine if problems exist with the drug shipment schedule.

## **Financial Management and Capacity Building**

Between April 1, 2017 and September 30, 2017, the END in Africa team continued to demonstrate progress in building more sustainable NTDPs in three implementation countries – Togo, Cote d'Ivoire, and Ghana. END in Africa's sustainability approach continues to look beyond resource mobilization, and is embodied through the strengthening of four foundational “building blocks” of financial analysis and strategy, advocacy and communications, strategic social partnerships, and organizational capacity. During the reporting period, END in Africa continued to transition its support from workshops to mentoring and coaching to further institutionalize NTDP tools and

procedures and to empower NTDP teams. END in Africa's efforts are on track to reach the following goals by the end of the fiscal year:

- Enhance government leadership and performance management efforts, including financial management and the effective use of data and information for planning, programming, and decision making;
- Increase sustainability planning and advocacy efforts to diversify partners and mobilize resources to improve financial stability of programming efforts;
- Update NTD Master Plans to maximize the efficient use of available resources for greater public health impact in NTD programming; and
- Advance the knowledge and awareness of NTD operational performance management, sustainability, and partnerships through documenting and disseminating lessons learned.

Key activities over the past six months relating to the four building blocks demonstrate the connection between END in Africa's activities and sustainability.

### Organizational Development

END in Africa continues to work with the NTDPs to increase ownership of program performance and work with key stakeholders through workshops, trainings, and mentorship. Further, the project continues to work closely with countries to assess their individual needs and determine how we can best build new skills and introduce practices. Organizational capacity work with each NTDP has focused on public financial management, partnership development, performance management, and data use for decision-making.

Between April and September 2017, END in Africa, through its partner Deloitte, worked closely with each team to further their ability to perform with the utmost efficiency to achieve their missions. Togo and Cote d'Ivoire faced some challenges stemming from leadership transition and personnel rotation. In Togo, the project provided counsel and advice based on historical trends and available data to support the program through the leadership transition. With the newly consolidated NTD national program in Cote d'Ivoire, END in Africa is enabling them to use economies of scale, valuable personnel from each legacy program, and data to build upon the country's momentum to continue delivering outstanding results. Much of the support to the teams is carried out through mentorship of new leaders, as well as skills building workshops and working sessions provided to selected personnel. The main competency areas addressed include strategic planning and program integration, performance based management, governance & accountability, public financial management, and effective communication.

### Capacity building to facilitate program integration and maximize program impact

*Cote d'Ivoire:* END in Africa's support has ramped up in Cote d'Ivoire over the past year thanks to additional funding for NTDPs. Using insights from the TIPAC analysis, Deloitte highlighted the financial risks associated with little funding diversification and built the program's capacity around advocacy for resource mobilization and partnership development. Following the sustainability workshop, Deloitte continues to provide mentorship and guide the NTDP through the proposal development and partnership management processes.

*Togo:* Based on priorities indicated in the NTDP's financial strategy adopted in November 2016,

Deloitte collaborated with the team to document the current state of financial management processes and identify a desired future state. The team has developed a set of guiding principles and job aids to help key personnel understand how to best execute their functions. Deloitte continues to work with identified personnel to support their growth as financial management professionals able to perform according to industry standards.

### Financial Strategy and Analysis

Finance strategy and analysis outlines the financial sources, resource allocation and gaps, financial management practices, and risk mitigation related to NTD programming. END in Africa continued to support countries in addressing these challenges through implementing strategies and creating processes.

#### **TIPAC implementation and data use for policy and program decision-making**

*Cote d'Ivoire and Togo:* During this reporting period, one of the key outputs of our work involved analyzing TIPAC data outputs to support the NTDPs in data use for decision-making. Deloitte's team performed an analysis of the updated TIPAC data for both countries. The TIPAC analyses include a program overview, historical analysis of the TIPAC data over the past five years, a current state assessment, and a forward-looking call to action for program sustainability. END in Africa will continue to mentor and coach the NTDPs in how to perform the analysis and use it for effective decision making. We will continue to empower NTDPs to perform the TIPAC workshops and analysis from end to end on their own in future years. This will include reinforcing past coaching and performing additional in-country coaching around Microsoft Excel and PowerPoint.

*Ghana:* In April 2017, the END in Africa project organized a Partners Meeting in Accra, Ghana. To deliver a presentation on Program Sustainability and Local Financing, Deloitte supported the GHS/NTD Program Manager with data from the TIPAC exercise conducted in the second quarter of the fiscal year. We worked with the NTDP to help them leverage analytics and visualization tools and to develop a summary of findings from the TIPAC. The presentation highlighted: the cost of implementing integrated NTD control programs in accordance with international guidelines and national action plans; NTD existing funds and resources as well as funding gaps; and projections for the next 5 years. The 2017 TIPAC results communicated to stakeholders during this event provided evidence for discussions around resource allocation.

#### **FY18 NTDP workplan development and budgeting**

*Togo:* Prior to this past July, the current leadership team of Togo's NTDP had little experience in developing a consolidated workplan and budget for a fiscal year. The team reached out to Deloitte for support to develop an effective workplan aligned with the 5-year Master Plan. In July 2017, our team supported Togo's NTDP in two ways: 1) reviewing proposed activities and evaluating their alignment with the 5-year Master Plan based on recent treatment coverage and disease prevalence data; and 2) reviewing the associated budget and providing a methodology for activity costing and asset allocation according to industry best practices. This support was aimed at maximizing the efficient use of available resources for greater NTDP impact from programming through execution.

### **Finance Strategy implementation**

*Togo:* In the first half of FY17, with Deloitte's technical assistance, Togo's NTDP finalized and adopted a tailored Finance Strategy. The strategy was designed to not only help the program address the identified financial risks facing the NTDP, but also offered an approach to reinforce internal financial controls and improve the program's ability to mobilize resources. During this period, Deloitte supported the NTDP to improve the overarching financial management system with an emphasis on increased stewardship and transparency as well as clear accountability. Deloitte helped build a financial management team at the coordination level, including: a program manager to support the planning functions; a budget and finance officer in charge of executing the budget and control functions; and an operations and logistics officer to oversee the proper execution of planned activities. In addition to supporting the team, END in Africa, through Deloitte, also created job aids and a set of guidelines to streamline the financial management processes and increase transparency.

### **Advocacy and Communications**

Advocacy and communications articulate NTDP values and communicate the importance of NTD control and elimination to stakeholders. Advocacy and communications can be powerful enablers of stakeholder engagement, investment, and partnership development. Accordingly, advocacy activities increase awareness of NTDs and win support for the program among influential government decision makers, public opinion leaders, and impacted communities themselves.

### **Advocacy Strategies**

Like most health programs, the NTDP's success and sustainability are closely related to the program's ability to inspire citizens to participate, and to influence decision makers to support and implement actions that contribute to the achievement of the program's mission. Deloitte has continued to support NTDPs in developing suitable approaches aimed at changing the behavior of different stakeholders to ensure their continued success.

*Cote d'Ivoire:* The NTDP leadership team is currently conducting final reviews of the advocacy strategy and resource mobilization plan. With Deloitte's advice and mentorship, the team has developed key messages for the program and developed a value proposition that will be tailored to different audiences. The goal of the advocacy strategy and resource mobilization plan is to provide a systematic approach to all NTDP sustainability efforts. Cote d'Ivoire is currently using techniques and tools acquired during the advocacy and communications workshop to engage stakeholders able to meet the programs' needs.

*Togo:* Deloitte helped Togo's NTDP develop a tailored advocacy strategy and a supporting resource mobilization plan, which were approved and adopted by the program's leadership in July 2017. These guiding documents promote the use of data to drive advocacy priorities and outline a performance management framework for monitoring progress.

### **Support Intercountry coordinating mechanism (ICCC) for NTD programming, partnerships, and coordination**

*Ghana:* The ICCC Communication and Resource Mobilization Sub-committees present a path to mobilize resources and support a funding allocation process that is evidence-based, transparent,



efficient, and effective. During the period under review, Deloitte supported the Ghana Health Service (GHS)/NTDP to plan and execute the first quarterly ICCC meeting. Deloitte's role in this process included the following:

- Setting up meeting schedules, circulating meeting notices, and following up on action items;
- Participating in and facilitating ICCC meetings;
- Working with the respective Sub-committees to implement agreed upon action plans; and
- Providing technical assistance to the Communication and Resource Mobilization sub-committees in support of the advocacy strategy and SSP Action Plan and guiding the sub-committees on how to implement and disseminate these strategies.

### Strategic Social Partnerships

Sustained and consistent funding is necessary for successful control and elimination of NTDs. One of the key outputs from the training sessions in each of the three countries on how to use advocacy and communication to support NTDP success is a prioritized list of stakeholders with the necessary resources and/or influence to enhance the NTDP. Cote d'Ivoire and Togo have both identified two priority partners and developed tailored business cases outlining the value that both the NTDP and the private sector partner will gain. The NTDPs in Cote d'Ivoire and Togo have requested meetings with potential partners and plan to submit their proposals in early FY18.

### Capacity building and ownership of partnerships within PPMED

*Ghana:* In April 2017, Deloitte organized the "Sustainability Planning and Business Case Development" workshop, which allowed the GHS/PPME/SSP unit to improve skills in business case and resource mobilization capabilities necessary to support sustainability. The workshop also increased their understanding of business case concepts and tools and improved skills in using data for advocacy and resource mobilization. The 3-day workshop included practical, hands-on mentoring support and guidance to help the GHS/NTDP do the following:

- Identify critical capabilities that are necessary to support GHS sustainability;
- Build critical planning and resource mobilization capabilities necessary to support GHS sustainability, specifically skills will focus on: business case development, using data for influencing stakeholders, and proposal writing; and
- Support in identifying and developing investment and partnership opportunities through executing these skills.

In addition, we also invited a representative from the MTN Foundation to lead a private sector panel discussion. The panel was critical to the success of the workshop as it provided an opportunity to: expand their network to potential resource partners, learn from social investors about their interests and how they make decisions about social investing, and understand the process for requesting investment into the NTD program. Moreover, the debrief from the panel discussion helped hone the following points: each stakeholder has a different interest in the NTD project portfolio, and the way in which you develop your business case, align it to stakeholder values, and articulate your message, will have critical implications on the success of the request.

### Partnership engagement and development

*Ghana:* Following the workshop in April 2017, Deloitte worked with both the NTDP and PPME to

apply the concepts and knowledge acquired. These activities enhanced the ability of the NTDP and PPMED to engage CAL Bank, Ecobank Foundation, uniBank, and Stanbic Bank Ghana to provide additional resources for NTD. Deloitte supported the data collection and research to complete the Stakeholder Profiles, helped the GHS/NTDP finalize disease priorities and draft the storyboards, and prepared the business case decks for the three priority partners.

In the final analysis, the NTDP had the opportunity to make a business case to management of CAL Bank Ghana Limited and a subsequent submission of proposal requesting an amount of \$1,029,696.79 to address regions of greatest need: Central, Western, Northern and Upper West. The proposed LF Management Campaign intends to: 1) manage LF cases to minimize disability and suffering; and 2) expand the impact of LF elimination initiatives to maintain progress. Further, Deloitte continues to support the GHS/NTDP/PPME and the NTD Ambassador pursue funding from the additional private sector companies. With the potential for increased financial resources flowing into the NTDPs' funding pool, Deloitte will continue to support the efficient implementation and transparent utilization of these resources to maintain the trust of potential funders.

### Success Stories

The greatest success in this reporting period shows how our sustainability work is gaining traction not only within the donor community but also across the broader West African community. We have received requests for additional workshops and coaching from Togo, Cote d'Ivoire, Ghana, and Sierra Leone.

The work undertaken by Deloitte to support the END in Africa project has reinforced lessons that will continue to guide our work:

- **Building up political will and leadership capabilities is critical to success.** To enable and sustain the progress that has been made to date in the control and elimination of NTDs, NTD Country Program Managers need to cultivate the political and leadership savviness required to lead a diverse group of people, identify and facilitate partnerships for mutual benefit, mobilize resources, and enable integrated programs. Further, providing countries with the guidance and tools necessary to have successful transitions, as in Togo, or program integration, as in Cote d'Ivoire, is essential to the sustainability of programs.
- **Mentoring and coaching are needed to institutionalize good management practices and hone skills learned during workshops.** The past year has been rich in the introduction of new skills intended to improve the planning and budgeting practices of staff and the effectiveness and financial sustainability of NTD programs. Deloitte continues to support new techniques for mentoring and ingraining practices and knowledge into staff work.
- **Public-private partnerships are possible, but require facilitation.** The leadership shown in Ghana in their partnerships pursuits continues to inspire other END in Africa countries. Ghana continues to show success in how the country has managed their relationship with uniBank and reported the program's efficient use of resources and strong health outcomes. The best practices and lessons learned from their partnership work is being leveraged in Cote d'Ivoire and Togo.
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## Collaboration and Coordination

### END in Africa—General

FHI 360 continued to coordinate with USAID, the MOH in each country, and existing USG-funded NTD programs to ensure effective program execution. END in Africa's NTD Technical Advisor continued to collaborate with NTD partners and NTDPs to plan for the 'End Game' and prepare countries for the final DSAs needed for trachoma and LF before countries start preparing their respective dossiers for verification of elimination.

### Specific Country Activities

Country-specific collaboration and coordination activities carried out by our sub-grantees during the period under review, and supported by END in Africa are summarized below:

#### Burkina Faso

- The Burkina Faso Government supports NTD control efforts by facilitating the purchase of NTD drugs by issuing special import authorizations as needed to facilitate the acquisition of the needed NTD drugs. Also, participation of high-ranking officials in advocacy activities and the launch of the recent MDAs illustrated its high-level commitment to the NTD program.
- Some of the health facility management committees (COGES) are helping to motivate the CDDs by using COGES and communal logistics resources. For example, during the SCH MDA campaigns, the COGES in the Est region provided 321,110 F CFA to support MDA implementation.
- The NTD technical committee met on September 7 and 8, 2017 and the next steering committee will be held in November 2017.
- Previously lacking in human resources, the NTDP recently boosted its workforce in terms of qualified staff (doctors, health assistants and support staff) and all the NTD control units' teams have been strengthened.

#### Cote d'Ivoire

- The government's commitment towards NTD control continues to be very high since the END in Africa project was launched in FY16. It was demonstrated during the reporting period through the representation of the MSHP by high level MSHP officers and local administrative authorities (prefect) in all activities conducted by the NTDP. This commitment was especially visible during the MDA launch ceremony in Daoukro district on May 12, 2017.
- There continues to be very good collaboration between END in Africa and other NTD partners working in Cote d'Ivoire (Sightsavers, SCI, HKI) for successful implementation of NTD activities and to avoid duplication of efforts. This partnership was reinforced through regular meetings, visits, conference calls, and joint supervision/monitoring of NTD activities in Cote d'Ivoire during the period under review.

#### Ghana

- The government continued to let the NTDP use the health system structures at all levels—

national, regional, district and sub-district to support NTDP activities. Medical stores at all levels keep NTD medicines and health system vehicles are used to support NTD activities.

### **Niger**

- A coordination meeting was held at the MOH in July 2017. The agenda included: NTD MDA update; date of the national campaign evaluation; dates of the micro-planning meetings; Schistosomiasis Control Initiative (SCI) funding; update on the monitoring of FOG execution; and the schedule for submitting the documents for the new FOG FY18 budget package. Attendees included the representative of the directorate of studies and programming (DEP) of the MOH, NTDP coordinators, ONPPC, DPH, HKI and Carter Center.
- Niger's Ministry of Health also met to validate the new NTD 2017-2021 master plan. Attendees included all actors working on NTDs (regions, executives from the Ministries of Health and Education, HKI and the Carter Center). The amount for the master plan's four strategic priorities totals approximately 332 billion F CFA.
- In terms of partnerships, meetings with the partners (coordination and evaluations) provide an ideal opportunity for NTD partners to exchange and share experiences, as well as to make and/or record all the major decisions regarding efforts to combat NTDs.

### **Sierra Leone**

- The national program and its partners held four coordination meetings to discuss the FY18 END in Africa workplan, recommencement of MDA LF/STH activities in the WA and a timeline of MDA for LF/Oncho/STH in 4 HDs and Oncho-STH MDA in 8 HDs and the STH transition meeting.
- The Ministry of Health and Sanitation (MoHS) annual work plan includes a budget line to cover administrative costs for the NTDP secretariat. However, the release of these funds to implement NTD activities remains a major challenge. No additional funding was received by NTDP from the government or other partners, and no new staff was assigned to the NTDP or additional office space provided during the reporting period.
- The NTDP and the Directorate of Food and Nutrition collaborated to organize the STH transition meeting at the Bintumani Hotel, Freetown on July 10, 2017. This meeting brought together stakeholders from the districts (district medical officers, NTD and school health focal points and nutritionists) INGO's, WASH actors, UNICEF and WHO. Discussion focused on updates on STH status in the country and the transition of LF MDA in 8 HDs.
- In addition, several meetings were held during the reporting period with the NSAHP, NTDP, WHO, and other partners to coordinate activity implementation as a way of strengthening collaboration with partners in country. These meetings aimed to promote cooperation and coordination, to allow strategic planning, and to ensure best practices would be followed and duplication of activities avoided.

### **Togo**

- The government of Togo continues to be strongly supportive of the Integrated NTD Control Program. The MOH has held numerous coordination meetings over the past six months to discuss the August 2017 MDA implementation and NTD elimination.
- The Togo MOH is also developing their data management and analytical capabilities and has plans to develop a streamlined data entry system, in which the MDA data that are

currently entered at the district level are sent to the central level, obviating the need for central level data entry. This will allow the Integrated NTD Program to operate more efficiently and sustainably.

- The MOH is developing partnerships within the government (e.g., WASH, malaria, onchocerciasis, education, etc.), as well as with other non-governmental organizations (UNICEF, Sightsavers, Red Cross, Plan Togo, etc.) to participate in the integrated NTD activities.
- Collaborations among the Integrated NTD Program, HDI-Togo, Sightsavers, and the Oncho Program are being strengthened with onchocerciasis elimination activities, such as the stop-MDA survey in Maritime that took place in August and September 2017, and the investigation into persistent high prevalence oncho areas that occurred in July 2017.
- Sightsavers and HDI are sharing the cost of the onchocerciasis assessment that will take place in Savanes region in late September 2017. The MOH, HDI, and Oncho Program are developing ways to further integrate onchocerciasis into the integrated platform, including collaborative development of detailed and integrated implementation plans for distribution of medications and data analysis.
- The MOH and HDI are also working to bring together other partners (CDC, the Taskforce for Global Health) to support onchocerciasis and trachoma surveillance and elimination activities, and operational research on onchocerciasis.
- HDI is continuing to work with the Bill & Melinda Gates Foundation to identify cases of trichiasis in the community using the MDA platform.

## Monitoring and Evaluation

FHI 360 and partners continued to support the selected six countries in developing sustainable M&E systems for NTD Country Programs. FHI 360 works closely with implementing partners to ensure that MDA activities and program impact assessments are implemented in accordance with WHO guidelines and that sound data are collected and reported to USAID in a timely manner.

Key M&E activities undertaken within the last six months are classified into the following sub-sections:

- Support to sub-grantees and MOHs to develop and implement quality M&E systems
- Data management and documentation
- Routine program monitoring
  - MDA
  - Impact assessments
  - Training
- Technical assistance/capacity building on M&E

## Support to Sub-grantees and MOHs

The M&E Specialist continued to liaise with country programs and other NTD partners to ensure appropriate execution of M&E activities for NTD Programs. The main accomplishments for this reporting period were as follows:

- All FY17 SAR2 workbooks were submitted to USAID and RTI for review and all countries provided responses to all comments. USAID, RTI and FHI 360 review the workbooks separately, put all comments into a single feedback file, discuss the feedback in a group,

and send joint USAID/RTI/FHI 360 feedback to the countries. The M&E Specialist provides country background/specifics, as necessary.

- As there is a delay in data review due to multiple persons' timeline and priorities, the M&E team agreed on the new workbooks' review process starting with FY17 SAR2. Country and/or partner sent workbooks to FHI 360 for preliminary review and feedback. Then FHI 360 sent the final or near-final version of the workbooks to USAID with a copy to RTI for secondary review. Lastly, FHI 360, RTI and USAID worked together to address any outstanding issues.
- Outstanding issues with FY16 workbooks have been addressed and MOH approval is being sought. The review process is ongoing for Ghana and Niger.

Country-specific details are below:

### **Ghana**

The END in Africa team – Project Director, Mr. Bolivar Pou; Associate Director, Technical Dr. Joseph Koroma; and Technical Advisor, Dr. Ernest Mensah – embarked on a field visit to Bukruso, Central Region of Ghana on April 4, 2017 to observe an oncho epidemiological survey in Ghana. The team observed OV16 rapid test, skip snip microscopy and dry blood sample collection for OV16 ELISA.

### **Niger**

The DQA that was long postponed was finally held. The first activity involved training a pool of trainers. It was combined with the INDB training conducted by an FHI 360 M&E Advisor for five participants, including three from the MOH's NTD programs and two from HKI. This training for trainers will enable them to provide cascade training to other teams. Following the training, the World Bank will support DQA implementation in October 2017 in two districts in each of the regions of Zinder and Maradi.

### **Sierra Leone**

Noting that a few health districts have failed pre-TAS twice over, the NTDP is making a concerted effort to ensure these districts, with persistent LF prevalence, meet the criteria for conducting TAS 1 in FY19. During the FY18 work planning workshop in July 2017, the NTDP and partners agreed on the following strategies to be implemented during the next MDAs:

- Continue in-process Independent Monitoring to identify issues that hinder MDA,
- Coverage survey in three HDs (Koinadugu, Bombali, Kailahun) to verify coverage and determine compliance issues,
- Community self-monitoring and intensified supervision (increase supervision teams) of MDA at all levels,
- MDA launch by senior MoHS and government officials in 4 HDs (Bombali, Koinadugu, Kailahun and Kenema) in addition to the WA to raise awareness of the NTD program in targeted communities to ensure that MDA coverage is improved,
- Engage traditional healers and youth groups to serve as community advocates helping mobilize members of their communities to participate in MDAs to improve coverage, and
- Involve leaders of youth groups to serve as community mobilizers to help sensitize their communities to participate in MDAs to improve coverage.

Also, HKI provided funds to the NTDP to support all data collection for the SCH MDA in 7 HDs during the reporting period.

### **Togo**

In April 2017, the END in Africa M&E Specialist trained the NTDP on how to: conduct DQAs, implement the WHO NTD Database, and complete the WHO joint request and reporting forms. The aim of the training was to help the country improve the data quality and quantifying the number of tablets required to reach the target population, and ensure they report annual progress on integrated and coordinated distribution of drugs across diseases in the reporting year.

### **Data Management and Dissemination**

All 6 countries have submitted their FY17 SAR2 workbooks that have been reviewed and the countries provided their feedback on all comments. The challenge encountered this time with submission of workbooks is the incomplete treatment data because most countries scheduled their mass drug campaigns at the end of the fiscal year. All workbooks will be updated as soon as the data are available in the first quarter of FY18. The review team addressed the remaining outstanding issues with FY16 workbooks and the final review of Ghana and Niger FY16 workbooks is ongoing. The countries submitted the final workbooks to their respective MOH for approval.

### **Burkina Faso**

The first data validation meeting was held from August 9 – 12, 2017 in Koudougou and involved only the SCH MDA. The second data validation session will be held after the LF MDA. This second session will generate consolidated data on LF, oncho and STH treatment and coverages. The workbooks will be updated accordingly once this data is available.

### **Cote d'Ivoire**

A data validation workshop was held from June 27–29, 2017 to review and validate data from the LF/Oncho MDA in 57 districts.

### **Ghana**

The NTDP submitted an article on the trachoma pre-validation survey conducted in 2015–2016 to PLOS NTD on March 9, 2017. The journal reviewed the article and provided feedback with requested changes. An updated/revised article was submitted to the Journal in July 2017 together with the protocol for the pre-validation survey. The protocol can be accessed via this link: <https://www.protocols.io/view/pre-validation-survey-for-the-elimination-of-trach-h9db926>.

### **Sierra Leone**

During the reporting period, three abstracts were submitted for the late-breaker session at 66<sup>th</sup> annual conference of the American Society for Tropical Medicine and Hygiene (ASTMH) to be held in Baltimore, Maryland in November 2017:

- *“Stopping Mass Drug Administration for Lymphatic filariasis in 8 Districts in Sierra Leone”* (poster).
- *“Challenges in achieving elimination of lymphatic filariasis in hotspot districts in Sierra Leone”* (oral presentation)

- *“Rapid assessment of onchocerciasis through lymphatic filariasis transmission assessment survey (TAS) in Sierra Leone” (poster)*

In addition, a blog post on *“Sierra Leone’s Progress Towards Eliminating River Blindness<sup>2</sup>”* was submitted by HKI’s Regional Director for West Africa to share the country’s progress in combatting onchocerciasis.

## Routine Program Monitoring

FHI 360 recognizes the importance of sound data management in ensuring continuous performance improvement and thus, it provides TA to sub-grantees and NTDPs in END in Africa countries to strengthen data management skills among M&E staff and program managers. The M&E Specialist monitored country M&E activities on a regular basis, collecting information through phone calls, monthly reports, workbooks, work plans and emails. In addition, the M&E Specialist followed up on all planned FY17 M&E TA as requested. Information was collected through phone calls, monthly reports, workbooks, work plans and emails.

## Mass Drug Administration

### Burkina Faso

The MDA campaigns during the second half of FY17 began with the mass drug distribution of PZQ for SCH from May 11–15, 2017 with funding from END in Africa in five regions. A total of 4,524,424 people were treated, including 2,306,672 women and 2,217,752 men. Overall program coverage was reported to be 97.95%.

The Sud-Ouest region, which holds two rounds of LF and oncho MDA per year, held its second FY17 round from July 17–26, 2017. Four HDs were treated for LF (Gaoua, Diébougou, Batié, and Kampti) and four for oncho (Dano, Diebougou, Gaoua, and Batié). Based on preliminary results provided by the regional health center (DRS):

- 480,070 people were treated for LF (252,927 women and 227,143 men), achieving a program coverage of 81.41%.
- 155,590 people were treated for oncho (79,224 women and 76,366 men), achieving a program coverage of 80.26%.

The Centre-Est region conducted the second round of SCH MDA in September 2017; however, results are not yet available. The MDA did not integrated STH, as originally planned, since the ALB was not supplied in time by WHO.

Trachoma MDAs have not yet been held given the need for MDA depends on the results of the TIS, which are still ongoing (see M&E section). Nine out of 15 planned TIS have been completed to date, and preliminary results indicate that all nine of these districts will stop MDA and begin surveillance (This includes Pô district, which had the highest baseline TF prevalence).

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<sup>2</sup> <https://www.interaction.org/newsroom/blog/major-public-health-milestone-horizon>



## **Cote d'Ivoire**

Three MDAs were conducted during the reporting period with USAID funding:

- MDA for LF/oncho was conducted on May 20–24, 2017 in 57 HDs (48 oncho-endemic HDs and 57 LF-endemic HDs). A total of 5,889,188 men and 5,933,145 women were treated. The overall program and therapeutic coverage was 89.79% and 71.83%, respectively for both LF and Oncho.
- LF MDA is also treatment for STH ( $\geq 5$  years) and 22 of the 29 HDs that should be treated per WHO guidelines (STH prevalence  $\geq 20\%$ ) were among the 57 HDs treated for oncho and LF. Results show 3,144,612 people were treated for STH with a therapeutic coverage of 71.26% and program coverage of 90.24%.
- In May 2017, the END in Africa project supported treatment of adults only ( $\geq 15$  years) in the three districts treated for SCH that have a baseline SCH prevalence of  $\geq 50\%$  while SCI supported treatment of school-aged children (SAC) in the same three districts. A total of 206,062 men and 170,723 women were treated with a therapeutic coverage of 83.62%.
- The Trachoma MDA was conducted in July 2017 in 5 HDs and achieved a therapeutic coverage of 93.97%. Total number of people treated was 948,274 (470,415 men and 477,859 women).

## **Ghana**

Due to a nationwide oncho impact assessment conducted in the country, all MDAs were delayed allowing for the required time to elapse between the last MDA and the impact assessments to have valid results. The community-based MDA for LF/oncho/STH has just started and is expected to be completed by the end of September 2017. The community-based treatment for SCH in adults will be conducted simultaneously with the school-based MDA. Results of the MDAs are pending.

## **Niger**

Like the previous year, the FY17 MDA involved two separate campaigns. The first campaign was held from January – February 2017, covering the regions of Diffa, Dosso, Tillabéri and Niamey. Although this MDA was reported in the FY17 SAR1, overall preliminary program coverage rates for these regions are now available as follows:

- Diffa (80.81% for LF; 75.80% for trachoma)
- Dosso (82.39% for LF and 87.0% for SCH)
- Tahoua (84.75% for LF and 78.56% for SCH)
- Tillabéri (80.19% for SCH).

The second MDA campaign was held from April – May 2017 in the four other regions of Tahoua, Agadez, Maradi and Zinder. At the time of this report, preliminary coverage rates are only available for Agadez region, which achieved 86.1% program coverage for LF and 86.5% program coverage for trachoma.

The MDA commenced in Tahoua region in eight HDs: Bouza, Illela, Tahoua, Tchintabaraden, Konni, Keita, Abalak and Madaoua. END in Africa supported all MDAs except for the SCH/STH MDA in Abalak and Madaoua HDs, which were supported by SCI. In Maradi, 7 HDs were treated (Tessaoua, Mayahi, Maradi commune, Dakoro, Aguié, Madarounfa, and Guidan Roumdji) and in Zinder the campaign targeted 6 HDs (Goure, Magaria, Matamaye, Tanout, Zinder commune). Agadez was the

last region to conduct the MDA, which targeted three HDs (Tchirozerine, Arlit, and Agadez commune). Drug packages including IVM+ALB for LF and STH, Zithromax for trachoma, and PZQ+ALB for SCH and STH were administered to each district in the appropriate quantities depending on the endemicity profile of the district.

During the second MDA campaign, independent monitoring (IM) was conducted in 3 HDs: Konni (Tahoua region), Tessaoua (Maradi region) and Mirriah (Zinder region). Six two-person teams (2 teams/district) led this work in the field. The shortcomings identified in the field were reported to the NTD focal points to take corrective action. Initial results show overall coverage is acceptable (95.71% in Mirriah for Zithromax/TEO; 69.29% in Konni for the MEC/ALB package; 88.93% in Tessaoua for MEC/ALB and 82.5% for Zithromax/TEO). The lower coverage rate in Konni is due to a stock-out of mectizan. Investigations identified a weakness in the drug quantification process, which was ultimately corrected after the monitoring team stepped in. We are awaiting the results of the regional evaluation to confirm that coverage has increased in Konni.

### **Sierra Leone**

During the reporting period, SCH MDA in 7 HDs was conducted from May 15–21, 2017 with funds from END in Africa. However, due to the competing priorities of the MoHS such as malaria bed net distribution, mother and child health week and the Muslim month of fasting, the MDA was extended to June 27–July 6, 2017 to improve coverage. The NTDP reports show a total of 1,813,902 (SAC: 609,565 and high-risk adults (HRA): 1,204,337) out of 2,253,641 persons targeted were treated with PZQ, with a program coverage of 80.5%. The IM results showed that 9,101 out of 15,167 persons interviewed at both household and community locations recalled taking PZQ with a coverage of 60%. There was a significant difference in IM results versus NTDP reported coverage. The main reasons for the poor coverage identified during the independent monitoring were falling disease burden, malaria bed net distribution, mother and child health week and the Muslim month of Ramadan all of which coincided with the MDA.

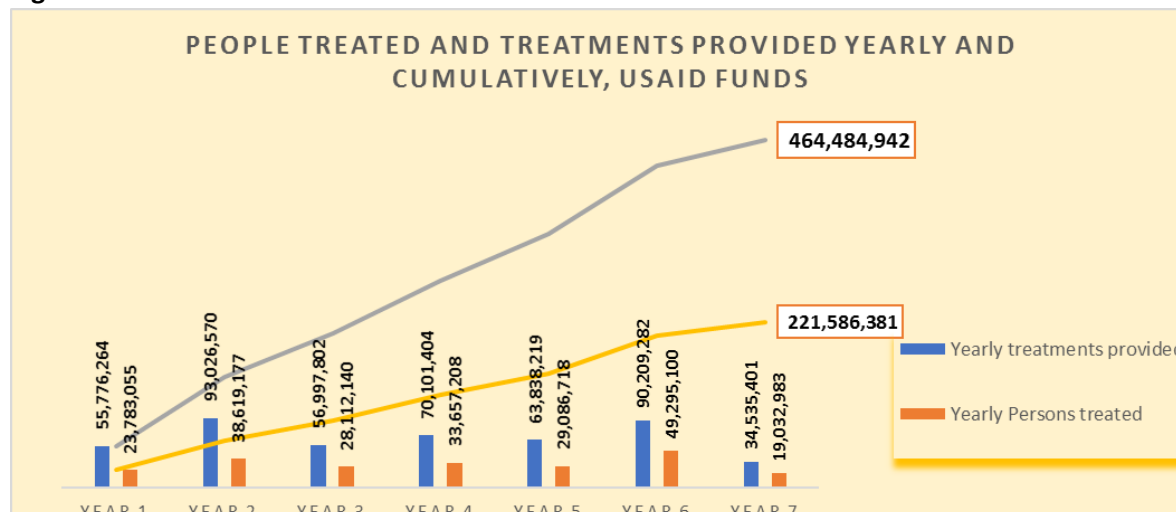
MDAs for LF/STH in the WA, LF/Oncho/STH in 4 HDs, and Oncho/STH in 8 HDs commenced on August 10, 2017 and is ongoing following the receipt of IVM in the country on August 30, 2017. This is expected to be completed by October 15, 2017. Treatment data is not yet available and will be updated in the workbooks when final reports are submitted.

### **Togo**

A nationwide integrated MDA to treat STH, SCH, and oncho was conducted in August 2017. Data collection, entry, cleaning, and analysis are planned and coverage numbers and final reports are expected in November 2017. The nation-wide MDA has historically been scheduled in April to avoid the rainy season; however, this year the MDA was delayed due to a late delivery of ALB drugs.

The graph below provides the total number of people treated and the number of treatments provided since the inception of the END in Africa project, by year and cumulatively.

**Figure 1: Annual and Cumulative Treatments**



As of the reporting period, the cumulative number of people treated for at least one NTD through END in Africa (USAID Funds) is 221,586,381 and the cumulative number of treatments provided is 464,484,942 as of September 2017. Available FY17 MDA data represented in the graph above is a combination of data from Cote d'Ivoire (all diseases), Burkina Faso (SCH, STH, and oncho), and Togo (one round of SCH). The cumulative number of people treated and treatments provided appears to be tapering off compared to FY16, but this is due to the incomplete FY17 MDA data. Since most countries planned their MDAs in the last quarter of FY17, the complete results will be available in the next reporting period – FY18 SAR 1 (October 1, 2017 – March 31, 2018).

## Impact Assessment

Disease-specific assessments (DSAs) conducted in the second half of FY17 included: LF pre-TAS and TAS; trachoma surveillance surveys (TSS); impact assessment surveys for trachoma, oncho, and SCH/STH; and post-CDTI coverage survey.

### Burkina Faso

The NTDCP conducted pre-TAS in 12 sentinel and control sites in four HDs (Bittou, Ouagaye, Diebougou and Koupela) using the night blood smear technique to measure mf prevalence; END in Africa supported pre-TAS in Bittou, Ouargaye and Koupela HDs and FPSU-L provided support for the pre-TAS in Diebougou HD. Results showed mf prevalence >1% in one or more sites in Bittou and Ouargaye districts in the Centre-Est region. The FTS was used during the pre-TAS in Diébougou (Sud-Ouest) and yielded *Ag* prevalence of 4.42%. These districts will go on to conduct two additional rounds of MDA. Koupela HD will conduct TAS 1 in FY18.

Manni, Nongre-Massom, Pouytenga, Garango, Sig-Nonghin, Boulmiougou, Bogandé, Diapaga, Gayéri, Sebba and Pama districts conducted TAS 1 using FTS. The preliminary results for number of positives are below the critical threshold. Implementation of TAS 2 in three evaluation units (11 HDs) was completed in Plateau Central (Boussé Ziniaré - Zorgho) and is currently ongoing in the Sahel (Dori, Gorom-Gorom, and Djibo) and Center regions (urban areas in the Center districts and Baskuy).

For Trachoma, the Tropical Data team provided technical support for preparing the FY17 TIS. Health districts scheduled to conduct the impact surveys were reclassified as EUs in keeping with the Tropical Data protocol. This produced a total of 28 EUs for the 21 HDs involved. The preliminary results from the 9 HDs that completed the TIS show TF prevalence below 5% among children aged 1-9 years.

The four additional TIS financed by the World Bank will be carried out in October 2017, followed by the TSS also planned with World Bank funding. There are not enough trained ophthalmic technicians to conduct the TIS and TSS simultaneously.

Also, the post-CDTI coverage survey was already conducted in the Sud-Ouest region, but the results are still not yet available. A post-MDA coverage survey is underway in 2 HDs (Tougan and Titao), with World Bank funding.

### **Cote d'Ivoire**

Only one DSA was conducted during the period under review – Trachoma Impact survey in Bouna HD. The purpose of the survey was to assess the impact of MDA on trachoma in the district after one round of treatment and to decide if MDA can be stopped per WHO recommendation of conducting TIS in districts that have baseline TF prevalence between 5% and 9.9% among children 1-9 years after at least one round of MDA. MDA was conducted in Bouna HD in FY16 and the TIS was conducted July 3–9, 2017. The prevalence of TF in children aged 1-9 years and the prevalence of trachomatous trichiasis (TT) among those aged  $\geq 15$  years were assessed. The survey was conducted in 26 villages targeting 30 households in each village and 1,311 children aged 1-9 years were examined. Three of the 26 villages examined had a prevalence of TF >5% but the overall district TF prevalence among children 1-9 years dropped from 8.6% to 1.36%. The prevalence of TT adjusted by age and sex was 0.14%. As a result, the NTDP has decided to stop MDA in Bouna HD per WHO recommendations while surveillance will be conducted over the next 3–5 years to monitor the TF and TT prevalence in the district.

### **Ghana**

The NTDP completed the epidemiological survey aspect of the oncho impact assessment on May 9, 2017. A total of 304 communities (sites) were surveyed in 155 districts. Preliminary results were presented to the GOEC meeting held on May 31–June 2, 2017. Based on the results, 41 HDs previously non-endemic or hypo-endemic have been recommended for MDA starting FY18.

Also, the program conducted blackfly breeding site prospection in all 7 transmission zones and major river basins in the country from July 14–August 2, 2017 to determine viable blackfly breeding sites to be used as sentinel sites. Blackfly larvae collected during the prospection was sent to the WHO laboratory in Ouagadougou for analysis. Blackfly collection is ongoing in the two onchocerciasis transmission zones in the eastern corridor of the country as recommended by the GOEC. The blackflies will be analyzed using pool screening to determine level of infectivity.

In addition, the NTDP conducted a SCH and STH assessment in two districts (Bole and Banda) in the catchment area of the recently constructed Bui Hydroelectric Power Plant to determine the

prevalence of infection compared to the baseline prevalence observed prior to construction of the dam in 2010. The survey was carried out on June 5–17, 2017 using Urine Filtration and Kato Katz methods. The results indicated SCH prevalence above 50% in both districts. Only *Schistosoma mansoni* species were found and no STH was identified in all sites surveyed. The results indicate a significant increase in prevalence over baseline and hence the two districts will be included in annual SCH school-based MDA and community-based MDA for adults starting in FY18. The program will also present a report to the power plant managers and seek their financial commitment for SCH MDA in the two districts.

## **Niger**

LF TAS 1 was conducted in four HDs using FTS: Matamaye, Magaria, Mirriah and Zinder. These districts were divided into two evaluation units (EU), and results indicate that all of them passed TAS and may now stop MDA and begin surveillance. TAS 1 in the remaining three HDs (Diffa, Mainé Soroa and N'Guigmi) began on September 10, 2017 and is currently ongoing. In addition, the microfilaramia survey in Arlit HD began September 25 and will be completed by October 6, 2017.

The impact surveys for three HDs planned for FY16 and rescheduled to FY17 (Bilma, Tchirozérine and Aguié) were conducted in May-June 2017. The survey results show that MDA is no longer necessary in Aguié, but Tchiro and Bilma districts both require an additional year of MDA. The TIS planned for Mayahi and Guidan Roumdji in FY17 was rescheduled for FY18 because of the need to wait six months after the May-June 2017 drug distribution in both of those districts.

The surveillance surveys originally scheduled for FY16 in the Say, Ouallam and Filingué HDs were finally conducted in May-June 2017. Based on the results, surveillance will continue in Say and Filingué, while Ouallam HD requires one round of MDA. The surveillance surveys in Tera and Tillabéri HDs were held in August 2017 but results are still pending.

## **Sierra Leone**

TAS 1 was conducted between March and April 2017 using FTS in four EUs, each comprised of two HDs. All four EUs were well below the critical cut-off value for number of positives and MDA for LF has subsequently stopped in these eight HDs.

The four HDs that failed the pre-TAS in 2013 include Bombali + Koinadugu and Kailahun + Kenema. This was because at least one site in each pair had microfilaremea (*mf*) prevalence >1%. Three additional MDAs have since been completed in FY14, FY15 and FY16 in these districts. In February 2017, a second pre-TAS ("re-pre-TAS") was conducted in these four HDs using FTS (this time HDs assessed individually) with each HD having a sentinel site and a spot check site. All four HDs had *Ag* prevalence >2% and did not qualify for TAS for a second time.

Pre-TAS was also conducted in the Urban Western Area (UWA) and Rural Western Area (RWA) in February 2017 using FTS (these two HDs had qualified for Pre-TAS in FY15 but the Pre-TAS was postponed due to the Ebola outbreak). The results indicate that the UWA had *Ag* prevalence <2% and qualifies for TAS 1 in FY18; however, the RWA had *Ag* prevalence >2%. Based on WHO recommendations, two additional rounds of MDA will be conducted in the five HDs that failed the pre-TAS in FY17. A re-pre-TAS is anticipated in these five HDs in FY19 (for 4/5 of these HDs, this will be a re-re-pre-TAS).

A follow-up post-DSA failure in the five HDs was conducted in May 2017. Among 296 FTS positives, 236 were traced and tested for LF *mf* using midnight blood samples and nine LF *mf* positives were identified, while 232 were tested for *Mansonella perstans mf* using midday blood samples and 13 *M. perstans* positives were identified. The results suggest that the 5 HDs failed the Pre-TAS with four failing for the second time to meet the criteria for conducting TAS per the FTS results. At least two more rounds of MDA will be conducted. The 4 HDs are along the borders with Guinea and/or Liberia with difficult terrain and accessibility. There may have been coverage issues in hard-to-reach communities (this will be assessed in FY18 with a coverage survey). Bombali and Koinadugu have traditional healers attracting LF cases for traditional healing, which may have created foci of poor compliance. Cross border migration is another issue as Liberia and Guinea achieved full MDA scale-up only in 2014 and 2016. Cross-reactivity of FTS with *M. perstans* adds another challenge to the already difficult situation.

During the reporting period, an oncho impact assessment using OV-16 rapid diagnostic test was conducted in children 5-9 years alongside the TAS in eight HDs in April 2017, and separately in 4 HDs in June 2017. The main objective was to determine the impact of MDA following 10 years of treatment and the need for IVM MDA in hypo-endemic areas that have benefitted from MDA for LF since 2008<sup>3</sup>. The results show the prevalence among the 12 HDs ranges between 1.6% and 2.5%. Of the 17,441 children tested, only 347 positives were found, i.e. an average prevalence of 2.0%. Refer to the country summary report in Appendix 2 for complete summary results.

## Togo

A stop-MDA survey occurred in July and August 2017 in Maritime, a region thought to be hypo-endemic. The goals for the stop-MDA survey are as follows: 1) Determine if MDA can be stopped in four endemic districts (Ave, Yoto, Zio, and Bas-Mono) and 2) Confirm that the other districts in Maritime that are non-endemic remain free of oncho (Lacs, Vo, and Golfe). The MOH and HDI will determine the prevalence of oncho antibodies in children 2 to 9 years of age using OV16 ELISA. Work is planned for the fall of 2017 to measure the prevalence of infection in the vector (black flies) using O-150 pool screen PCR. These data will be used to determine the future of oncho treatment in the Maritime region.

Three countries (Burkina Faso, Niger, and Sierra Leone) noted challenges with M&E activities:

**Challenges in Burkina Faso:** One of the NTDP's ongoing major challenges is to improve the quality of MDA data in terms of promptness and completeness. To ensure ongoing improvement, starting in FY16, the data are validated every six months at the national level. A data validation session for regions that completed the SCH MDAs (except the Centre-Est for the second round) was held from August 9–12, 2017 in Koudougou and helped to consolidate the database. In addition, the DRS and HD assessment meetings provided an opportunity to review the data generated by these MDAs.

The other challenge is to complete TAS 2 and TIS before the end of FY17, despite the rainy season

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<sup>3</sup> The last oncho impact assessment was conducted in 2010 following five rounds of MDA in the 12 oncho endemic HDs using skin snip.

and farming tasks that slow these activities. To address this, the HKI END in Africa team consults with the NTDP on an ongoing basis to address challenges quickly and support the program to complete the assessments in a timely manner.

Lastly, it was noted that some districts have failed the pre-TAS more than once (including Bittou, Ouargaye and Diébougou). To address this challenge, the NTDP has proposed to conduct an independent monitoring survey in targeted districts to identify the determinants of persistent LF prevalence (>1%). The districts concerned are Kampti and Diebougou (Southwest region), Bittou and Ouargaye (Central East region) and Fada and Gayeri (Eastern region). Another recommendation is to monitor treatment coverages at lower levels (i.e., by village) to identify areas with potentially low coverage so that specific actions can be taken that directly target these potential problem areas.

**Challenges in Niger:** The main M&E challenges faced during the reporting period encompassed:

*Campaign duration* – Despite the social mobilization campaigns that set the start and end of the campaign at the national level, NTD campaigns take place every year for several months. This year, the program asked each region to determine the duration of the campaign according to the number of drug packages. Regardless of this, the campaign was longer than initially scheduled in some regions because the MOH delayed setting the national assessment date.

*Security Issues* – Data collection, management and control are very precarious in certain areas of the country. This is related to problems gaining access to regions at risk in terms of security. Attacks carried out in certain areas (North Tahoua and Diffa region) impeded efforts to supervise the survey activities. We also note that the workers have problems obtaining data from insecure areas. For example, in the area north of Tillabéri, there are soldiers instead of MOH health workers in the CSI, this makes it difficult to obtain health information for these populations.

*Archiving* – Campaign data collection materials are not archived adequately. During supervision, supervisors inform the health workers of the need to develop a rational system for archiving the various materials and data for later use. However, these workers' mobility affects the ability to preserve older documents from prior mass campaigns. It was recommended the health facilities set up an NTD-specific dossier to ensure traceability of information from the various campaigns conducted by each facility at each level of the health pyramid. As things stand today, several NTD focal points (regional, health district) or health center directors have been reassigned or have left their health facilities. Their replacements have had problems accessing data from prior campaigns. Some focal points used their own computers for work and took the data with them when they left. Ideally, this discussion would be held again at meetings with the focal points (national, regional, health district and CSI directors). However, since then, we have asked the health workers to archive information on NTDs, as with Guinea worm.

**Challenges in Sierra Leone:** A major challenge encountered during the DSAs is the poor road network, especially in the riverine districts (Pujehun, Moyamba, Bonthe). Survey teams had to hire boats and canoes to access these areas and additional days were provided for team members to achieve their objective. In addition, some communities were resistant to sample collection due to the recent Ebola outbreak and in some cases, teams were denied sample collection.

Poor road networks also posed challenges for the national program, HKI and other partners, who could not monitor activities in some communities that were inaccessible. Another M&E challenge facing the NTDP and other partners in the country are population denominators. The results of the national population and housing census conducted in December 2015 indicate a gross underestimation of population figures in some districts. The national program and partners have agreed to use projections of the 2015 census and compare with the CDD census and take the highest figures for program planning. Additionally, a 10% buffer will be supplied to each district to account for unexpected increase in the population.

## Training

In this reporting period, a total of 34,253<sup>4</sup> people were trained to conduct and/or supervise MDAs and to perform M&E related activities. Training sessions were cascaded and organized mainly around MDA or DSA activities. Reported data shows 14,571 women and 19,682 men were trained in the second half of FY17. The number of trainees by category is presented in Table 15 of Appendix 1. Additional information on trainings conducted during the period under review can also be found in the respective country summary reports in Appendix 2.

## M&E Technical Assistance and Capacity Building

FHI 360 and partners continued to support the countries in developing sustainable NTDP M&E systems. During the reporting period, the END in Africa project continued to collaborate with NTD partners (Task Force for Global Health, WHO HQ, and RTI) to determine the way forward on post-MDA surveillance for LF and Trachoma, based on current WHO guidelines for the two diseases and experiences in post-MDA surveillance in the six END in Africa countries. TA was provided for routine activities and requested ad hoc activities, based on country needs.

The only technical assistance provided by the END in Africa M&E Specialist during the period under review was to three portfolio countries – Ghana, Niger and Togo.

**Togo and Niger:** In April and May 2017, the END in Africa M&E Specialist trained the NTDP on how to conduct data quality assessment, how to implement the WHO NTD Database, and how to complete the WHO joint request and reporting forms. The purpose is to help countries improve the data quality and quantifying the number of tablets required to reach the target population, and ensure they report annual progress on integrated and coordinated distribution of drugs across diseases in the reporting year.

**Ghana:** In July and August 2017, the END in Africa M&E Specialist provided coaching on quality improvement to QI teams in Birim North District. He also assessed the level of implementation of QI activities in this district and conducted a new training of health staff and CDDs on QI for targeted LF hotspot districts in Ghana.

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<sup>4</sup> Based on data reported in FY17 SAR 2 workbooks, hence may vary from numbers reported in narrative text.



## Knowledge Management

END in Africa recognizes the importance of keeping the broader NTD and global health community informed about the project's and countries' progress toward eliminating and controlling NTDs. As END in Africa project lead, FHI360 carefully documents and shares information regularly through multiple formats, in addition to supporting the USAID NTD communications team as well as cultivating partnerships in the NTD and related communities. Specifically, the team:

1. Informs countries, partners, donors and colleagues in the NTD community about the project's progress and impact to date;
2. Creates or contributes to dialogue among the NTD community on shared challenges, issues and concerns;
3. Showcases cost efficiencies, improved equity in healthcare and the public health impact of NTD control efforts and advocates for the expansion of partnerships and funding for such efforts;
4. Multiplies the project's impact by informing NTD control efforts in non-END in Africa countries that are still struggling to control NTD transmission; and
5. Improves awareness about NTDs among global health professionals and the public.

Major activities completed during the second half of FY17:

- Updated content in every section of the END in Africa website. The website is the END in Africa project's most important knowledge management and communication tool. It showcases the project's progress, results, success stories, lessons learned and impact. Posted all key documents on the website.
- Coordinated, researched, wrote, edited, produced and published 6 success stories, articles or blog pieces. These included:
  1. [Persistent 'hotspots' of lymphatic filariasis microfilaraemia despite 14 years of mass drug administration in Ghana](#)
  2. [END in Africa Project Team Wins Award for Program Excellence](#)
  3. [Integrated Mass Treatment Protects 13 Million against Neglected Tropical Diseases in Côte d'Ivoire](#)
  4. [Resource Mobilization for Morbidity Management](#)
  5. [Supportive Supervisory Visit to Sierra Leone Helps Ensure Excellence through Team Work](#)
  6. [Supportive Supervisory Visit to Cote d'Ivoire Helps Ensure Excellence through Team Work](#)
- Composed, posted and tracked tweets and tweet conversations on the END in Africa Twitter account to broaden the reach of END in Africa's success stories, progress and news; raise awareness about project results, best practices, and lessons learned; engage and strengthen alliances with partners and colleagues in the NTD community; and increase engagement and information exchange with the public and the NTD community.
- Between April 1, 2017 and September 13, 2017, the END in Africa website had 1,095 unique visitors who viewed a total of 2,752 pages. Of the visitors, 75% were first-time visitors; the remaining 25% were repeat visits from people who had visited the website previously at least once.
- END in Africa's influence in the Twittersphere has grown by 8% between April 1, 2017 and September 13, 2017, increasing from 566 to 610 followers. The project has been using the

@ENDinAfrica Twitter feed and the #NoMoreNTDs and #BeatNTDs hashtags strategically to increase awareness and engage NTD partners and related communities on issues involving NTD control and elimination. In this period, @ENDinAfrica generated 4,637 tweet impressions.

- Coordinated with sub-grantees to obtain new documents and photos and updated END in Africa's SharePoint site.
- Continued work to broaden and maintain collaborative partnerships with organizations in the broader NTD and knowledge management communities, and shared and exchanged information, publications, data, photos or other knowledge products with the same.
- Provided editorial and quality control services to END in Africa partners and sub grantees on various publications to improve product quality and ensure compliance with USAID publication guidelines and the END in Africa Branding and Marking Plan. Worked with Deloitte to provide content, feedback, editorial and branding support, and quality control services for the NTD Program Sustainability Handbook. Also took on responsibility for producing and disseminating the content of the Handbook.
- Provided editorial support and quality control services for reports and documents that are disseminated to the public.
- Updated and expanded END in Africa's contact and information dissemination database; added security features to website to protect database from malicious attacks.
- Continued to coordinate, support and maintain the END in Africa article publication schedule and tracking tool. The tool ensures timely, well-researched, effective dissemination of information on the successes of project implementation in the beneficiary countries, including success stories, lessons learned and best practices. It is used to track publications submitted in peer-reviewed journals, as well as technical articles and blog posts. More specifically, the project team is using the tool to identify, schedule and track the progress of articles as they move from the conception stage to final publication; it is particularly useful for ensuring the integrity and accuracy of articles and publications requiring input, collaboration and approval from multiple parties.
- Contributed to group discussions on the NTD Communicators Google Group, KM4DEV, HIPNET and the Infectious Diseases listserv. These groups aim to increase collaboration among knowledge and communications managers through information and network sharing, cross-promotions, and creation of synergies.
- Responded to public requests for information on the END in Africa project.
- Worked with ENVISION to promote ENVISION's NTD webinar series and stories and content on ENVISION's NTD website, via meetings/presentations, participation in a webinar, and social media. Also worked with ENVISION to produce a manuscript on the history and accomplishments of USAID's NTD program.
- END in Africa staff participated in and hosted the April 2017 USAID NTD partners meeting
- Responded to requests from USAID for information, photos, and content for various materials.

### **Sustainability Handbook**

During the END in Africa Partners Meeting, Deloitte was given the opportunity to present our flagship product, the Sustainability Framework. The objectives of this presentation were to help participants understand:

- Sustainability within the context of health programs;
- Interconnected components of sustainability, with a focus on strategic partnerships;
- Approaches and tools that can be applied in programs to advance sustainability through strategic partnerships; and
- Present an example of a successful social strategic partnership in Ghana.

Following the presentation, a copy of the Sustainability Handbook was distributed. This Handbook builds on the Sustainability Framework, and reflects the activities implemented in Ghana and other END in Africa countries in West Africa to promote sustainability. It was designed to help influence NTDP teams in how they are thinking about the trajectory of their programs as they work towards elimination and control targets and how they are sustaining impact in a post-elimination environment. The Handbook can serve as a standalone resource for self-learning or as a “take-away” reference guide for those who have participated in the NTD Sustainability Workshop.

The contents of this Handbook break down the components of the Sustainability Framework and present visual learning, real world examples, and exercises to help users understand and operationalize key actions that can promote sustainable programming and impact. Each chapter is comprised of definitions for key terms and concepts, recommended approaches, supporting tools and processes related to sustainability planning, and practical exercises. While this Handbook was developed with NTD programming in mind, the approaches and tools extend far beyond just NTDPs and can be applicable to other health and non-health programs.

### **Blog post publications**

During this reporting period, Deloitte created two blog posts. The first one, entitled ‘Resource Mobilization for Morbidity Management’, discussed how financial analysis and strategic advocacy can be effective tools for obtaining funds for morbidity management, which can dramatically improve quality of life for people suffering from the consequences of NTDs. The second post announced the official publication of the Sustainability Handbook and provided an electronic copy. These blog posts have been well received and published by END in Africa, amplifying the visibility. Our team will continue to provide blog postings on thought provoking and relevant topics.

### **Success Stories**

*Success story #1* – Eight years after the last LF treatments were distributed in Togo, the WHO certified that Togo was the first country to achieve elimination of LF as a public health problem in sub-Saharan Africa. It is difficult to imagine the hard work that went into this success. Initially, in the 2000s, the Dr. Yao Sodahlon, the LF Program Manager at the time, managed, with very limited funding, to provide IVM and ALB treatments to those areas with LF transmission. Once treatments stopped, the new LF Program Manager’s work continued with routine surveillance, as well as high quality LF morbidity management activities and dossier preparation. The celebration of Togo at the WHO NTD Summit in Geneva was a proud moment for all of those in Togo who had worked so hard to prevent new cases of LF morbidity. The work for the LF Program Manager is not yet done, however. Dr. Dorkenoo continues to champion morbidity management programs for those remaining cases of elephantiasis and surgical treatment of hydroceles. In addition, Dr. Dorkenoo is remaining vigilant to the threat of reintroduction of LF into Togo through ongoing efforts to maintain LF surveillance in Togo. The success of Togo in eliminating LF demonstrates what Program Managers can accomplish with the support of their governments, as well as outside funders. The

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next two diseases to be eliminated in Togo are trachoma and oncho. Given the dedication and commitment of the current trachoma and oncho Program Managers, we look forward to celebrating the elimination of other NTDs in Togo in the future.

*Success story #2* – Togo is making significant progress towards collecting the data needed to complete their dossier demonstrating elimination of trachoma as a public health problem. While Togo had conducted several surveys of trachoma in the past, issues with the methodology or even changing global standards for the rigor of such surveys have meant that essential information was still needed for Togo to demonstrate elimination of trachoma as a public health problem. In April of this year, representatives of WHO, USAID, FHI 360 and HDI met with the MOH of Togo in Accra to review all available data and identify the final steps necessary to obtain the data required for a trachoma dossier. Seven districts were identified that warrant trachoma mapping. With USAID funding, and critical training and logistics support from Tropical Data, Togo launched its trachoma survey in seven of its forty districts on August 28, 2017. The results of this survey, which will be available in October 2017, will indicate whether surgical campaigns for trichiasis will be necessary to meet the criteria for elimination of trachoma as a public health problem. Completion of any necessary trichiasis surgeries and submission of the dossier should be possible within the next year.

**Table 2: Suggested Topics for Publications in FY2018**

No.	Suggested Title	Summary	Type of publication (Peer reviewed paper-PRP; Article-A; Blog-B)			Time frame	Comments
			PRP	A	B		
1.	Supportive Supervision Visit Reviews Progress in Ghana's Fight against Neglected Tropical Diseases	This blog will discuss the activities reviewed by the project manager during project supervision in Ghana.			Yes	Oct 2017	Joseph K and Kathy Sanchez
2.	Brief report on END in Africa support to and participation in OECs in project countries	This blog will highlight the role of OECs, where they already exist, project support to and participation in the existing OECs			Yes	Nov 2017	Joseph K and Kathy Sanchez
3.	Progress towards documenting trachoma elimination in Togo	This blog will briefly report interventions for documenting elimination of trachoma in Togo			Yes	Dec 2017	Joseph K and Kathy Sanchez
4.	Validation of trachoma elimination in Ghana	Brief report on progress with dossier submission to WHO for verification of trachoma elimination and feedback received.			Yes	Jan 2018	Joseph K and Kathy Sanchez
5.	Update of the epidemiological situation of PCT NTDs in Burkina Faso	This blog will provide an update on the epidemiological situation for the 5 PCT NTDs in the country			Yes	Feb 2018	Joseph K and Kathy Sanchez
6.	Update of the epidemiological situation of PCT NTDs in Ghana	This blog will provide an update on the epidemiological situation for the 5 PCT NTDs in the country			Yes	Mar 2018	Joseph K and Kathy Sanchez
7.	Update of the epidemiological situation of PCT NTDs Ivory Coast	This blog will provide an update on the epidemiological situation for the 5 PCT NTDs in the country			Yes	Apr 2018	Joseph K and Kathy Sanchez
8.	Update of the epidemiological situation of PCT NTDs in Niger	This blog will provide an update on the epidemiological situation for the 5 PCT NTDs in the country			Yes	May 2018	Joseph K and Kathy Sanchez
9.	Update of the epidemiological situation of PCT NTDs in Sierra Leone	This blog will provide an update on the epidemiological situation for the 5 PCT NTDs in the country			Yes	Jun 2018	Joseph K and Kathy Sanchez
10.	Update of the epidemiological situation of PCT NTDs in Togo	This blog will provide an update on the epidemiological situation for the 5 PCT NTDs in the country			Yes	Jul 2018	Joseph K and Kathy Sanchez
11.	Importance of cross-border collaboration for sustaining gains within the END in Africa project	This blog will discuss the importance of cross-border collaboration for PCT NTDs and what has been done for implementation of cross-border interventions within the project			Yes	Jul 2018	Joseph K and Kathy Sanchez
12.	Deloitte publication on sustainability of NTD programs in West Africa	This will be a blog post from Deloitte on the country interventions needed for sustaining gains in controlling and eliminating NTDs			Yes	Jul 2018	Deloitte and Kathy Sanchez

*\*Please note some of the topics listed here can also be changed/replaced based on developments within the project. The titles can also be modified based on the final content of the publication.*

## Major Activities for the Next Six Months

### Program Management and Implementation (FHI 360):

- Continue to provide technical support and leadership to END in Africa sub-grantees and NTDPs in program implementation countries, including design, development, planning, implementation, execution, capacity-building, and evaluation of NTD projects and programs at the country and regional levels.
- The project's Associate Director, Technical will provide technical assistance to address requests from the NTDPs in the END in Africa implementing countries in FY18.
- Continue to improve coordination and collaboration with other organizations and agencies involved in the control/elimination of the 5 NTDs targeted by the END in Africa project.
- Continue to work with sub-grantees, NTDPs and colleagues of the END in Africa consortium to document program successes, best practices and lessons learned, and to improve visibility of the END in Africa project.
- Continue to support general coordination of the END in Africa project by ensuring the NTDPs in the six END in Africa implementing countries submit requests for impact assessment surveys (pre-TAS, TAS, TIS) to the WHO NTD RPRG for approval before the surveys are conducted. We will also ensure reports from these surveys are submitted to the NTD RPRG for review, acceptance and guidance on the way forward.
- Begin preliminary preparations for end of project close out procedures – All project implementation is slated to end June 2018, giving the sub-recipients two months to wrap-up project operations. FHI 360, as the prime, will have one month to complete the award close out process, pending submission of final project deliverables that are due 90 days after the project end date.

### Financial Management and Capacity Building (Deloitte):

Anticipated priorities for the next six months (October 1, 2017–March 30, 2018) listed by country:

#### *Cote d'Ivoire*

- Complete the TIPAC data analysis and develop a visualization and report of the results
- Mentor identified NTDP team members to build skills in data analysis and reporting
- Support the implementation of the advocacy strategy and build business cases to engage government leaders in NTDs
- Review and provide recommendations for improved financial management
- Provide technical support for partnership engagement, messaging, and business cases development

#### *Ghana*

- Complete the TIPAC data analysis and develop a visualization and report of the results
- Mentor program managers on reporting, data analytics, and performance management focused on practical application and decision-making
- Work with the NTDP and PPMED/SSP Unit to execute a partnerships action plan
- Identify key partnership opportunities for the NTDP and continue to mentor and train on key partnership enabling skills for the NTDP and the SSP Unit within the PPMED
- Support program performance management and planning through financial accountability, governance, and PMIs

### **Togo**

- Complete the TIPAC data analysis and develop a visualization and report of the results
- Mentor and support the NDTP to build business cases and develop proposals for partnerships with the private sector

### **Sierra Leone**

- Complete the TIPAC data analysis and develop a visualization and report of the results

Additional anticipated priorities/activities for the next six months (October 1, 2017–March 30, 2018) are listed below by implementing partner:

### **Burkina Faso (HKI)**

- MDAs:
  - Conduct LF/STH MDA once ALB arrives in-country (FY17) – Postponed to November 2017
  - Hold MDA implementation training sessions at all levels (central level, regional health directorate, HD, health center (CSPS in French), community distributor)
  - Conduct advocacy and social mobilization activities before and during the MDAs
- Monitoring & Evaluation:
  - Complete the remaining FY17 TAS 1 in Centre-Sud (Kombissiri, Manga, Po, Sapone)
  - Conduct TAS 2 in the Sahel (Djibo, Dori, Gorom-Gorom) and Centre regions – (Baskuy, Boulmiougou, Nongre-Massom, Sig-Nonghin, Bogodogo)
  - Conduct trachoma surveillance surveys in 18 HDs
  - Conduct pre-TAS in 11 sentinel and control sites
  - Conduct FY18 TAS 1 in 6 HDs
  - Conduct DQA in the Centre-Est and Est regions
- Meetings/workshops (technical)
  - Convene an STH-SCH transition planning meeting
- Provide technical assistance
  - Develop the Trachoma elimination plan
  - Support for the onchocerciasis technical committee

### **Niger (HKI)**

- MDAs:
  - Official launch of the FY18 MDA campaign
  - MDA campaign for Trachoma, LF, and SCH in 5 HDs (Maradi, Diffa, Tillabéri, Agadez, Zinder)
- Monitoring & Evaluation:
  - Train ophthalmic technicians in trachoma survey methodology; PNDO/EFL technicians on ELISA techniques; and how to conduct TAS 1 and TAS 2
  - Oncho epidemiological survey (OV16 ELISA) in 3 HDs
  - Conduct TAS 1 survey in 7 HDs (Konni, Illéla, Keita, Tahoua, Bouza, Tchintabaraden (Tahoua region) and Tanout)
  - Conduct LF surveillance survey in 8 HDs (Tera, Say, Kollo, Boboye, Madaoua, Tillabéri, Dakoro and Guidan Roumdji)
  - Conduct TIS in 2 HDs (Mayayi and Guidan Roumdji)
  - Conduct TSS in 13 HDs on INDB data entry
- Meetings/workshops (technical):

- LF and Trachoma surveillance strategy validation meeting
- Workshop to develop STH transition plan
- Onchocerciasis Elimination Committee meeting

#### **Sierra Leone (HKI)**

- MDAs:
  - Complete the LF/Oncho/STH MDA and update workbooks with treatment data
  - Conduct SCH MDA in 7 HDs
- Monitoring & Evaluation:
  - Cascade training on DQA will take place in October 2017 targeting district focal persons and district M&E officers
  - Implement data quality assessment in 2 HDs
  - Conduct coverage survey in 3 HDs
  - DQA training and implementation
  - Conduct integrated NTD database training and data entry
- Meetings/workshops (technical):
  - Hold NTD annual review meeting
  - Convene SCH/STH transition planning meeting
- Update TIPAC and conduct participate in a resource mobilization skills training

#### **Cote d'Ivoire (FHI 360)**

- MDAs:
  - Conduct capacity building activities for all MDA actors – April 2017
  - Conduct integrated MDA for LF/Oncho/STH in 57 HDs (48 HDs – oncho; 22 HDs – STH)
  - Conduct trachoma MDA in 6 HDs
  - Official launch of FY18 NTD MDA in Aboisso health district
  - Purchase and duplication of MDA materials
- Monitoring & Evaluation:
  - Train data managers of regions (10 regions) and districts (35 districts) on the integrated NTD database
  - Conduct trachoma impact survey in Senguela HD
- Meetings:
  - Operational workplan development meeting
  - Coordination meeting with governors (local administrative authorities)

#### **Ghana (FHI 360)**

- MDAs:
  - Implement integrated LF/oncho/STH MDA in 129 HDs
- Monitoring & Evaluation:
  - Conduct pre-TAS in 6 HDs
  - Conduct TAS 1 in 5 HDs
- Meetings:
  - Attend the 2017 Annual Meeting for COR-NTD and ASTMH in Baltimore, MD
- Complete WHO trachoma elimination validation template for submission to WHO in October 2017



## **Togo (HDI)**

- MDAs:
  - Implement December 2017 MDA in high STH-, SCH- and onchocerciasis-burden areas
  - Implement March 2018 MDA
  - Conduct training of people involved in MDA: Supervisors, nurses, and CDDs
  - Implement community mobilization activities in high onchocerciasis prevalence villages
- Monitoring & Evaluation:
  - Collect, enter and analyze data from August 2017 MDA
  - Revise MDA tools
  - Continue stop MDA survey in Maritime (entomology) and analyze collected samples
  - Finalize FY19 Praziquantel application
  - Onchocerciasis surveillance activities
- Meetings (technical):
  - Onchocerciasis Elimination Committee meeting
  - HDI-Togo and HDI-HQ team to participate in 2017 ASTMH meeting in Baltimore, MD

## **Monitoring & Evaluation Activities:**

- Coordinate data management, documentation and dissemination within the END in Africa project. The M&E Advisor will coordinate the review of project data through a continuous process that involves USAID, ENVISION, sub grantees, and national NTDPs. NTD data Consistency and accuracy will be assessed considering reporting deadlines.
- Support general capacity building efforts within countries by directly providing TA to countries on M&E-related activities per approved workplans, as agreed with USAID.
- Train and advise sub grantees and national NTDPs on the use of M&E tools and implementation of M&E processes, including indicators, data collection techniques and methodologies, data collection and analysis, and reporting protocol.
- Monitor project performance including NTD program coverage and NTD program progress toward stopping district and/or sub-district MDA.
- Participate in the writing and reviewing of the END in Africa first semi-annual report for FY18 and the end of project report.

Table 3

## Travel Plans for Fiscal Year 2018

Traveler	From	To	# Trips	Duration	Month	Purpose
Egide Ndayishimye, M&E Specialist	Ghana	Niger Cote d'Ivoire Sierra Leone Togo	1 1 1 1	1 week	TBD	<i>Niger</i> : Training on NTD database and DQA <i>Cote d'Ivoire</i> : Monitor implementation of DQA action plan <i>Sierra Leone</i> : Training on DQA and NTD database and to support implementation of DQA <i>Togo</i> : Training on NTD database and M&E aspects of the NTDP and DQA
Joseph Koroma Assoc. Technical Director	Ghana	Niger Cote d'Ivoire Sierra Leone Burkina Togo	2 1 2 2 2	1 week	TBD	To participate in 4 OEC meetings (1 week for each country with Cote d'Ivoire not included) and 5 TA/monitoring visits (1 week/country for the 5 countries)
Bolivar Pou Project Director/ Yudaya Mawanda Project Operation M.	W/DC	TBD	2	1 week	TBD	Reserving two trips if needed for project close out (one week per country)
TBD Financial Specialist Deloitte	W/DC	Ghana Sierra Leone Cote d'Ivoire Togo	1 1 4 2	1 week in each country	TBD	<i>Cote d'Ivoire</i> : Continue support for TIPAC and resources mobilization. <i>Togo and Cote d'Ivoire</i> : Mentoring on Project Management. <i>Ghana</i> : Resources mobilization/Program Management
Kingsley Frimpong Financial Specialist Deloitte	Ghana	Sierra Leone	2	1 week	TBD	TIPAC Partnership development.
Egide Ndayishimye, M&E Specialist	Ghana	Geneva	1	TBD	TBD	WHO International M&E meeting
Joseph Koroma Assoc. Technical Director	Ghana	TBD	1	TBD	TBD	RPRG meeting in Africa
Project Technical Team: Joseph Koroma Paul Yikpotey Ernest Mensah Virginie Ettiegne Traoré	Ghana Ghana Ghana Cote d'Ivoire	Baltimore, Maryland	4	1 week	November 2017	2017 ASTMH Conference

# Appendices

## Appendix 1: MDA Reporting of Integrated NTD Control

**Table 7: Number of people treated, All funding, FY17 SAR2**

NTD	Ghana	Niger	Sierra Leone	Togo	Burkina Faso	Côte d'Ivoire	Total treated FY17
LF	0	0	0	NA	0	11,822,333	11,822,333
Oncho	0	0	0	1,365,810	161,039	9,606,607	11,133,456
SCH	0	0	0	698,384	4,524,424	515,203	5,738,011
STH	0	0	0	432,243	1,487,425	3,144,612	5,064,280
Trachoma	NA	0	NA	NA	0	948,274	948,274
<b>Treatments provided</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,496,437</b>	<b>6,172,888</b>	<b>26,037,029</b>	<b>34,706,354</b>
<b>Treated for at least one NTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,244,130</b>	<b>4,524,956</b>	<b>12,296,432</b>	<b>19,065,518</b>

**Table 8: Number of people treated through USAID funding, FY17 SAR2**

NTD	Ghana	Niger	Sierra Leone	Togo	Burkina Faso	Côte d'Ivoire	Total treated FY17
LF	0	0	0	N/A	0	11,822,333	11,822,333
Oncho	0	0	0	1,333,275	161,039	9,606,607	11,100,921
SCH	0	0	0	698,384	4,524,424	376,785	5,599,593
STH	0	0	0	432,243	1,487,425	3,144,612	5,064,280
Trachoma	NA	0	NA	N/A	0	948,274	948,274
<b>Treatments provided</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,463,902</b>	<b>6,172,888</b>	<b>25,898,611</b>	<b>34,535,401</b>
<b>Treated for at least one NTD</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,211,595</b>	<b>4,524,956</b>	<b>12,296,432</b>	<b>19,032,983</b>

**Table 9: Gender distribution: Percentage male treated over the females by NTD and by country, FY17 SAR2**

Country	LF		Oncho		SCH		STH		Trachoma	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Burkina Faso	0*	0*	49.12%	50.88%	48.03%	51.97%	0*	0*	0*	0*
Côte d'Ivoire	49.86%	50.14%	49.85%	50.15%	40.00%	33.14%	49.92%	50.08%	49.61%	50.39%
Ghana*	0	0	0	0	0	0	0	0	NA	NA
Niger*	0	0	0	0	0	0	0	0	0	0
Sierra Leone*	0	0	0	0	0	0	0	0	NA	NA
Togo	NA	NA	50.10%	49.90%	47.82%	52.18%	49.75%	50.25%	NA	NA

\*Disaggregated data by gender not yet available.

**Table 10: Number of people treated for at least one NTD, USAID funds, annually  
ACCUMULATIVE NUMBER TREATED, AS OF FY17 SAR2, USAID FUNDS**

Country	2011	2012	2013	2014	2015	2016	2017	Accumulative
Burkina Faso	9,953,928	11,425,882	10,766,545	9,806,303	7,896,218	11,735,579	4,524,956	66,109,411
Côte d'Ivoire	N/A	N/A	N/A	N/A	N/A	14,729,251	12,296,432	27,025,683
Ghana	0	8,932,210	8,260,837	9,620,862	4,845,599	4,967,247	0	36,626,755
Niger	8,672,220	10,226,100	960,145	9,907,579	9,068,274	8,884,258	0	47,718,576
Sierra Leone	3,908,514	5,242,394	5,214,790	4,091,497	4,065,939	5,645,521	0	28,168,655
Togo	1,248,393	2,792,591	2,909,823	230,967	3,210,688	3,333,244	2,211,595	15,937,301
<b>Total</b>	<b>23,783,055</b>	<b>38,619,177</b>	<b>28,112,140</b>	<b>33,657,208</b>	<b>29,086,718</b>	<b>49,295,100</b>	<b>19,032,983</b>	<b>221,586,381</b>

**Table 11: Accumulative Number Treated, as of FY17 SAR2, USAID Funds**  
**ACCUMULATIVE NUMBER OF TREATMENTS PROVIDED, AS OF FY17 SAR2, USAID FUNDS**

Country	2011	2012	2013	2014	2015	2016	2017	Accumulative numbers
Burkina Faso	20,842,690	24,460,183	20,094,365	19,815,380	15,988,314	26,990,829	6,172,888	134,364,649
Côte d'Ivoire	N/A	N/A	N/A	N/A	N/A	15,943,099	25,898,611	41,841,710
Ghana	0	20,315,518	14,712,196	14,681,359	5,492,502	5,388,492	0	60,590,067
Niger	22,417,876	28,004,828	1,822,325	24,523,339	24,920,461	20,281,191	0	121,970,020
Sierra Leone	10,263,686	14,754,384	14,670,706	10,850,359	10,774,071	14,000,546	0	75,313,752
Togo	2,252,012	5,491,657	5,698,210	230,967	6,662,871	7,605,125	2,463,902	30,404,744
<b>Total</b>	<b>55,776,264</b>	<b>93,026,570</b>	<b>56,997,802</b>	<b>70,101,404</b>	<b>63,838,219</b>	<b>90,209,282</b>	<b>34,535,401</b>	<b>464,484,942</b>

**Table 12: Districts endemic at baseline and number of districts that stopped MDA, by NTD FY17 SAR2**

Country	# Known endemic districts by September 2017				
	# Districts stopped PC (at least at district level for trachoma), by end FY17 SAR2				
	LF	Oncho	SCH	STH	Trachoma
Burkina Faso	70	6	70	70	48
	55*	0	0	0	29
Côte d'Ivoire	74	67	80	82	9
	0	0	0	0	1
Ghana	98	85	216	216	37
	83	0	0	0	37
Niger	31	NA	41	41	35
	11	NA	0	0	23
Sierra Leone	14	12	12	14	NA
	8	0	0	0	NA
Togo	8	32	35	28	NA
	8	0	0	0	NA
<b>Total</b>	<b>295</b>	<b>266</b>	<b>454</b>	<b>451</b>	<b>129</b>
	<b>165 (56%)</b>	<b>0 (0%)</b>	<b>0 (0%)</b>	<b>0 (0%)</b>	<b>90 (70%)</b>

#s in **red** are endemic districts and #s in **black** are districts that were endemic but have stopped treatment.

\*10 districts have recently passed TAS and can stop MDA (narrative report), but are waiting for official TAS results to be included in workbook.

**Table 13: Number of districts assessed during FY17 SAR2**

Country	Pre-TAS	TAS 1	TAS 2	SCH	STH	Trachoma	Oncho
Burkina Faso	4	15	7	16	0	19	Epi Eva: 0 Ento: 0
Cote d'Ivoire	0	0	0	0	0	1	Epi Eva: 21 Ento: 0
Ghana	10	2	7	0	0	2	Epi Eva: 155 Ento: 0
Niger	0	0	0	17	0	0	Epi Eva: 0 Ento: 0
Sierra Leone	6	8	0	0	0	NA	Epi Eva: 12 Ento: 0
Togo	NA	NA	NA	0	0	NA	Epi Eva: 28 Ento: 0

**Table 14: Program and Epidemiological coverage, FY17 SAR2, USAID Funds**

	Country											
	Burkina Faso		Côte d'Ivoire		Ghana		Niger		Sierra Leone			
NTD	Program	Epi %	Program	Epi %	Program	Epi %	Program	Epi %	Program	Epi %	Program	Epi %
LF	0%	0%	89.64%	71.35%	0%	0%	0%	0%	0%	0%	NA	NA
Oncho	100.34%	23.88%	89.62%	71.39%	0%	0%	-	-	0%	0%	84.46%	77.70%
SCH	97.38%	60.32%	102.81%	50.52%	0%	0%	0%	0%	-	-	96.43%	18.92%
STH	44.58%	12.27%	90.24%	71.26%	0%	0%	0%	0%	0%	0%	82.84%	33.05%
Trachoma	0%	0%	93.51%	93.97%	-	-	0%	0%	-	-	-	-

**Table 15: Total trained during FY17 SAR2, by country and socio-professional category**

Category	Burkina	Côte d'Ivoire	Ghana	Niger	Sierra Leone	Togo	Total
TOT	0	11	0	0	51	0	66
Supervisors	0	92	0	5	64	164	259
Health Providers	0	2,121	480	0	0	0	2,878
CDDs	0	29,007	0	0	0	0	29,007
Others (Lab & Program Staff)	0	246	15	12	1,900**	85	2,012
<b>Total</b>	<b>0</b>	<b>31,477</b>	<b>495*</b>	<b>17</b>	<b>2,015</b>	<b>249</b>	<b>34,253</b>
Total female	0	13,043	316	7	1,180	25	14,571
Total male	0	18,434	179	10	835	224	19,682

\*Ghana data includes persons trained on quality improvement

\*\*Sierra Leone data includes various PHU staff

## Appendix 2: Country Program Summaries

### Burkina Faso

#### Summary

The majority of planned FY17 activities were implemented during the second half of Fiscal Year 2017 (FY17); April 1 – September 30, 2017. An overall status check of FY17 project implementation shows that most activities planned in FY17 have been completed or have commenced despite a challenging socio-political and security environment in the country due to labor unrest and the activities of terrorist groups operating in the Sahel region, most notably the recent terrorist attack in Ouagadougou on August 14, 2017. The main activities carried out during the reporting period involved strategic planning, training and capacity building, mass drug administration (MDA) campaigns for LF, oncho and SCH, and monitoring and evaluation (M&E) activities for LF and trachoma.

Several strategic planning activities took place during the reporting period. A series of work planning sessions was held in Koudougou, Ouaga and Kombissiri to develop the FY18 END in Africa work plan. The work planning meeting in Ouagadougou took place from May 22–24, 2017 and involved participation from the NTDP, HKI, FHI 360, USAID, and representatives from the Centre Est and Sud-Ouest regions. HKI and the NTDP also participated in a workshop held by the West African Health Organization (WAHO) to standardize NTD campaign data collection tools for participants from Mali, Niger and Burkina. Two additional planning activities included the workshop to finalize the NTD campaign data collection tools and the adoption of the 2017-2020 NTD integrated communications plan.

Cascade trainings for MDA were held at national, regional and district level for all stakeholders involved in the implementation of MDA and/or CDTI for oncho. In addition, district health staff in four HDs of the Sud-Ouest region were trained in community self-monitoring of CDTI. For M&E, trainings were held for the LF TAS and the trachoma impact assessments (TIS) using Tropical Data. In terms of staff capacity building, two HKI END in Africa staff attended a training on "USAID Rules & Regulations: Grants & Cooperative Agreements" from May 8-10<sup>th</sup> in Dakar. Two HKI staff also completed a training on "Financial Management for US Government Funding" in Dakar and one HKI staff member completed a project management training in Niamey.

MDA campaigns for oncho, LF and SCH were carried out during the reporting period. First, MDA for LF and community-directed treatment with ivermectin (CDTI) for oncho was conducted in five health districts (HDs) in the Sud-Ouest region. According to provisional results, programmatic coverages of the oncho and LF MDAs were 80.3% and 81.4%, respectively. SCH MDA was conducted in five regions in a total of 28 HDs. A total of 4,524,424 people were treated (2,306,672 women and 2,217,752 men), achieving a national programmatic coverage rate of 97.9%. The second round SCH MDA in the Centre Est region was implemented from September 20 – 30<sup>th</sup>, 2017, but MDA data is not yet available.

LF MDA planned in the five remaining regions has not yet been carried out due to a delay in processing the albendazole (ALB) order, which was submitted to the WHO on September 11, 2016. The WHO anticipates that the ALB will not arrive in Burkina Faso until November 2017; thus, this MDA has been postponed.

LF transmission assessment surveys (TAS 1) have been completed in 11 HDs and preliminary results indicate that all HDs were below the critical cut-off and can stop MDA TAS 3 surveys were also completed in 3 HDs, but results are not yet available. LF pre-TAS were implemented in 12 sentinel and control sites in four HDs (Bittou, Ouagaye, Diebougou and Koupela) using the night blood smear technique; END in Africa supported pre-TAS in Bittou, Ouargaye and Koupela HDs and FPSU-L provided support for the pre-TAS in Diebougou HD. Koupela HD had *mf* prevalence <1% and will go on to conduct TAS 1 in FY18; the other three HDs will continue MDA.

Trachoma impact surveys (TIS) have been conducted in 13/15 planned HDs using Tropical Data. Preliminary TIS results are available for nine HDs and all showed a TF prevalence among children ages 1-9 years of less than 5%. The TIS is ongoing in the remaining two HDs and an additional four HDs will conduct TIS with World Bank support in October 2017. If all TIS results are satisfactory, Burkina will be able to stop MDA for trachoma country-wide. Lastly, coverage surveys for SCH/STH were implemented in the districts of Tougan and Titao with World Bank support. Data collection in 18 SCH control sites integrated with STH evaluations were also completed with World Bank funds. The survey results are not yet available.

### 1. MDA Assessment

The FY17 workbooks have been updated with available data.

### 2. Changes in MDA Strategy

District Name	Disease	Description of Change (ex: Stopped MDA; or Changed from district-level treatment to community-level treatment, etc.)	Rationale for Change (ex: active trachoma prevalence in impact study conducted in August 2011)
Zabré, Boussouma Kaya, Kongoussi, Ténado Léo, Nanoro, Réo, Pô	Trachoma	Stopped MDA	TF prevalence below 5%
Rural areas of the central HDs (Boulmiougou, Nongre-Massom, Sig-Nonghin), Bongandé-Manni, Diapaga Gayéri-Pama Pouytenga - Garango	LF	Stopped MDA	WB antigen prevalence with FTS below 1%

### 3. Training

Several training and capacity building sessions were held during the second half of FY17. They involved actors at the national, regional and district levels. Cascade trainings for MDA were held at national, regional and district level for all stakeholders involved in MDA implementation. Training participants included 56 national trainers, 169 members of district management teams, 1,276 head nurses; 2,032 health workers and 11,237 CDDs. In addition, a total of 129 trainees were trained how to conduct DSAs – 97 investigators how to conduct TAS 1, and 21 investigators and 11 data managers how to conduct TIS using Tropical Data (data not included in FY17 SAR 2 workbooks).

In addition, HKI END in Africa staff participated in three training opportunities related to project and financial management and USAID rules and regulations in May 2017 (Dakar, Senegal); and a project team member participated in the training on designing and guiding humanitarian projects in Niamey, Niger (July 24 – 28, 2017).



#### **4. Community Mobilization, IEC materials, Registers, Publications and Presentations**

Social mobilization activities were carried out in all health regions (Boucle de Mouhoun, Nord, Sahel, Sud-Ouest and Centre-Est) that conducted LF, oncho, SCH and STH MDAs. At the district level, these activities included radio broadcasts (1/district), radio spots (12/district and by region) and posters. Public criers, CDDs and members of health facility management committees (COGES) helped to mobilize people at health facilities and within the community. In particular, public criers were used in areas where people converge (Gaoua gold mining site, refugee camps in the Sahel) and in areas that are difficult to reach (farming hamlets) to ensure participation and satisfactory treatment coverage. Leaders of educational institutions were also engaged to relay information about the SCH campaign and to support the CDDs in administering drugs to children in school.

Quick survey tools were provided to supervisors at all levels to assess the effectiveness of the communication strategies. The summary of the results of the surveys conducted during the MDAs showed that all persons surveyed knew about the campaign and were aware of the dates of the MDA distribution. Eighty-three percent of the individuals surveyed (n=2,242) during the MDAs had received information about the MDA from criers, 13% by radio and 4% from other sources. In addition, the coverage survey results showed that grassroots communications via local radio stations and criers helped reduce the rate of refusals significantly, from 12.5% in 2015 to 1.1% in 2017. These tools allowed the supervisors to direct the CDDs and town criers based on the shortfalls noted.

#### **5. Supervision**

The Sud-Ouest, Sahel, Nord and Boucle du Mouhoun regions that carried out MDA and/or CDTI campaigns during this half-year were supervised by the national, regional and operational levels (districts and CSPS). The budget allocated for this activity to be executed in accordance with the FOGs. In cooperation with the regional and district staff, the HKI/Burkina Faso END in Africa team supervised implementation of these activities. All members of the district management teams and the head nurses were supervised on a cascade basis. Emphasis was placed on grassroots supervision and on recording the recommendations in the supervision notebook. Instituting a required daily briefing at all implementation levels was an important action. These daily assessment meetings at the regional health centers (DRSs) and districts during campaigns provided an opportunity to monitor coverage rates and summarize the problems noted at the various levels. Taking guidance from the national MDA directives, the corrective actions are transmitted to the actors in the field during the next day's visits.

Any weaknesses noted during supervision are addressed on-site. The other supervisors provide their perspective during the daily debriefings. The following problems were corrected:

- poor drug distribution;
- failure to properly supervise patient self-administration;
- inadequate mop-up operation before the end of the campaign; and
- inadequate communication.

The new data collection tools designed by the NTDP were also used during this supervision. The tools comply with WHO directives and incorporate new elements that consider the information needs of the NTDP and its partners. The elements of the tools were explained to the participants during preparatory meetings to help ensure that quality data are collected. The supervisors were

directed to ensure that participants understood the elements during the supervision.

On the DSA front, the NTDP and END in Africa project teams supervised the staff who carried out the pre-TAS, TAS 1 and TIS conducted during this reporting period. The regional and district actors participated in supervision in each district surveyed. A training/refreshers session was held for all the new and previous investigators to ensure that they comply with the Tropical Data protocol for the TIS.

## **6. Supply Chain Management**

The following NTD drugs were received in country during the reporting period:

- The second shipment of praziquantel (PZQ) for FY17 was received on March 31, 2017 accounting for a total of 6,657,000 tablets (333 boxes valued at USD \$494,881); this was not reported in the SAR1. The FY18 PZQ needs were also quantified and submitted with the WHO joint request for medicines.
- The program received 14,278,500 ivermectin (IVM) tablets (value of USD \$21,417,750) for its LF and onchocerciasis control activities.
- In anticipation of trachoma MDA (pending TIS results), six cartons of tetracycline eye ointment (TEO) were received, for a total of 9,000 tubes (value of USD 1,722.60). If trachoma MDA is not warranted, the TEO may be distributed during future trachoma impact and surveillance surveys.

In May 2017, a workshop was held in Kombissiri to determine the NTD drug needs for FY18. Supply inventories will be conducted when all the MDA campaigns have ended.

It should be noted that the government issued a special import authorization (SIA), which facilitated the acquisition of these drugs. The MDA drugs are delivered on a cascade basis from the central level to the health facility (CSPS) level. The drug consumption daily monitoring sheet was used to monitor the book inventory of drugs at all levels during the campaign and to avoid stock-outs at certain levels. The NTDP supplied the DRSs with SCH MDA drugs; the latter, in turn, supplied the health districts.

In addition, the NTDP obtained inputs (office furnishings, laboratory equipment and consumables and smartphone accessories) to be used to conduct the LF and trachoma surveys. The WHO also provided 20,700 Filariasis Test Strips (FTS) for the TAS. HKI worked with the NTDP to project the FTS needs for FY18 LF surveys: a total of 23,900 FTS (TAS + pre-TAS) are expected from the WHO donation program.

The albendazole (ALB) has not yet arrived in country because there was a delay in processing the request that was sent to the WHO. The Burkina MOH, in collaboration with WHO-AFRO, is exploring the option of obtaining 4.9 million leftover ALB from Cameroon to conduct the FY17 LF MDA in time. If this is unsuccessful, the WHO will supply ALB in November 2018.

### **Supply chain strengths and weaknesses**

Overall, the key strengths of the SCM system in Burkina Faso are:

- DRSs and HDs received MDA drugs and other materials on time to begin MDA
- Distribution statements and delivery notes are prepared in a timely manner
- Drugs are distributed accurately according to the targets to be treated by health facility

- HKI held a drug quantification workshop with the NTDP to quantify the 2018 drug request

Despite the strengths, some weaknesses of the system remain:

- There is low storage capacity at the national level (NTDP)
- Discrepancies between book inventory reported and physical inventory remaining from MDAs
- Some CSPS have incinerated their waste themselves

To address the low storage capacity at the national level, it was recommended that drugs be transported promptly to the regions as soon as they arrive at the Ouagadougou warehouse. Implementation of the post-MDA logistics audit will correct the discrepancies between book and reported inventories (this audit will be supported by World Bank).

## 7. Program Monitoring and Evaluation

The main M&E activities conducted during the reporting period included pre-TAS, TAS 1, TAS 2, trachoma impact surveys and post-CDTI coverage surveys as follows:

**LF – Pre-TAS** was implemented in 12 sentinel and control sites in four HDs (Bittou, Ouargaye, Diébougou and Koupela) using the night blood smear technique to measure *mf* prevalence; END in Africa supported pre-TAS in Bittou, Ouargaye and Koupela HDs and FPSU-L provided support for the pre-TAS in Diébougou HD. Results showed *mf* prevalence >1% in one or more sites in Bittou and Ouargaye districts in the Centre-Est region. The FTS was used during the pre-TAS in Diébougou (Sud-Ouest) and yielded antigen (Ag) prevalence of 4.42%. These districts will go on to conduct two additional rounds of MDA. Koupela HD will conduct TAS 1 in FY18.

**Table 1: Preliminary results from 2017 LF sentinel and control site surveys**

Districts	Sites	Total sampled	Number Positive	% prev. mf
Bittou	Lounga	389	05	1.29
	Rabouly	365	03	0.82
	Tiba	419	01	0.24
Koupéla	Bonessin	350	02	0.57
	Kougdo	311	01	0.32
	Zeologhin	333	00	00
Ouargaye	Tensobtenga	330	02	0.61
	Tangonko	370	04	1.08
	Kandoure/ Kaongho	447	00	00
	Comin Yanga	350	03	0.86
	Niorgo/Salembaore	332	06	1.81
	Boudangou	380	00	00

Manni, Nongre-Massom, Pouytenga, Garango, Sig-Nonghin, Bogandé, Diapaga, Boulmiougou, Gayéri, Sebba and Pama districts conducted TAS 1 using FTS. The preliminary results for number of positives are below the critical threshold. Implementation of TAS 3 in three evaluation units (11 HDs) was completed in Plateau Central (Boussé Ziniaré - Zorgho) and is currently ongoing in the Sahel (Dori, Gorom-Gorom, and Djibo) and Center regions (urban areas in the Center districts and Baskuy).

**Trachoma** – The Tropical Data team provided technical support for preparing the FY17 TIS. Health districts scheduled to conduct the impact surveys were reclassified as EUs in keeping with the

Tropical Data protocol. This produced a total of 28 EUs for the 19 districts involved; 15 of which were supported by END in Africa and the remaining four districts by the World Bank. The preliminary results from the nine districts that completed the TIS show TF prevalence below 5% among children aged 1-9 years.

The four additional TIS financed by the World Bank will be carried out in October 2017, followed by the trachoma surveillance surveys also planned with World Bank funding. There are not enough trained ophthalmic technicians to conduct the TIS and TSS simultaneously.

**Coverage Survey** – The post-CDTI coverage survey was already conducted in the Sud-Ouest region, but the results are not yet available. A post-MDA coverage survey is underway in two health districts (Tougan and Titao), with World Bank funding.

## **8. Transition and Post-Elimination Strategy**

The Ministry of Health and its partners adopted the 2016-2020 strategic plan to combat NTDs in the first half-year of FY17. This approved document is currently awaiting the signature of the Minister of Health, which will give it official status.

Passive surveillance is being implemented in the Cascades, Nord, and Hauts Bassins regional health directorates, which have successfully completed TAS 3 in all districts. In these three regions, the two supervisions conducted by the NTDCP in FY16 revealed that the activity had been carried out properly and no positive cases have been detected. However, surveillance activities in the Boucle du Mouhoun, Centre, Plateau Central, Centre-Nord, Sahel, and Centre-Ouest regions have not yet begun because of a lack of reagents. The World Bank has planned to provide funds for these reagents.

## **9. Short Term Technical Assistance**

The NTDCP received support from the FHI 360 M&E Specialist to implement the DQA in the Sud-Ouest and Centre-Sud regions.

## **10. Government Involvement**

Burkina Faso's 2011-2020 National Health Development Plan (PNDS) gives priority to the fight against neglected tropical diseases. NTD control efforts are described in action plans at all levels of the health system (NTDP, regional health directorates and districts). This priority is the basis for developing, during FY17, the second strategic plan to combat NTDs (2016-2020). The Government of Burkina Faso also supports NTD control efforts by facilitating the purchase of NTD drugs by issuing SIAs as needed. The participation of high-ranking officials in advocacy activities and the launch of the recent MDAs illustrated its high-level commitment. In addition, some of the health facility COGES are helping to motivate the CDDs by using COGES resources and communal logistics resources. For example, during the SCH MDA campaigns, the COGES in the Est region provided 321,110 CFA francs to support MDA implementation. Last, World Bank support for efforts to combat NTDs and malaria (seasonal malaria chemoprevention) for 2016-2019 is attributable to the Burkinabé government's commitment to fight NTDs.

Previously lacking in human resources, the NTDP recently boosted its workforce in terms of qualified staff (doctors, health assistants and support staff) and all the NTD control units' teams have been strengthened.

In addition, the NTD technical committee met on September 7 and 8, 2017 and the next steering committee will be held in November 2017.

### **11. Proposed Plans for Additional Support to National NTD Program**

The NTDP has identified several platforms that could contribute to NTD control efforts. They are:

- ✓ Malaria chemoprevention for the STH campaign among children under 5 years
- ✓ The universal LLIN (long-lasting insecticidal mosquito nets) campaign for the STH campaign among children under 5 years
- ✓ Treatment consultation for SCH and STH control efforts
- ✓ Mother-child week (Child Survival Week) for STH control efforts
- ✓ Development of the NTD-WASH strategy (awareness-raising)

To ensure synergies, the ministry's key officials conduct advocacy to increase the communes' involvement in sanitation, including the construction of family latrines. In addition, several entities/associations (including Catholic Relief Services in the Est region and Terre des Hommes in Boucle du Mouhoun) promote family latrines and community-led total sanitation (CLTS) in many districts. However, a precise mapping of these actors is not available. The Morbidity Management and Disabilities Prevention (MMDP) project is active in morbidity control efforts in the Center-Nord and the Hauts Bassins and the World Bank plans to implement NTD morbidity control activities in the other districts that are not targeted by the MMDP project.

### **12. Lessons Learned/Challenges**

In 2016, 10 villages were chosen at random for post-CDTI coverage surveys. The coverage survey results were comparable to reported coverage: 85.32% for Dano HD; 84.1% for Diébougou HD; 82.1% for Gaoua HD; and 80.2% for Batié HD. Average regional coverage was 83.54%. However, some coverage disparities were identified at the village level. The villages of Batiélé (Dano HD) and Kankouera (Batié HD) posted coverages, respectively, of 76.7% and 67.3%, which are well below the treatment coverages expected. This may reflect the ineffectiveness of return visits to households to treat persons who were absent during prior visits and the population's internal mobility at the time of the campaign.

During the FY17 MDA, the results of the 2016 coverage surveys helped to guide the supervisors' teams at all levels. The supervision of the prior MDAs, provided by HKI, NTDP and DRS teams, generated recommendations to improve future campaigns. Based on these recommendations, the data collection supervision tools were revised and the field strategy was changed. A quick coverage survey tool was thus incorporated at all levels (national, regional, district and health facility supervisors) starting on the third day of each campaign. In addition, debriefing meetings to monitor coverages and solve problems are now held daily at all levels, based on the new directives. At the health facility level, a notebook must be maintained so that supervision teams can record recommendations and, specifically, monitor implementation of prior recommendations. HKI teams focused on supervision at the village level, particularly in the Sud-Ouest region where community self-monitoring was conducted and where coverage rates improved relative to the preliminary data.

Insecurity in the Sahel region did pose a challenge as the team was required to observe authorities' security instructions and avoid visiting certain health facilities. To overcome this challenge, these districts emphasized grassroots supervision; the data reported indicate that

satisfactory program coverage was achieved with this strategy. Communication tools (telephone and internet) were also used to maintain ongoing contact with key officials throughout the campaigns.

A key recommendation from the recent MDA campaigns is to encourage head nurses to strengthen grassroots supervision of the CDDs. This helped to ensure strict compliance with the door-to-door strategy and supervision of all NTDP directives at the lowest level.

### **13. Major Activities for the next six months**

- Implement the LF/STH MDA once ALB arrives in country – postponed to November 2017
  - Organize MDA implementation training sessions at all levels (central level, regional health directorates, health districts, and health and social promotion centers)
  - Conduct advocacy and social mobilization activities before and during the MDAs
- Complete the remaining FY17 TAS 1 in Centre-Sud (Kombissiri, Manga, Po, Sapone)
- Conduct TAS 3 in the Sahel (Djibo, Dori, Gorom-Gorom) and Centre regions – (Baskuy, Boulmiougou, Nongre-Massom, Sig-Nonghin, Bogodogo)
- Conduct trachoma surveillance surveys in 18 HDs
- Conduct pre-TAS in 11 sentinel and control sites
- Conduct TAS 2 in 6 HDs
- Develop the trachoma elimination plan
- SCH/STH transition planning meeting
- Support the oncho technical committee
- Carry out DQA in the Centre-Est and Est regions

## Cote d'Ivoire

### Summary

The Cote d'Ivoire Neglected Tropical Disease Program (NTDP) of the Ministry of Health and Public Hygiene (Ministère de la Santé et de l'Hygiène Publique or MSHP) continues to show a lot of progress and has gained ground on implementation of the END in Africa program, despite having joined the project portfolio only 2 years ago; in fiscal year (FY) 2016. This reporting period was marked by the launch of another mass treatment campaign graced by the leadership of the MSHP, USAID West Africa, other notable personalities of the district, and representatives from the World Health Organization (WHO), FHI 360 and Sightsavers. All key note speakers of this event emphasized the need to support and fully engage health authorities across the country to meet NTD elimination and control targets by 2020. This second FY17 semi-annual report (SAR2) outlines the progress made during the period under review (April 1, 2017 – September 30, 2017).

The main project activities executed during this period by the MSHP included: trachoma mapping, nationwide MDA to treat SCH in 3 HDs, LF and oncho, STH in 57 HDs, and trachoma in 5 HDs; implementation of a trachoma impact survey in Bouna health district; implementation of data quality assessments (DQA) for LF/Oncho and trachoma; and developed an integrated NTD Work Plan for FY18.

Cote d'Ivoire's current epidemiological situation (as of September 2017) is as follows: 68 HDs are endemic for Oncho and 74 HDs for LF, while 65 HDs are coendemic for oncho and LF, 3 HDs are oncho-only and 9 districts are LF-only; all 83 HDs are endemic for STH; 81 out of 83 HDs are endemic for SCH; and 14 HDs are currently endemic for Trachoma. Mapping is completed for LF, oncho, SCH and STH, while mapping for Trachoma is still ongoing and 100% geographic coverage was attained for these 4 diseases for which mapping is completed in FY17 with support from the USAID NTD program.

Another major development during this reporting period was the creation by the MSHP of an integrated national program for the control of preventative chemotherapy NTDs (Programme National de Lutte contre les Maladies Tropicales Negligees cibles par la chimiotherapie preventive or PNLMTN-CT), to replace the previous two programs that were responsible for preventative chemotherapy (PCT) NTDs – PNLSGF (the National Program for the Control of SCH, STH and LF, Programme National de Lutte contre la Schistosomiase, les Géohelminthiases et la Filariose Lymphatique) and PNSOLO (the National Program for Eye Health and Onchocerciasis Control, Programme National de Santé Oculaire et de Lutte contre l'Onchocercose). The integrated program is led by the former director of PNLSGF, Dr. Aboulaye Meite.

The USAID NTD Program approved Cote d'Ivoire's FY18 work plan for PCT NTD interventions in September 2017. The NTD control and elimination activities planned for the next six months (first half of FY18) will commence once FHI 360 obtains USAID approval to issue FY18 fixed obligation grants (FOG) to PNLMTN-CP. These activities include MDA campaigns, development of communication materials, coordination and mobilization activities, and preparation toward the close-out of the END in Africa project.

### 1. MDA Assessments

A DQA was conducted after the integrated LF/oncho/STH and trachoma MDA campaigns to evaluate the quality of the data management system involved with both MDAs at national, regional and district levels. The DQA after the integrated LF/oncho/STH MDA was conducted July 16–23, 2017 while the post-trachoma MDA DQA was conducted on August 16–23, 2017. These evaluations have both shown that the data collected and transmitted were of good quality through the established standards. However,

the following recommendations were made to further improve data quality and have been communicated to the relevant people:

- NTDP at central level should make available their documents on data management procedures to health personnel at regional and district level involved in the implementation of NTD activities.
- The district monitoring and evaluation officers and others involved in data collection should make efforts to document the errors noted during data collection so that feedback can be provided to lower levels to prevent repeat of the same errors.
- The NTDP should develop and put in place at district level a system to avoid the duplication of administration of trachoma medications during MDA for Trachoma.

## **2. Changes in MDA Strategy**

The extension of the END in Africa project to Cote d'Ivoire in FY16 has resulted in the attainment of 100% geographic coverage for oncho, LF, SCH and STH. One of the 4 districts treated for trachoma in FY2016 had baseline TF prevalence among children 1-9 years of 8.6% and so needed just one MDA. A TIS was conducted during the reporting period that showed that after one MDA round TF among children 1-9 years is now below 5% and MDA can be stopped in this district.

## **3. Training**

There were cascade training workshops for actors involved in the MDA campaigns that were carried out in 57 HDs for LF/oncho, 3 HDs for SCH and 5 HDs for trachoma. A total of 31,477 actors were trained out of a total targeted 31,552, including 18,434 men and 13,043 women. Those trained included local administrative authorities (prefects), health workers in charge of health facilities, epidemiological surveillance officers, district NTD focal points, Drug and Supply Managers (pharmacists) and CDDs.

## **4. Community Mobilization, IEC materials, Registers, Publications, and Presentations**

The NTDP has succeeded in reaching 100% geographic coverage for oncho, LF, SCH and STH in FY17 and extra efforts are needed regarding community mobilization to maintain good therapeutic and program coverage in the targeted districts. The social mobilization activities included the procurement of information, education and communication/behavior change communication (IEC/BCC) materials – 29,012 T-shirts, 2,448 posters, and 30,463 folders with NTD messages that were reproduced by the NTDP in preparation of MDA campaigns. These materials were used for health education and social mobilization to improve visibility of the NTDP and to improve acceptance of the program and compliance to treatment within targeted communities.

## **5. Supervision**

The three MDA campaigns conducted during the reporting period were supervised at all levels. FHI 360 has 3 permanent staff in its Cote d'Ivoire office who work with the NTDP at central level. They also serve as part of the national level supervisory team that also includes members of the top management team of the MSHP, the Director-General of Health and Public Hygiene and his Deputy. Involvement of MSHP top management team in supervision of NTD MDAs helped ensure the regional and district health authorities could understand the importance of the project and would be motivated to give project activities the necessary attention when they are implemented in their respective regions and districts.

The national level supervisory team conducted supervision at the different levels to ensure proper implementation of MDAs and were supported by regional and district level health personnel. During the supervision visits, debriefing was organized and relevant issues were identified, discussed and recommendations were made so that problems can be addressed while the MDA was still ongoing.



NTDP and FHI 360 personnel also supervised the trainings conducted pre-MDA within districts. Supervision/ monitoring of PCT NTD activities enables the NTDP to adjust when needed for better outcome during program implementation. Supervision/monitoring was conducted using specially designed check lists that were used by all field supervisors.

## **6. Supply Chain Management**

The national committee set up within the MSHP to coordinate effective SCM of essential NTD drugs and supplies/medical logistics organized two annual meetings (one during the reporting period) to (i) develop and implement the annual SCM plan for PCT NTD medicines and logistics; (ii) monitor the plan on a quarterly basis; (iii) implement an information feedback system at all levels of the supply chain; and (iv) conduct critical analysis (strengths and weaknesses) of the supply chain system.

In terms of drug donations, the NTDP used the WHO Joint Application Package (before 15 April 2017) to request for ALB, IVM and PZQ, while the ITI application form was utilized to request Zithromax tablets and suspension. Both applications were used to request required drugs for planned FY18 MDA campaigns.

As stipulated in an agreement signed in May 2016 between the NTDPs (PNSOLO and PNLSGF) and the National Warehouse (Nouvelle Pharmacie de la Santé Publique – NPSP), NPSP continued to provide storage for PCT NTD medicines and logistics and monitoring of manufacturing dates to avoid drug expiration. This support includes package of the right quantity of drugs per region and district based on instructions received from the NTDPs.

The NPSP also transports the drugs and other medical supplies needed for MDAs to the district level. Subsequent distribution from the district level to frontline health facilities and communities is accomplished using district-level trainings conducted before the MDA campaigns. Frontline health facility staff collect supplies for areas they cover when they travel to a central point within districts for MDA-related training and CDDs collect supplies for their communities when they are trained by frontline health facility staff before MDA campaigns.

No drugs or diagnostics were procured by FHI 360/END in Africa project during this reporting period.

## **7. Program Monitoring and Evaluation**

Only one DSA was conducted during the period under review – Trachoma Impact survey in Bouna HD. The purpose of the survey was to assess the impact of MDA on trachoma in Bouna district after one round of treatment and to decide if MDA can be stopped per WHO recommendation of conducting TIS in districts that have baseline TF prevalence between 5% and 9.9% among children 1-9 years after at least one round of MDA. MDA was conducted in Bouna district in FY16 and the TIS was conducted July 3 – 9, 2017. The prevalence of TF in children aged 1-9 years and the prevalence of trachomatous trichiasis (TT) among those aged ≥15 years were assessed. The survey was conducted in 26 villages targeting 30 households in each village and 1,311 children aged 1-9 years were examined. Three of the 26 villages examined had a prevalence of TF >5% but the overall district TF prevalence among children 1-9 years dropped from 8.6% to 1.36%. The prevalence of TT adjusted by age and sex was 0.14%. The NTDP has decided to stop MDA in Bouna district per WHO recommendations while surveillance will be conducted over the next 3-5 years to monitor the TF and TT prevalence in the district.

## **8. Transition and Post-Elimination Strategy**

This is currently not applicable to Cote d'Ivoire as MDA campaigns only recently started for PCT NTDs.

## **9. Short Term Technical Assistance**

END in Africa, through its consortium partner Deloitte Consulting LLP, continued to provide financial management and capacity building technical assistance (TA) to the NTDP during the second half of FY17. The TA included facilitation of an advocacy workshop on local fund raising and support for the development of an advocacy strategy for local fund raising for sustainability of NTDP interventions. The advocacy workshop was conducted in May 2017 to equip the NTDP with techniques and tools that can be used for effective advocacy, such as ecosystem mapping, messaging, value articulation and business case development. The objective was to create a shortlist of targeted organizations that could be approached for financial and technical support to the NTDP based on the NTDP prioritized needs and the organizations' eligibility, and to identify the most suitable and effective approach for engaging such organizations (business case development, proposal writing, etc.). Deloitte Consulting LLP is currently supporting the NTDP to develop an advocacy strategy that outlines the 5-year vision of what advocacy efforts will focus on. Deloitte will support the NTDP both in the development of this important document and the implementation of the adopted strategy through coaching and ad hoc mentorship.

## **10. Government Involvement**

The Government of Cote d'Ivoire's commitment towards NTD control has been very high since the END in Africa project was launched in FY16 and is still very high. It was demonstrated during the reporting period through the representation of the MSHP by high level MSHP officers and local administrative authorities (prefect) in all activities conducted by the NTDP. This commitment was especially very visible during the MDA launch ceremony in Daoukro district on May 12, 2017.

## **11. Proposed Plans for Additional Support to National NTD Program**

Nothing to note for the reporting period.

## **12. Lessons Learned/Challenges**

FY17 is the second year the Cote d'Ivoire NTDP has attained 100% geographic coverage for oncho, LF, SCH and STH. The NTDP has made tremendous efforts to make this achievement possible through involvement of local administrative authorities (prefects) in NTD activities. It is worth noting that although reported coverage for PCT NTDs is good, supervision and monitoring of MDA campaigns show poor treatment coverage in some villages. The use of IEC/BCC materials to ensure high quality MDA with good treatment coverage in all targeted villages is needed to avoid having hotspot areas after years of treatment. The NTDP needs to continue the good social mobilization and distribution of IEC/BCC materials as key requirements for maintaining high quality MDA campaigns with good coverage. Sensitization and social mobilization activities that touch on all levels of the health pyramid and all social strata should be continued to improve and sustain the visibility of the NTDP activities.

## **13. Major Activities for the next six months**

- Operational workplan development meeting/Dabou (4 days) – November 2017
- Duplication of forms, sheets for MDAs and purchase of MDA materials – November 2017
- Train media staff/Abidjan 1 day – December 2017
- Coordination meeting with governors (local administrative authorities) – January 2018
- Train regional and district data managers on the integrated NTD database – February 2018
- Launch ceremony of FY18 NTD MDA / Aboisso health district – March 2018
- Conduct MDAs for LF/Oncho/SCH/Trachoma – February & March 2018
- Conduct trachoma impact survey in Seguela district – March 2018

## Ghana

### Summary

The Trachoma Elimination Committee (TEC) is working with the Neglected Tropical Diseases Program (NTDP) to submit a dossier to WHO by October 2017 for validation of elimination of trachoma as a public health problem in Ghana. The NTDP conducted a nation-wide oncho epidemiological impact assessment survey using OV16 rapid test, OV16 ELISA and skin microscopy in April-May 2017. The Ghana Onchocerciasis Elimination Committee (GOEC) reviewed the results of the survey in its last meeting in May-June 2017 and has recommended 41 additional districts for oncho MDA. This increases the number of districts for oncho treatment from 85 to 126. At the request of USAID, the NTDP held a technical review meeting to identify treatment and disease specific assessments (DSAs) required to ensure elimination of onchocerciasis (stopping MDA in all endemic foci) in Ghana by 2025. Blackfly breeding site prospection and fly collection for pool screening in two transmission zones in the eastern corridor of the country was conducted in April – May 2017 with support from Sightsavers.

END in Africa continued support for sustainability planning by conducting a workshop to train the GHS strategic social partnership unit on business case development on April 24-26, 2017. It was a hands-on workshop to build key skills for business case development. The NTDP organized advocacy meeting with LF endemic districts in three regions on May 18, 23 and 26, 2017 to discuss post-treatment surveillance after MDA has been stopped in 83 out of 98 endemic districts. The meeting sought to gain support of districts for post-treatments surveillance activities as we approach LF elimination in Ghana.

MDA for LF/oncho/STH was delayed due to the oncho impact assessment. However, national level training and cascaded training at the sub-national levels has been largely completed. Mass drug distribution for both community based MDA and school-based MDA for SCH/STH are expected to be completed by the first week of October 2017. Items for the two MDAs including information, education and communication (IEC) materials and medicines have been delivered to the endemic regions by the central medical stores.

### 1. MDA Assessment

No MDA assessment were conducted during the reporting period.

### 2. Changes in MDA Strategy

No changes have been made to the MDA strategy during the period under review.

### 3. Training

The NTDP conducted three trainings: 1) Training on blackfly prospection for 8 officers drawn from the NTDP, Public Health Reference Laboratory and retired GHS entomology technicians. The training was conducted by experienced entomology technicians, NTD program officer, and FHI 360 technical advisor. 2) National training of trainers (TOT) for LF/Oncho/STH MDA for key regional level staff such as Regional NTD coordinators, Health Information officers, Deputy Directors of Public Health and Regional Pharmacists responsible for managing pharmaceutical products in the regions. 3) National TOT for school-based SCH/STH MDA – Key participants included national and regional School health education program (SHEP) coordinators of the Ghana Education Service (GES) Regional NTD coordinators and Deputy Directors of Public Health. The two TOT trainings reviewed 2016 NTDP performance for all regions and presented sessions on social mobilization for MDA, MDA medicines and logistics management, MDA reporting and reporting tools, financial monitoring and accountability.

The only training numbers currently available for the period under review include the health staff and teachers trained for the oncho impact assessment and blackfly breeding site prospection, and national level training of trainers for community and school-based MDAs. Reports of cascaded training for the two MDAs and actual drug distribution are still pending. However, it is expected the NTDP will meet the set training targets for supervisors and community drug distributors for FY17.

Also, the NTDP conducted quality improvement (QI) trainings in all 15 LF endemic districts (August and September 2017) to improve MDA treatment coverage to facilitate achievement of elimination in the remaining LF hotspot districts.

Additionally, END in Africa project organized a 3-day residential workshop on Sustainability Planning and Business Case Development for the newly created Sustainability Unit under Policy Planning Monitoring and Evaluation Division (PPMED) of the GHS on April 24-26, 2017. The workshop, facilitated by Deloitte, was attended by an 8-member team from the PPMED Sustainability Unit including four senior management level staff, the program manager and deputy program manager of the NTDP and the Technical Advisor of END in Africa Project supporting the Ghana NTDP.

#### **4. Community Mobilization, IEC Materials, Registers, Publications, and Presentations**

The ongoing community-based MDA for LF/Oncho/STH, school-based SCH and STH MDA and community SCH MDA were preceded by social mobilization including radio and television announcement and discussions; announcement on community public address systems and vehicle-mounted public-address systems at the regional, district and community levels. These social mobilization efforts will continue throughout the MDA period. The following information education and communication materials were produced and distributed to endemic communities and schools for social mobilization - school posters (6,500 copies), community posters (6,500 copies) and parent notification forms (500,000 copies) for community and school-based MDA. Polo shirts (3,500) were produced to motivate and identify CDDs.

#### **5. Supervision**

Supervision of the ongoing MDA is cascaded from the national to regions, districts, sub-districts and communities and schools. From the national level teams of health staff and combination of GHS and GES staff are supervising the community and school-based MDAs respectively. While the supervision is cascaded each team visits communities and schools to have a first-hand observation.

#### **6. Supply Chain Management**

For the ongoing community and school-based MDAs, the Central Medical Store (CMS) delivered medicines to all 10 Regional Medical Stores (RMS). The RMS will deliver required medicines for each district to designated health facilities medical stores in districts and sub-districts. The health facilities will then deliver pre-package smaller quantities to schools and CDDs for distribution to pupils and community members. At each storage point the medicines will be managed by trained pharmacists and pharmacy technicians to ensure potency and safety of the medicines are maintained. After the MDA, the same channels will be utilized to returned remaining drugs for storage and management at the RMS.

In July 2017, PATH presented draft copies of supply chain management standard operating procedures (SOP) developed with NTDP and partners in February 2017 for review. Draft copies of the five sets of SOPs were reviewed and expected to be finalized by the end of September 2017, however staff changes at PATH have affected this timeline.

#### **7. Program Monitoring and Evaluation**

END in Africa SAR: April 1, 2017 – September 30, 2017

*Oncho Impact Assessment Epidemiological Survey* – The NTDP completed the epidemiological survey aspect of the Oncho Impact Assessment on May 9, 2017. A total of 304 communities (sites) were surveyed in 155 districts. Preliminary results were presented to the Ghana Onchocerciasis Elimination Committee meeting held on May 31 – June 2, 2017. Based on the results, 41 districts previously non-endemic or hypo-endemic have been recommended for MDA starting FY18.

*Blackfly breeding site prospection and blackfly collection* – The program conducted blackfly breeding site prospection in all 7 transmission zones and major river basins in the country from 14th July to 2nd August 2017 to determine viable blackfly breeding sites to be used as sentinel sites. Blackfly larvae collected during the prospection was sent to the WHO laboratory in Ouagadougou for analysis. Blackfly collection is ongoing in the two onchocerciasis transmission zones in the eastern corridor of the country as recommended by the Oncho GOEC. The blackflies will be analyzed using pool screening to determine level of infectivity.

*SCH/STH surveys in two districts* – The NTDP conducted a SCH and STH assessment in 2 HDs (Bole and Banda) in the catchment area of the recently constructed Bui Hydroelectric Power Plant to determine the prevalence of infection compared to the baseline prevalence observed prior to construction of the dam in 2010. The survey was carried out on 5-17 June 2017 using Urine Filtration and Kato Katz methods. The results indicated SCH prevalence above 50% in both districts. Only *Schistosoma mansoni* species were found and no STH was identified in all sites surveyed. The results indicate a significant increase in prevalence over baseline and hence the 2 HDs will be included in annual SCH school-based MDA and community-based MDA for adults starting in FY18. The program will also present a report to the managers of the power plant and seek their financial commitment for SCH MDA in the 2 HDs.

## **8. Transition and Post-Elimination Strategy**

Nothing to document this reporting period.

## **9. Short Term Technical Assistance**

No short term technical assistance was received during the reporting period.

## **10. Government Involvement**

The government continued its support to the project by letting the program use the health system structures at all levels – national, regional, district and sub-districts to support NTDP activities. Medical stores at all levels keep NTD medicines and health system vehicles are used to support NTD activities.

## **11. Proposed Plans for Additional Support to National NTD Program**

No specific activity to report.

## **12. Lessons Learned/Challenges**

No lessons learned to report as the community-based MDA for LF/oncho/STH and school-based MDA for SCH/STH are currently ongoing.

## **13. Major Activities for the next six months**

- Attend the 2017 Annual Meeting for COR-NTD and ASTMH in Baltimore, MD (November)
- Draw up an activity implementation plan for FY18
- Conduct pre-TAS in 6 districts and TAS in 5 HDs
- Conduct integrate LF/Oncho/STH MDA in 129 HDs

## Niger

### Summary

The main activities conducted during this reporting period (April – September 2017) involved: holding strategic planning meetings for program activities; organizing the second FY17 mass drug administration (MDA) campaign; and conducting monitoring and evaluation (M&E) activities for lymphatic filariasis (LF) and trachoma.

Several planning and coordination meetings were held during the reporting period as part of strategic planning activities. For example, a coordination meeting that engaged all partners involved in NTD control efforts was held to review any problems that arose during the MDA. The FY2018 END in Africa work planning meeting was held from May 30 – June 2, 2017 with participation from USAID, HKI and other partners. The work plan was developed based on a nine-month implementation period for FY18. Lastly, HKI participated in a WHO-sponsored meeting to validate the 2017-2021 Master Plan for NTD control, attended by all partners working in NTDs.

As in FY16, Niger split their annual MDA into two separate campaigns for FY17. The first campaign (captured in the SAR1) covered the regions of Diffa, Dosso, Niamey and Tillabéri. The second MDA campaign, conducted during this reporting period, covered the remaining four regions: Agadez, Maradi, Tahoua and Zinder and included MDA for LF, trachoma, SCH and STH. The campaign was officially launched by the Secretary-General of the Ministry of Health (MOH) in the Zinder region on May 13th. The Zinder Regional Governor presided the launch and attendees included Zinder's administrative, customary and religious authorities, MOH officials, HKI's NTD coordinators, and several invited guests and community members. During the integrated MDA, the program distributed MEC and ALB that arrived after the first MDA campaign, and redeployed remaining drugs and supplies (including PZQ for SCH and Zithromax for trachoma) from the first MDA campaign to the four regions to avoid any drug expiration. As with the first campaign, the MDA was supervised by a central-level supervision team comprised of 16 people (12 from the national NTD programs and four from HKI). Independent monitoring (IM) was also implemented in three HDs in June 2017. The regional MDA review meetings, which marked the end of the MDA campaigns, were held beginning on August 24, 2017.

All LF and trachoma surveys planned for FY17 were implemented during the reporting period. The National Program for the Elimination of Onchocerciasis and Lymphatic Filariasis (PNDO/EFL) successfully conducted LF transmission assessment surveys (TAS 1) in four districts (Magaria, Matamaye, Mirriah, and Zinder) that were initially planned for FY16. The results show that all four districts have met the criteria for stopping MDA. TAS 1 surveys were also completed in Diffa, Mainé, and N'Guigmi HDs; the results are not yet available. In addition, the PNSO held a training on the new Tropical Data trachoma survey platform for 50 surveyors and national program staff. Trachoma impact surveys (TIS) were conducted in Aguié, Bilma and Tchiro districts. Per preliminary results, only Aguié met the criteria for stopping MDA (TF <5%); Bilma and Tchiro will conduct one additional round of MDA. Three trachoma surveillance surveys (TSS) were also implemented in Ouallam, Say and Filingué districts. Based on the results, Ouallam will conduct one more round of MDA, while Say and Filingué will continue with surveillance. Two additional TSS were implemented in Tillabéri and Téra districts in September 2017; results are not yet available.

### 1. MDA Assessment

Please refer to the corresponding FY17 workbooks.

## 2. Changes in MDA Strategy

District Name	Disease	Description of Change	Rationale for Change
Bilma	Trachoma	1 round of MDA	TIS conducted May 2017; TF = 6.92%
Tchirozerine	Trachoma	1 round of MDA	TIS conducted May 2017; TF = 5.18%
Aguié	Trachoma	Stop MDA; start surveillance	TIS conducted May 2017; TF = 1.58%
Ouallam	Trachoma	1 round of MDA	TSS conducted May 2017; TF = 6.42%
Say	Trachoma	Continue surveillance	TSS conducted May 2017; TF = 1.99%
Filingué	Trachoma	Continue surveillance	TSS conducted May 2017; TF = 2.98%
Tera	Trachoma	Results pending	TSS conducted August 2017, results pending
Tillabéri	Trachoma	Results pending	TSS conducted August 2017, results pending
Mirriah	LF	Stop MDA, start surveillance	TAS conducted in April 2017 using FTS; 6 positives (critical cut-off = 18)
Magaria	LF	Stop MDA, start surveillance	TAS conducted in April 2017 using FTS; 1 positive (critical cut-off = 18)
Matameye	LF	Stop MDA, start surveillance	TAS conducted in April 2017 using FTS; 1 positive (critical cut-off = 18)
Zinder Commune	LF	Stop MDA, start surveillance	TAS conducted in April 2017 using FTS; 6 positives (critical cut-off = 18)

## 3. Training

The main training and capacity building activities that took place during the reporting period included training for trachoma impact and surveillance surveys and LF TAS, training of independent monitors and capacity building of the NTDP and HKI in M&E and data management tools.

- *Trachoma survey training (April 29 – May 7):* Twenty-five ophthalmological technicians and five supervisors were trained on the use of the new Tropical Data platform from April 29 – May 7<sup>th</sup> with support from HKI. This training covered the use of tablets for data collection using the Tropical Data application to improve data quality and facilitate quick and effective decision making.
- *TAS training:* A two-day TAS training was held in Zinder for the CSI chiefs in the four districts that were surveyed (Zinder commune, Mirriah, Matamaye, and Magaria). The first day was devoted to reviewing the survey protocol, methodology, sample and household census and data collection; the second day consisted of practice in the field.
- *Training on DQA and the INDB (May 2–5):* Five participants (three from the MOH NTD programs and two from HKI) attended this training, provided by FHI 360. The goal of the training was to train the five participants as trainers who can go on to provide cascade training to other MOH staff at the decentralized level. This activity is critical to helping the program prepare its elimination dossiers for submission to WHO (namely for trachoma, LF and oncho).
- *Training of independent monitors (May 7–9):* Twelve independent monitors were trained (nine women and three men) for the second FY17 MDA campaign. The training was conducted by HKI's NTD M&E Officer. The first day focused on the in- and end-process monitoring methodology, the second day orientated trainees to tablets for data collection, and the third day involved field practice, with a classroom feedback session at the end.

## 4. Community Mobilization, IEC Materials, Registers, Publications, and Presentations

Several social mobilization activities were carried out during the reporting period to encourage community participation in the MDA. Social mobilization was carried out in all targeted regions and districts, specifically, Agadez (Arlit, Agadez and Tchirozérine HDs), Maradi (Aguié, Madarounfa, Tessaoua, Maradi, Guidan Roumdji, Mayayi and Dakoro HDs), Tahoua (Tchintabaraden, Konni, Illéla, Keita, Bouza and Tahoua HDs) and Zinder regions (Gouré, Mirriah, Magaria, Matameye, Tanout, and Zinder commune HDs).

Social mobilization activities included using community radio stations, public criers and female community health workers to transmit messages in the targeted villages and hamlets. This involved approximately 5,800 public criers, 5,800 female community health workers and 65 community radio stations for the campaign. Each public crier and health worker was responsible for covering a certain number of villages, based on the number assigned per district. We estimate that the town criers and health workers each reached 1,000 – 1,200 residents, on average. The public criers used megaphones to disseminate information as they traveled through the villages and hamlets. The female community health workers held educational talks on the importance of the NTD drugs, through delivering messages at wells, markets and through household visits. On most community radio stations, the programming directors recorded interviews with the health center directors in the health areas covered by the radio station. The interviews were conducted in the local dialect and addressed the following:

- The diseases targeted by the drug distribution
- The drugs, their importance, age range covered, dosage and how to take them
- The surveys that will help to demonstrate the impact of treatment on disease prevalence.

Certain strengths and weaknesses were noted during the MDA supervision. One of the observations made during supervision is the lack of a free time slot for health at the community radios, which would allow for an interview with the chief CSI during the campaign. Similar to the last MDA, it was again noted that the lack of formal training for female health workers and town criers means that they are unable to respond to some of the key questions about the MDA posed by community members. Although these female health workers have received briefings by the head nurses in their areas, it is evident that they would benefit from a formal training. Lastly, the national radio and television messages were unfortunately not broadcasted for the second MDA campaign because of the MOH communicated the exact date of the campaign too late.

Among the strengths noted during supervision were the social mobilization efforts, especially the mobilization of women in certain concessions that are off-limits to men. In addition, an awareness raising caravan successfully traveled through 62 villages in Maradi and Zinder. This approach of holding awareness raising caravans has been successful in the past and continues to mobilize people to participate in MDA, especially in communities where disease burden is highest (please see “MDA” section for more details).

## **5. Supervision**

*MDA Supervision* – For the second FY17 MDA campaign, the MOH created a pool of supervisors by region. Each supervision team included three staff for each of the four regions, plus the three national program coordinators and the national NTD focal point, for a total of 16 supervisors. Once the teams are in the field, a daily work program is drawn up with the DRSP team and a debriefing is held at the end of the day at the health district and DRSP level.

Prior to the MDA, a meeting was held for the supervisors which involved the national program staff, focal points, DEP staff and HKI. This meeting provided an opportunity to present an update on the supervision reports from the first MDA campaign held in February 2017 (involving the same supervision teams).

*Independent Monitoring* – During the second MDA campaign, independent monitoring was conducted in 3HDs: Konni (Tahoua region), Tessaoua (Maradi region) and Mirriah (Zinder region). Six two-person teams (two teams/district) led this work in the field. The shortcomings identified in the field were



reported to the NTD focal points to take corrective action. Initial results show that coverage is acceptable overall (95.71% in Mirriah for Zithromax/TEO; 69.29% in Konni for the Mectizan/albendazole package; 88.93% in Tessaoua for Mectizan/albendazole and 82.5% for Zithromax/TEO). The lower coverage rate in Konni is due to a stock-out of Mectizan. Investigations identified a weakness in the drug quantification process, which was ultimately corrected after the monitoring team stepped in. We are awaiting the results of the regional evaluation to confirm that coverage has increased in Konni.

*Compliance with WHO and national guidelines* – During the reporting period, information related to WHO guidelines and strategies, was shared during workplan development, development of the MOH strategic plan, cascade trainings, and campaign coordination, supervision, and evaluation. The meetings also provide an opportunity to issue instructions to health workers when subject matter experts make changes to the strategies. If there is a change in strategy or methodology in drug distribution, relevant information is provided to health center heads to share with CDDs.

*Supervision for DSAs* – For DSAs, supervision/support was provided to the PNSO for all TIS and TSS that were conducted. HKI's M&E Officer provided field support for the TSS in Tillabéri district. All trachoma surveys (TIS and TSS) were implemented using Tropical Data. The TAS surveys were supervised by the PNDOEFL program coordinator, the regional health authorities, and HKI. HKI directly supervised the TAS in Magaria and Zinder commune HDs to ensure compliance with the survey protocol and WHO directives. Particularly, the data collection process was carefully supervised given that tablets had been introduced for Tropical Data.

## **6. Supply Chain Management**

*Customs clearance and importation* – Drug delivery for the second MDA campaign (specifically Mectizan) was delayed due to problems with transit and customs declarations. The customs clearance service (Bolloré) required that an insurance policy be purchased for the drugs, which remained at the Roissy airport in France for two months, and refused to remove them immediately when they arrived in Niamey because an exemption had not been obtained for the mectizan. It took three weeks to complete those formalities, which caused the date of the campaign launch to be postponed to mid-May (originally, the MDA was scheduled for March 2017). A total of 21,494,500 mectizan tablets were delivered.

*Quantification: Forecasting and supply planning* – A drug supply plan was developed by the national NTDP focal point in coordination with HKI and the NTD program coordinators and sent to the ONPPC for execution prior to the MDA. The table below provides an overview of the quantities of each drug that were supplied to the districts.

In relation to preparing the NTD drug order for 2018, HKI supported the PNDO/EFL and PNLBG to complete the WHO Joint Drug Request Form, which includes the results of the previous MDA campaign, epidemiological data, and the drug needs for the next year's MDA. The form was signed by one of the coordinators and then sent to WHO Regional Office for Africa (AFRO) for review by April 15, 2017. The PNSO also sent the 2018 request for Zithromax to the International Trachoma Initiative (ITI) and subsequently submitted the results of the most recent trachoma surveys to ensure the proper amount of Zithromax would be available for the FY18 campaign.

*Distribution & Transportation* – The ONPPC has a contract with HKI for drug storage and supply and, similar to last year, the ONPPC handled the transport and distribution of MDA drugs and supplies, including dose poles and registers. Support was provided to the ONPPC to assist them in packaging the

drugs and in conducting the proper verifications in the regions. Program representatives from the PNDO, PNSO and PNLBG were mobilized to help load the trucks and travel with the drugs to the districts. HKI Niger coordinated this activity.

*Warehousing and stock management* – The ONPPC handles warehousing and stock management in Niamey. It has large central warehouses in Niamey and regional warehouses in two regions (Zinder and Tahoua). At the decentralized level, the drugs and tools are first stored in the district warehouses before being delivered to the CSI. Unfortunately, some districts lack storage facilities and must distribute the drugs from offices or other inappropriate locations, such as corridors, containers or hangars.

*Loss/Expiration/Wastage* – Given the problems Niger has experienced in NTD drug management, particularly regarding drug expiration, an emergency plan was developed in FY16 to improve the situation. Implementation of this emergency plan has been successful, and the program is working hard to improve drug management and minimize drug loss. Drug wastage has been reduced considerably, now that health workers in charge of handling drugs have greater accountability. In terms of drug expiry, Niger has instituted a “first expired, first out” system. This involves checking expiry dates to ensure that drugs expiring first are consumed first.

Although the national FY17 MDA evaluation has not yet been conducted, we can confirm that no major expiration was noted during MDA supervision this year. A post-campaign inventory is underway following the second FY17 MDA campaign and will provide precise, updated information on remaining MDA drug stocks.

*Redistribution and reverse logistics* – Drug redistribution has been one of the key solutions to the problem of drug expiration. HKI’s support was critical in redeploying drugs in the districts to avoid stock-outs and increase coverage rates during the FY17 MDA campaigns. This was done in cooperation with the national NTD programs.

After the MDA campaign, remaining drugs were returned from the CSIs to the districts. A post-campaign physical drug inventory is then conducted to obtain an up-to-date count on the remaining MDA drug stocks. As mentioned above, this physical inventory is currently ongoing.

### **Supply chain management strengths and weaknesses**

Two of the biggest strengths in the supply chain include the role of the ONPPC and the post-campaign physical inventory. The ONPPC ensures appropriate storage of the drugs, availability of trucks for transport, and the transfer and set-up of drugs and other MDA supplies (i.e., dose poles and registers) at the district level. The post-campaign physical inventory, which is now conducted on a routine basis after each MDA campaign, has helped tremendously in avoiding drug expiration and helps ensure that the NTDP submits a more accurate drug order request to WHO for the next annual MDA.

Despite these strengths, some weaknesses remain. Some CSI chiefs do not return the drugs remaining after MDA back to the districts. In addition, some health districts lack proper storage facilities for the drugs or, even if there are stores, they are poorly maintained and medicines can be easily misplaced without the provision of proper drug management support. Lastly, although HKI supports the NTDP and ONPPC with drug management and logistics, the program could benefit from an electronic drug management system or software.

## **7. Program Monitoring and Evaluation**

The LF TAS 1 was conducted in four HDs using FTS: Matamaye, Magaria, Mirriah and Zinder. The districts were divided into two evaluation units (EU) as follows: 1) Matamaye and Magaria; 2) Mirriah and Zinder. Results indicate all 4 HDs passed TAS and may now stop MDA and begin surveillance – EU 1 had 1 positive and EU 2 had 6 compared to the critical cutoff point of 18 positives. TAS 1 in the remaining three HDs (Diffa, Mainé Soroa and N’Guigmi) began on September 10, 2017 and is currently ongoing. The *mf* survey in Arlit HD began on September 25, 2017 and will be completed by October 6, 2017.

On the trachoma front, the impact surveys for the HDs planned for FY16 and rescheduled to FY17 (Bilma, Tchirozérine and Aguié) were conducted in May-June 2017. The survey results show that MDA is no longer necessary in Aguié, but Tchiro and Bilma districts both require an additional year of MDA. The TIS planned for Mayahi and Guidan Roudji in FY17 was rescheduled for FY18 because of the need to wait six months after the May-June 2017 drug distribution in both of those districts. Additionally, the surveillance surveys originally scheduled for FY16 in the Say, Ouallam and Filingué HDs were also conducted in May-June 2017. Based on the results, surveillance will continue in Say and Filingué, while Ouallam HD requires one round of MDA. The surveillance surveys in Tera and Tillabéri HDs were held in August 2017 and results are still pending.

**Table 1. Preliminary results of TIS and TSS conducted during the reporting period**

Region	District	Prior trachoma survey prevalence	New trachoma prevalence	Type of survey	Action
Agadez	Bilma	9.90%	6.92%	Impact	1 round of MDA
Agadez	Tchirozerine	6.90%	5.18%	Impact	1 round of MDA
Agadez	Aguié	22.50%	1.58%	Impact	Stop MDA; start surveillance
Tillabéri	Ouallam	3.50%	6.42%	Surveillance	1 round of MDA
Tillabéri	Say	0.90%	1.99%	Surveillance	Continue surveillance
Tillabéri	Filingué	1.70%	2.98%	Surveillance	Continue surveillance
Tillabéri	Tera	0.45%	Result not available yet	Surveillance	Result not available yet
Tillabéri	Tillabéri	0.12%	Result not available yet	Surveillance	Result not available yet

*Other M&E activities* – The DQA that was long postponed was finally held. The first activity involved training a pool of trainers. It was combined with the INDB training conducted by an FHI 360 M&E Advisor for five participants, including three from the MOH’s NTD programs and two from HKI. This training for trainers will enable them to provide cascade training to other teams. Following the training, the World Bank will support DQA implementation in October 2017 in two districts in each of the regions of Zinder and Maradi.

## **8. Short Term Technical Assistance**

Training on DQA and the Integrated Disease Database (INDB) was provided by FHI360 for five participants (three from the MOH NTD programs and two from HKI). It was held for trainers who will then provide cascade training to the other teams. This activity is very important for the program to ensure data is of good quality and is stored and managed properly for successful completion of the elimination dossiers for trachoma, LF and oncho.

## **9. Government Involvement**

A coordination meeting was held at the MOH in July 2017 to discuss the following agenda items: update on the NTD MDA; the date of the national campaign evaluation; the dates of the micro-planning meetings; SCI funding; update on the monitoring of FOG execution; and, the schedule for submitting the documents for the new FOG FY18 budget package. Attendees included the representative of the

director of studies and programming (DEP) of the MOH, NTD program coordinators, the ONPPC, the DPH, HKI and the Carter Center.

Niger's Ministry of Health also met to validate the new NTD 2017-2021 master plan. Attendees included all actors working on NTDs (regions, executives from the Ministries of Health and Education, HKI and the Carter Center). The amount for the master plan's four strategic priorities totals approximately 332 billion F CFA.

#### **10. Transition and Post-Elimination Strategy**

As part of implementation of the post-elimination strategies proposed by the NTD program, the PNSO conducted several trachoma surveillance surveys to ensure that there has not been resurgence of the disease. This is required as part of the trachoma dossier for validation of elimination. A surveillance plan was thus developed and implementation has begun in a few areas. This plan involves primarily increasing facial cleanliness & environment improvements (F&E) and water, sanitation and hygiene activities, to decrease chance of disease recrudescence and integration of surveillance into the health system.

Niger plans to conduct LF TAS 2 surveys in early 2018. Per WHO guidelines, the TAS 2 and TAS 3 surveys are repeated every 2-3 years after the stop-MDA criteria is achieved.

For onchocerciasis, the PNDO/EFL has established an Onchocerciasis Elimination Committee. The last meeting was held in Niamey in January 2017, and the next meeting is planned for FY18. Per WHO recommendations, the committee's role is to help Niger make decisions regarding preparation and submission of its dossier for validation of the interruption of onchocerciasis transmission.

#### **11. Proposed Plans for Additional Support to National NTD Program**

The NTD Program has received funding from the World Bank's NTD and Malaria project. A portion of this funding supports morbidity management for LF in 17 HDs. With regards to integration of community-based activities, the MOH is standardizing the compensation for the community distributors so that they can work for all the programs that carry out activities at the community level.

#### **12. Lessons Learned/Challenges**

Independent monitoring (IM) of MDA has been a useful activity in Niger to identify problems and challenges quickly and find solutions to improve MDA coverage. IM was conducted in three health districts: Konni (Tahoua region), Tessaoua (Maradi region) and Mirriah (Zinder region) during the second MDA campaign. The IM revealed a number of problems, including populations that had not yet received drugs, shortages of certain drugs, inadequate social mobilization and problems among CDDs understanding the correct dosage or other distribution-related problems. In the cases where some populations had not been reached, the independent monitors notified the health center directors, who in turn deployed more CDDs into those areas to distribute drugs to individuals that had not previously been reached. In addition, in areas where drug shortages were identified, health center managers arranged for additional drugs to be deployed to those areas. For example, when the independent monitors reported a stock-out of Mectizan in several villages in Konni HD, the national program was immediately informed and quickly dispatched additional drugs to the district. The IM team then re-visited the areas previously affected by the stock-out to ensure that drugs were available for distribution.

The problem of inadequate social mobilization was mostly attributed to the fact that public criers and community health workers were not formerly trained to deliver NTD messages or respond correctly to

questions posed by community members. This issue was reviewed during the campaign evaluation to determine whether capacity building of these community health workers was necessary. In terms of incorrect dosing, the MDA training for the CDDs dedicated more time this year to role playing as a strategy to increase knowledge of proper dosing amounts. (Please see the “Supervision” section for more details.)

As part of the integration of activities, support for the campaign’s regional evaluations is beginning to be integrated into the post-campaign physical drug inventory. This involves two phases and two teams. While the first team helps to finalize the presentation of results in Power Point and Excel, the second visits the districts to conduct a physical inventory of drugs remaining after the campaign. This also helps to reduce the cost of the physical inventories, because the two teams travel together to the districts to reduce transportation costs.

### **13. Major Activities for the next six months**

- LF and Trachoma surveillance strategy validation meeting
- Workshop to develop STH transition plan
- NTD Coordination Meetings
- Oncho Elimination Committee meeting
- Commitments Committee Meeting
- Meetings with Regional Governors
- National Launch of the mass distribution campaign
- MDA for Trachoma, LF and SCH in 5 districts (Maradi, Diffa, Tillabéri Agadez and Zinder)
- Training of ophthalmic technicians in trachoma survey methodology
- Training of PNDO/EFL technicians on ELISA techniques
- Training for TAS 1 and TAS 2
- Oncho epidemiological survey (OV16 ELISA) in 3 HDs
- TAS 1 survey in 7 HDs (Konni, Illéla, Keita, Tahoua, Bouza, Tchintabaraden (Tahoua region) and Tanout)
- LF surveillance survey in 8 HDs (Tera, Say, Kollo, Boboye, Madaoua, Tillabéri, Dakoro and Guidan Rounjdji)
- Trachoma impact survey in 2 districts (Mayayi and Guidan Rounjdji)
- Trachoma surveillance surveys in 13 HDs (INDB data entry)

## Sierra Leone

### Summary

USAID's END in Africa project, managed by Family Health International 360 (FHI 360) and implemented by Helen Keller International (HKI) in Sierra Leone, provides support to the Ministry of Health and Sanitation (MoHS) to control and eliminate four major Neglected Tropical Diseases (NTDs): lymphatic filariasis (LF), onchocerciasis (oncho), schistosomiasis (SCH), and soil-transmitted helminths (STH). This semi-annual report (SAR) highlights the key activities implemented by the National NTD Program (NTDP) of Sierra Leone during the second half of Fiscal Year 2017 (FY17) of the project, from April 1 – September 30, 2017.

During the reporting period, several activities took place, particularly related to strategic planning, advocacy and social mobilization, mass drug administration (MDA), and monitoring and evaluation (M&E). as follows:

*Strategic Planning* – An NTD task force meeting was held on the 23<sup>rd</sup> March 2017 to discuss progress and challenges of the national program, provide updates on FY17 activity implementation, discuss twice-yearly MDA for oncho, and the future of SCH and STH control. Also, an STH transition meeting was held at the Bintumani Hotel, Freetown on 10<sup>th</sup> July 2017 to discuss updates on STH status in the country and the transition of STH MDA after LF MDA stops in the 8 health districts (HDs) that passed the LF transmission assessment survey (TAS 1).

A Technical Advisory Committee (TAC) meeting for oncho elimination was held at the directorate of disease prevention and control (DPC) with support from Sightsavers to discuss the way forward for oncho elimination in Sierra Leone.

Lastly, the END in Africa Project also supported the NTDP to develop the FY18 END in Africa annual work plan from 11<sup>th</sup>–14<sup>th</sup> July 2017. The main goals for FY18 are to conduct TAS 1 for LF in the Urban Western Area, coverage survey in three districts (Bombali, Koinadugu and Kailahun), and strategies to improve coverage in districts that failed pre-TAS.

*Advocacy and Social Mobilization* – Advocacy meetings were held at district headquarter towns with stakeholders to raise awareness about MDAs and seek their support. Social mobilization meetings were held at village level to gain the support and commitment of stakeholders for SCH MDA in 7 HDs, LF/STH MDA in the Western Area (WA), LF/Oncho/STH MDA in 4 HDs, and Oncho/STH in 8 HDs during the period under review. The participants included council chairmen, ward councilors, religious and traditional leaders, leaders of market women's associations, village development committees, the teachers' union, motor cycle riders, the police, and youth and women's organizations. These stakeholders helped sensitize target populations prior to and during the MDAs. In addition, town criers played a great role in sensitizing the communities including the importance of eating at least one hour before praziquantel (PZQ) can be administered.

*MDA* – MDA for SCH in 7 HDs was successfully conducted from 15<sup>th</sup> – 21<sup>st</sup> May 2017 and later extended for another two weeks from 27<sup>th</sup> June to 6<sup>th</sup> July 2017 to ensure suitable MDA coverage was achieved amidst competing health priorities (i.e., malaria bed net distribution and mother and child health week) and the Muslim month of Ramadan. The MDA targeted school-aged children (SAC) and high-risk adults (HRA) and a total 1,813,901 eligible persons were treated with PZQ, achieving an overall program coverage of 80.5%.

End process independent monitoring (IM) for SCH MDA showed that 60% of eligible persons ingested the drugs, which is significantly lower as compared to the NTDP reports. The main reasons for the poor coverage identified by monitors were falling disease burden, malaria bed net distribution, mother and child health week and the Muslim month of Ramadan all of which coincided with the MDA. Overall monitoring and supervision exercises were conducted at the national, district and community levels. At the national level, staff from the NTDP supervised the MDA, whilst at district and community levels, District Health Management Teams (DHMTs) and community leaders took leadership in the supervision. HKI also provided supportive supervision during the MDA.

Ivermectin (IVM) for the various LF, Oncho and STH MDAs arrived in country on August 30, 2017 and MDA campaigns for LF-Oncho-STH in 4 HDs and Oncho-STH in 8 HDs are currently ongoing and will be completed by mid-October. Treatment data will be updated in the FY17 disease workbooks as soon as they are made available by the NTDP. Unfortunately, on September 13<sup>th</sup>, 2017 the MDA campaign in the WA was abruptly and unexpectedly postponed by the MoHS because of a cholera vaccine trial that took precedence following the devastating mudslide and floods that hit Freetown in August 2017. The LF/STH MDA in the WA is therefore rescheduled for November 2017 (FY18).

*Monitoring & Evaluation* – Several disease-specific assessments (DSAs) were conducted during the reporting period for both LF and oncho, including TAS1 in eight HDs, pre-TAS in six HDs and oncho impact assessments in 12 HDs. TAS1 was conducted between March and April 2017 using the Alere Filarisis Test Strip (FTS) in four evaluation units (EUs), each comprising two HDs. All four EUs were well below the critical cut-off value for number of positives and MDA for LF has subsequently stopped in these eight HDs (see the M&E section for detailed results). Although the pre-TAS in six HDs was conducted in February 2017, the results were not yet available for the first semi-annual report and are reported here. Results show that only the Urban Western Area (UWA) had antigenemia (Ag) prevalence <2% and qualifies for TAS 1 in FY18; the other five HDs had Ag prevalence >2% and will conduct two additional rounds of MDA prior to the next pre-TAS, based on WHO recommendations. See the M&E section for detailed pre-TAS results and proposed new strategies to ensure that these HDs achieve the criteria for conducting TAS 1 in FY19.

After 10 years of MDA, an oncho impact assessment using OV-16 rapid diagnostic test was conducted in children 5-9 years alongside the TAS in eight HDs in April 2017, and separately in four HDs in June 2017. The main objective was to determine the impact of MDA and the need for IVM MDA in hypo-endemic areas that have benefitted from MDA for LF since 2008. The results indicate a significant decrease in prevalence, however, it also shows that there is ongoing transmission of *onchocerca volvulus* hence the need to continue MDA (see M&E section for results).

## **1. MDA Assessment**

Refer to the corresponding FY17 Workbooks

## **2. Changes in MDA Strategy**

During the reporting period, TAS 1 for LF in eight HDs was conducted in March and April 2017 (see Monitoring and Evaluation section for results of the assessment). All eight HDs achieved the criteria to stop MDA for LF. It was based on this achievement the NTDP and partners organized a transition meeting in July 2017 to inform DHMTs and senior MoHS officials about the changes and the need to embark on post MDA surveillance.

### **3. Training**

Training of trainers for the LF/Oncho/STH MDA in 4 HDs and MDA for Oncho/STH in 8 HDs was held from August 1 & 2, 2017. Training/refresher training of primary health unit (PHU) staff for the LF/Oncho/STH MDA in 4 HDs and MDA Oncho/STH in 8 HDs was held from August 4–11, 2017. Training/refresher training of community drug distributors (CDDs) for the LF/Oncho/STH MDA in 4 HDs and MDA Oncho/STH in 8 HDs was held between September 7–14, 2017.

### **4. Community Mobilization, IEC Materials, Registers, Publications and Presentations**

During the reporting period, several social mobilization activities were carried out to mobilize communities to achieve high drug coverage during MDAs. Social mobilization guidelines and frequently asked questions (FAQs) leaflets for LF, SCH and STH were updated to include community concerns such as adverse events, feeding of primary school children prior to PZQ MDA, the sub-district units (Chiefdoms) targeted and exclusion criteria from participation in the MDA. The social mobilization guidelines are emphasized during the training of health staff so that they know exactly what they should tell the public during community meetings. The FAQs are used in all community meetings as well as radio discussion programs. These FAQs are updated based on the feedback from the SMS messages and phone-in comments or concerns from the audience. A total of 1,200 integrated training manuals for PHU staff, 15,000 treatment & reporting forms and 10,000 FAQs were produced and distributed for both the LF/STH MDA in WA and SCH MDA in 7 HDs.

Social mobilization activities for the SCH MDA in 7 HDs was conducted in late April 2017 at the village level, with the PHU staff holding meetings for traditional leaders, religious leaders, village headmen, section chiefs, councilors, youth leaders and local teachers. Town criers in villages and street announcers in urban settings (i.e., the WA and district head quarter towns) were used to inform communities about the dates of the sensitization meetings and the MDA and to convince every eligible person to comply with the treatment.

Well-tailored, pre-tested messages and position statements were aired on community radio stations prior and during the SCH MDA in 7 HDs. Text messages and phone calls from the public that come in during the live panelist broadcasts serve to heighten the radio discussion, and the feedback from these discussion is used to update the FAQs. According to the independent monitoring reports from the FY17 SCH MDA, 40% (n=2,072) of people heard about the MDA from health workers, 14.2% (n=735) from friends, 11.8% from neighbors (n=610), 13.5% (n=697) from radio, 6.9% (n=356) from town criers; the remaining 13.6% of people heard about MDA from street announcers or other channels.

In WA, social mobilization activities had already commenced in some communities when the national program and the DHMT-WA put the activity on hold as IVM was not yet available for the MDA. This activity which includes radio programs, TV discussions, and street announcements, will resume in September 2017, now that IVM has been received as of August 30, 2017.

Social mobilization activities for the LF-Oncho-STH MDA in 4 HDs and MDA for Oncho-STH in 8 HDs was conducted in August 2017 at the village level, with the PHU staff holding meetings with key stakeholders including traditional leaders, religious leaders, village headmen, section chiefs, councilors, youth leaders, village development committee members and local teachers. These meetings were used to inform communities about the dates of the MDA and to convince every eligible person to comply with the treatment during MDA.

Also, during the reporting period, HKI assisted the National Program to develop a six-monthly radio



discussion to cover various issues about NTDs such as the need for motivation for CDDs, responsibilities of communities during MDAs (especially in urban settings), lessons learned and the impact of NTDs in communities to increase awareness about the NTD program. These monthly radio discussion programs invite key stakeholders such as religious leaders, councilors and heads of youth groups to be panelists to increase a sense of community ownership and public confidence.

Commercial motorbike riders who are frequently on the move were included in advocacy and social mobilization for all MDAs. This group was invited to community meetings to sensitize them and encourage them to raise awareness and mobilize others to participate in the MDA. Also, traditional and religious leaders played a vital role during the Ebola Virus Disease (EVD) outbreak. These individuals also helped raise awareness during MDAs. They also helped to sensitize communities about the importance and benefits of taking NTD drugs.

On the publications front, three abstracts were submitted for the late-breaker session at 66<sup>th</sup> annual conference of the American Society for Tropical Medicine and Hygiene (ASTMH) to be held in Baltimore, Maryland in November 2017:

- Yakuba M. Bah, Jusufu Paye, Mohamed S. Bah, Abdulai Conteh, Victoria Redwood-Sawyer, Alhassan Konneh, Mustapha Sonnie, Stephanie Palmer, Amy Veinoglou, Joseph B. Koroma, Yaobi Zhang, Mary Hodges. *“Stopping Mass Drug Administration for Lymphatic filariasis in 8 Districts in Sierra Leone”* (poster).
- Yakuba M. Bah, Mustapha Sonnie, Abdulai Conteh, Jusufu Paye, Mohamed S. Bah, Victoria Sawyer, Alhassan Konneh, Mary Hodges, Stephanie Palmer, Amy Veinoglou, Joseph B. Koroma, and Yaobi Zhang. *“Challenges in achieving elimination of lymphatic filariasis in hotspot districts in Sierra Leone”* (oral)
- Yakuba M. Bah, Mohamed S. Bah, Jusufu Paye, Abdulai Conteh, Victoria Sawyer, Alhassan Konneh, Mustapha Sonnie, Stephanie Palmer, Amy Veinoglou, Joseph B. Koroma, Mary Hodges and Yaobi Zhang. *“Rapid assessment of onchocerciasis through lymphatic filariasis transmission assessment survey (TAS) in Sierra Leone”* (poster)

Additionally, a blog post on “Sierra Leone’s Progress Towards Eliminating River Blindness<sup>5</sup>” was submitted by HKI’s Regional Director for West Africa to share the country’s progress in combatting onchocerciasis.

## 5. Supervision

As in previous MDAs, funds were made available to the NTDP for regular maintenance of their vehicles to enable supervision of the SCH MDA in 7 HDs, LF-STH MDA in the WA, MDA in the 12 HDs and all DSAs (TAS 1 in 8 HDs, Pre-TAS in 6 HDs and oncho impact assessment in 12 HDs). At district level, funds were provided in the DHMT budgets to cover the cost of hiring motorcycles and providing fuel to aid effective supervision by the NTD focal persons. Furthermore, at PHU level, funds were provided to cover the cost of transportation for PHU staff to supervise their catchment communities.

To ensure WHO guidelines are adhered to and MoHS regulations followed, a series of meetings were held prior to each activity to explain the guidelines and protocols before implementation. The WHO manual for monitoring and epidemiological assessment of MDA was fully utilized during the planning stage for pre-TAS, TAS 1 and onchocerciasis assessments.

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<sup>5</sup> <https://www.interaction.org/newsroom/blog/major-public-health-milestone-horizon>

HKI conducted IM of SCH MDA in 7 HDs during the reporting period to ensure that MDA targets were met. The monitoring was conducted to validate the NTDP reported tallies and understand reasons for non-compliance and MDA challenges. In addition to the IM, supportive supervision was also undertaken by HKI, NSAHP, and NTDP staff during trainings, advocacy and community meetings and the MDA. The DHMTs also supervised the MDA and community meetings implemented by PHU staff at village level. With support from the community leaders, the community health officers and assistants supervised the PHU staff to ensure that all protocols were observed and adequate drugs provided during the MDA.

The IM and the supportive supervision helped to identify poor practices and challenges prior and during MDA. During the SCH MDA in the 7 HDs, the monitors reported their findings to HKI, NTDP and the NTD focal persons daily. All issues encountered during supportive supervisions were communicated to the NTDP. The common problems reported were refusals due to previous adverse events, community members demanding for food, directly observed treatment not followed, drug distribution delays in some communities, inadequate drugs for adverse events, etc. In addition, the major challenge identified during MDA SCH in 7 HDs by the IMs was the timing of the MDA and the involvement of DHMTs in the malaria bed net distribution, and MCH week. Health workers prioritized these activities because they get daily stipend as compared to the one provided by the NTDP for just two staff per health facility. These issues will be discussed during the NTD annual review meeting to ensure that health staff are fully committed to any activity organized by the NTDP.

## **6. Supply Chain Management**

The PZQ for the MDA SCH in 7 HDs arrived in September 2016 (reported in the FY17 SAR1) and was cleared and transported to the NTD warehouse in Makeni. PZQ was supplied to the DHMTs in the 7 HDs from the NTD store in Makeni. These were then distributed to the PHU staff based on the target population of their catchment villages. During the MDA, drugs were distributed to the health workers daily. Other logistics, such as the dose poles (used for MDA in semi-urban and urban settings), pencils, pens, and polythene bags were distributed to the various DHMTs and onwards to the PHUs. Following the MDA for SCH in the 7 HDs, the remaining PZQ were quantified at PHU level, and returned to the district pharmacists and onwards to NTDP warehouse in Makeni. SCM topics were part of the training of supervisors, PHU staff and DHMT members. The topics ranged from reporting, reverse logistics, completing the treatment and reporting forms, and waste management of empty cups.

In addition, a total of 16,969,000 tablets of IVM arrived in the country on 30<sup>th</sup> August 2017 and was transported by NTDP vehicles to the warehouse in Makeni. The drugs and other logistics are currently being distributed to CDDs in each community for onward distribution to the community members.

Once NTD drugs are available in the warehouse in Makeni, there were no issues in distribution to the respective DHMTs. There was no issue with warehouse and stock management during the reporting period. All the necessary drug requisition and MDA forms were provided through the district pharmacists. The issue of expiration or wastage did not arise during the reporting period. Drugs were distributed based on the “First to Expire, First out” rule. No physical inventory was conducted after the SCH MDA; however, 813 tablets of PZQ were lost/spoiled during the distribution per the MDA reports received from the NTDP.

Waste management was also not an issue. Empty cups, which used to be reused by the community for domestic purposes following the completion of MDA, were returned to the PHUs based on recommendations from previous SCM trainings.

A major challenge at the various DHMTs continues to be the lack of operational vehicles to transport drugs to the various PHUs. Most of the vehicles supplied to the DHMTs are engaged in surveillance activities for post-Ebola and other diseases, making it difficult to distribute drugs in a timely manner. To address these problems, motor bikes and boats were hired for MDA activities to help the focal persons transport drugs where there was a shortage of vehicles.

The key strength in the supply chain system is the exemption of all NTD drugs and other supplies from customs payment. In addition, there is a special warehouse for NTD drugs and logistics. This makes it easier to access and distribute NTD drugs in time for MDA.

Lastly, HKI supported the NTDP to complete the joint request for selected preventive chemotherapy medicines (JRSM) forms to request all NTD drugs. The drug application for FY18 MDA using the WHO forms was submitted by April 15, 2017 with support from HKI.

## **7. Program Monitoring and Evaluation**

TAS 1 was conducted between March and April 2017 using FTS in four EUs, each comprised of two HDs. All four EUs were well below the critical cut-off value for number of positives and MDA for LF has subsequently stopped in these eight HDs.

The four HDs that failed the pre-TAS in 2013 include Bombali + Koinadugu and Kailahun + Kenema. This was because at least one site in each pair had *mf* prevalence >1%. Three additional MDAs have since been completed in FY14, FY15 and FY16 in these districts. In February 2017, a second pre-TAS (“re-pre-TAS”) was conducted in these four HDs using FTS (this time HDs assessed individually) with each HD having a sentinel site and a spot check site. All four HDs had Ag prevalence >2% and did not qualify for TAS for a second time.

Pre-TAS was also conducted in the UWA and RWA in February 2017 using FTS (these two HDs had qualified for Pre-TAS in FY15 but the Pre-TAS was postponed due to the Ebola outbreak). The results indicate that the UWA had Ag prevalence <2% and qualifies for TAS 1 in FY18; however, the RWA had Ag prevalence >2%. Based on WHO recommendations, two additional rounds of MDA will be conducted in the five HDs that failed the pre-TAS in FY17. A re-pre-TAS is anticipated in these five HDs in FY19 (for 4/5 of these HDs, this will be a re-re-pre-TAS).

A follow-up post-DSA failure in the five HDs was conducted in May 2017. Among 296 FTS positives, 236 were traced and tested for LF *mf* using midnight blood samples and nine LF *mf* positives were identified, while 232 were tested for *Mansonella perstans mf* using midday blood samples and 13 *M. perstans* positives were identified. The results suggest that the 5 HDs failed the Pre-TAS with four failing for the second time to meet the criteria for conducting TAS per the FTS results. At least two more rounds of MDA will be conducted. The four HDs are along the borders with Guinea and/or Liberia with difficult terrain and accessibility. There may have been coverage issues in hard-to-reach communities (this will be assessed in FY18 with a coverage survey). Bombali and Koinadugu have traditional healers attracting LF cases for traditional healing, which may have created foci of poor compliance. Cross border migration is another issue as Liberia and Guinea achieved full MDA scale-up only in 2014 and 2016. Cross-reactivity of FTS with *M. perstans* adds another challenge to the already difficult situation.

To ensure that these districts with persistent LF prevalence meet the criteria for conducting TAS 1 in FY19, the NTDP and partners agreed on the following strategies that will be implemented during the

next MDAs:

- Continue in-process Independent Monitoring to identify issues that hinder MDA
- Coverage survey in three HDs (Koinadugu, Bombali, Kailahun) to verify coverage and determine compliance issues
- Community self-monitoring and intensified supervision (increase supervision teams) of MDA at all levels
- MDA launch by senior MoHS and government officials in 4 HDs (Bombali, Koinadugu, Kailahun and Kenema) in addition to the WA to raise awareness of the NTD program in targeted communities to ensure that MDA coverage is improved
- Engage traditional healers and youth groups to serve as community advocates helping mobilize members of their communities to participate in MDAs to improve coverage.
- Involve leaders of youth groups to serve as community mobilizers to help sensitize their communities to participate in MDAs to improve coverage.

During the period under review, an oncho impact assessment using OV-16 rapid diagnostic test was conducted in children 5-9 years alongside the TAS in eight HDs in April 2017, and separately in four HDs in June 2017. The main objective was to determine the impact of MDA following 10 years of treatment and the need for IVM MDA in hypo-endemic areas that have benefitted from MDA for LF since 2008<sup>6</sup>. The table below summarizes the oncho results.

Funds were provided by HKI to the NTDP to support all data collection for the SCH MDA in 7 HDs during the reporting period. M&E tools such as tally sheets, census forms and summary sheets are provided to members of the DHMTs and PHU staff during trainings. To determine the effectiveness and efficiency of health workers' trainings and community sensitization meetings for the SCH MDA, HKI developed questionnaires to evaluate the knowledge gained by communities and impact of health workers' training on the SCH MDA strategy. The findings from this evaluation will be presented in the form of a poster during the annual review meeting for NTDs in December 2017.

As discussed above, 8 HDs conducted LF TAS 1 and have subsequently transitioned to post MDA surveillance. These districts will be monitored in the coming years based on WHO guidelines. TAS 2 and TAS 3 is scheduled for FY19 and FY22 respectively.

Data quality assessment training for NTD focal points and district M&E officers is scheduled for mid-October 2017. Following the training, the NTDP will conduct its first DQA to strengthen data quality, consistency and reporting at all levels. This is scheduled for early October 2017.

## **8. Transition and Post-Elimination Strategy**

As mentioned above, 8 HDs have stopped MDA and now transitioned to post MDA surveillance. During the reporting period, the NTDP and partners also convened a meeting to discuss LF MDA transition with the DHMTs of these 8 HDs and the way forward for STH control. No specific post-elimination strategy was developed during the reporting period. However, the TAC for onchocerciasis elimination with support from Sightsavers, organized a meeting in June 2017 to map out strategies for oncho elimination in Sierra Leone. Key recommendations reached are as follows:

- Ideally oncho MDAs should be planned for the month of March, during the dry season, when

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<sup>6</sup> The last oncho impact assessment was conducted in 2010 following five rounds of MDA in the 12 oncho endemic HDs using skin snip.

hard-to-reach communities are accessible.

- An OV-16 field operations manual should be developed in collaboration with WHO to facilitate implementation of the surveys.
- When conducting future oncho surveys in LF co-endemic areas, note that LF sentinel sites are not criteria for oncho assessments (although the two DSAs may be integrated as was done in 2017).
- A mapping of the transmission zones should be conducted.
- A national oncho elimination plan should be developed.
- Twice yearly treatment with IVM has been proposed with support from Sightsavers for the second round of MDA; the Mectizan Donation Program (MDP) will assess if Sierra Leone has met the criteria for twice yearly treatment with IVM for oncho.
- Inauguration of the oncho TAC group by the Minister of Health and other key stakeholders will be done to facilitate high-level acknowledgement of the oncho program and enhance publicity.

Another oncho TAC meeting is scheduled in December 2017 to move the discussions forward.

Training activities such as the TAS training using FTS and the oncho impact survey training using OV-16 have increased the capacity of the NTDP in M&E, which will be crucial to ensuring that the NTDP is able to sustain the successes made when donor support ends. To this end, DQA training is also planned for mid-October 2017.

Lastly, in June 2017, the NTDP M&E officer, a national supervisor, two focal points from the districts and HKI NTD program assistant participated in a regional workshop organized by WHO in Entebbe, Uganda. The aim of the workshop was to improve the skills of national NTD program managers, M&E officers and WHO technical advisors to conduct integrated monitoring and epidemiological assessments of mass drug administration for LF, STH and Oncho, the use of FTS as the new WHO approved diagnostic test for *W. bancrofti*, and help countries develop plans for implementing TAS. This workshop has also helped strengthen the capacity of NTDP staff and HKI.

## **9. Short Term Technical Assistance**

No external technical assistance (TA) was received during the period under review. The TA to update the TIPAC and resource mobilization at local level has been postponed to FY18 due to Deloitte not being available to provide the TA in FY17.

## **10. Government Involvement**

The national program and its partners held four coordination meetings to discuss FY18 END in Africa work plan, recommencement of MDA LF-STH activities in the WA and a timeline of MDA for LF-Oncho-STH in 4 HDs and Oncho-STH MDA in 8 HDs and the STH transition meeting.

An NTD Task Force Meeting was held in March 2017 and the discussion points included progress and challenges of the national program, update on FY17 activity implementation, twice-yearly MDA for oncho and looking ahead after September 2018: SCH and STH Control. This task force meeting was not reported in the SAR1.

The MoHS annual work plan includes a budget line to cover administrative costs for the NTDP secretariat. However, the release of these funds to implement NTD activities remains a major challenge. During the reporting period, no additional funding was received by NTDP from the government or other

partners. No new staff was assigned to the NTDP or additional office space provided during the reporting period.

### **11. Proposed Plans for Additional Support to National NTD Program**

During the reporting period, no activity was implemented to support integration of NTDs with other platforms. However, as discussed above, the STH transition meeting brought together major stakeholders to discuss STH transition post LF MDA in 8 HDs.

### **12. Lessons Learned/Challenges**

Despite intensive use of community radios, town criers and the airing of jingles several days prior to and during the SCH MDA; however, the IM coverage was significantly low compared to the NTDP reported coverage. One of the lessons learned was as disease burden falls, MDA compliance, especially in adults, becomes weak. In addition, the timing of activities is very important to avoid overlap with other MoHS interventions such as MCH weeks or malaria bed net distribution. Because the MDA coincided with these interventions, coverage was low in many of the communities surveyed during the independent monitoring. The issue of low coverage reported by IMs was discussed further during the training of trainers for the MDAs for LF/Oncho/STH in four HDs and Oncho/STH in eight HDs. Since most of the affected districts were fully represented, the importance of getting good and effective coverage for subsequent MDAs came out strongly from the national program as well as partners.

The IM conducted during the SCH MDA was influential in improving MDA coverage in some communities especially in Kenema district. This was particularly noted because when IM results were discussed with the district authorities, an extension was announced for the MDA and in the following monitoring, the coverage was found to have improved significantly.

### **13. Major Activities for the next six months**

- Complete the LF/Oncho/STH MDAs and update workbooks with treatment data
- Cascade training on DQA will take place in October 2017 targeting district focal persons and district M&E officers
- Implement data quality assessment in 2 HDs (December 2017)
- Conduct coverage survey in 3 HDs (November 2017)
- Hold NTD annual review meeting (November 2017)
- Conduct TIPAC update and resource mobilization (December 2017)
- Conduct integrated NTD database training and data entry (October - January 2018)
- Hold SCH/STH transition planning (January 2018)

## Togo

### Summary

The main activities during this period were the approval of Togo's dossier certifying the elimination of lymphatic filariasis (LF), the August 2017 nationwide integrated mass drug administration (MDA) to treat soil-transmitted helminths (STH), onchocerciasis, and schistosomiasis, implementation of the epidemiological component of a stop-MDA survey in Maritime region, and a survey to verify the elimination of trachoma in seven districts. Also during this period, the Togo Ministry of Health (MOH), in collaboration with Health & Development International (HDI), submitted drug orders for the coming fiscal year and developed an integrated neglected tropical diseases (NTD) Work Plan for fiscal year (FY) 2018.

We learned in April 2017 that Togo had successfully achieved WHO certification of Elimination of LF as a Public Health Problem. Togo received an acknowledgement letter from Dr. Margaret Chan (Director-General WHO) and was celebrated at the WHO NTD Summit in Geneva as the first country to achieve LF elimination in sub-Saharan Africa.

In August 2017, the MOH implemented their eighth large scale integrated MDA to treat onchocerciasis, schistosomiasis, and STH under USAID funding. Medications (ivermectin, praziquantel, and albendazole) were provided to school-aged children and high-risk adults via a community-based, house-to-house distribution platform. Community drug distributors (CDDs) distributed medications according to local disease prevalence, per World Health Organization (WHO) guidelines and Togo MOH policies. In preparation for the MDA, the MOH organized supervisor training sessions in all five geographic regions, followed by training of the nurses, culminating in the CDD training. The drug distribution report forms were collected from all of the districts in September 2017 and data entry will occur in October 2017. Overall, we expect the data will demonstrate high treatment coverage and minimal drug losses, as in Togo's previous MDAs.

The nation-wide MDA has historically been scheduled in April to avoid the rainy season; however, this year the MDA was delayed due to a late delivery of albendazole. The NTD Regional Programme Review Group (RPRG) met in October 2016 to discuss Togo's drug requests and had some questions that were sent to the former NTD Focal Point who did not respond. A new NTD Focal Point was appointed in February 2017, and did not learn of the questions from the RPRG until he inquired in early April about the shipment date for the requested albendazole. The NTD Focal Point responded to the RPRG's questions in May, but the albendazole was not received until July, and was released from Customs in early August. Due to the delay of the first round of calendar year 2017, it is unclear when or if the MOH will hold a second MDA in calendar year 2017. Normally, a second MDA is planned for November 2017, and would be delivered to areas with high rates of STH (6 districts), schistosomiasis (21 districts), and/or onchocerciasis (15 districts).

A stop-MDA survey was implemented in July in Maritime, a region that is hypo-endemic for onchocerciasis and that preliminary data suggested may be ready to stop MDA. The goals for the stop-MDA survey are as follows: 1) Determine if MDA can be stopped in four endemic districts (Ave, Yoto, Zio, and Bas-Mono) and 2) and confirm that the other districts in Maritime that have not historically been thought to be endemic for onchocerciasis are not endemic (Lacs, Vo, and Golfe). The MOH and HDI will determine the prevalence of onchocerciasis antibodies in children 2 to 9 years of age using OV16 ELISA. Work is planned for the fall of 2017 to measure the prevalence of infection in the vector (black flies)

using O-150 pool screen PCR. These data will be used to determine the future of onchocerciasis treatment in the Maritime region.

In April 2017, international stakeholders met to determine what additional trachoma mapping is needed in support of Togo's dossier demonstrating elimination of trachoma as a public health problem. The MOH and HDI presented maps of all available trichiasis data to WHO, USAID and FHI 360, and the group determined that mapping is needed in seven districts (Assoli, Dankpen, Keran, Tchamba, Tchaoudjo, Anie, Est Mono) that were most likely to have prevalence of trichiasis above the elimination threshold. An MOH team received training in Senegal to conduct trachoma grading. The mapping began at the end of August 2017 and will continue through September. The survey involves determining the prevalence of trachomatous inflammation (-follicular (TF) and -intense (TI)) in children 1 to 9 years of age and the prevalence of trachomatous trichiasis (TT) in adults 15 years and above. The results from this survey will determine the need for any additional trachoma interventions (e.g. trichiasis surgeries), and will be included in the dossier Togo is drafting to document elimination of trachoma as a public health problem.

Finally, the MOH has worked with HDI, USAID, FHI 360, and other partners to develop a new Work Plan, and the MOH generated drug orders for the upcoming fiscal year. Overall, this has been a highly successful six-month period. Although the final treatment numbers have not yet been calculated for the recent nation-wide MDA, we expect that the coverage will be excellent, and we look forward to continued successful activities.

### **1. MDA Assessment**

The workbooks have not yet been updated with the August 2017 MDA numbers. We will update them as soon as they are finalized and confirmed by the MOH.

### **2. Changes in MDA Strategy**

There were no changes in MDA Strategy during this six-month period.

### **3. Training**

The NTDP conducted several trainings and/or refresher trainings but data at the time of reporting was only available for the following trainings: MDA trainers, MOH/MOE central level staff, DQA tool training, accountant training, pool screen PCR, and trachoma survey. The listed trainings account for only 198 trainees, which consists of 149 men and 49 women. Data for the additional trainings conducted during the period under review will be reported in FY18 SAR 1.

### **4. Community Mobilization, IEC Materials, Registers, Publications, and Presentations**

During the August 2017 integrated MDA, town criers were used to publicize the campaign. This year, a training was added prior to the MDA for the town criers to clarify the social mobilization messages. The training reinforced the role of the town crier and specifically described the message that they should communicate. The MOH also developed radio spots (in French, as well as nine different local languages) to encourage individuals to participate in the MDA.

The CDDs have dose poles and educational flip charts that can be reused every year. Use of the flip charts as an educational tool was stressed during all levels of the cascade training sessions.

The MOH also implemented an investigation into 18 villages with continued high onchocerciasis prevalence despite ongoing ivermectin treatment. During this investigation, a team visited villages on the Benin and Ghana borders to determine the barriers to onchocerciasis control and elimination. The



investigation involved interviews with district health directors, PHU nurses, CDDs, and community members about the quality of the MDA implementation (census, treatment) and the reasons for non-compliance with the MDA (concerns about being able to drink alcohol before or after taking the medication, concern about praziquantel side effects). The team took this opportunity to reinforce the importance of taking the medication, and further work will be done in these communities to increase their acceptance of the MDA.

## **5. Supervision**

The Togo Integrated NTD Program conducts training and supervision using a cascade approach. Each level trains and supervises the next lower level, from central to region-, district-, and finally to the PHU-level. During MDA activities, drugs are delivered to each level, and ultimately reach the CDDs. After the MDA is complete, CDDs return any remaining medication along with treatment records to their local nurse supervisor, who then gathers the medications and data and returns them to his or her district supervisor. Supervisors also examine registers and summary sheets to confirm that data have been correctly recorded in the registers.

Every year, supervisory teams from the Togo MOH and from HDI-Togo attend trainings at every level, and implement spot-checks at locations that have previously had problems during the MDA. These supervisory visits have been helpful to maintain the high quality of the MDA activities, and have identified problems that needed resolution.

As part of the supervision process, a rapid evaluation is conducted in which a random sample of villages is selected for close examination. Adherence to treatment targets and coverage of the village are assessed. Problems identified are quickly investigated and corrective actions are taken while the MDA is still in progress. If there are issues that need to be investigated beyond that village, that is done quickly.

Supervisors also investigate all problems reported by the implementers. Problems in implementation of the integrated MDA are identified during field supervisory visits, during post-MDA reviews when drugs and data are returned to the nurses and district supervisors, and at a central level after data are analyzed. If implementation problems are identified in a particular geographic area, these problems are addressed during the next round of training and more attention is paid to that area during future MDAs by the central supervisors in order to resolve the issues.

PHU-level drug distribution guides that conform to WHO treatment guidelines (based on disease prevalence) and MOH recommendations are distributed to every CDD. After the MDA, reported coverage is calculated and compared to the intended distribution plan. Feedback on any errors is given to the PHUs and CDDs where the error occurred.

## **6. Supply Chain Management**

Supply chain management is generally a strength of the Togo MOH Integrated NTD Program. The MOH delivered the medications to the regions according to a drug distribution plan that was generated collaboratively by the Togo MOH and HDI. Once in the regions, the drugs are then distributed to the districts and peripheral health units (PHUs). At each step of the process, the number of drugs being distributed is documented and inventory forms are signed. Once the MDA is completed, the remaining drugs, as well as the reporting forms, are delivered back up the chain from community drug distributor (CDD) to PHU, district, region, and are ultimately returned to Lomé. At each step, drug distribution records will be checked against the number of drugs received, and any losses will be documented. During the August 2017 MDA, losses and wastage are expected to be minimal, but we have not yet

analyzed the data.

## **7. Program Monitoring and Evaluation**

The Togo MOH is continuing to use the existing monitoring and evaluation (M&E) framework and tools supplied by FHI 360. An integrated impact assessment for SCH and STH occurred in early 2015, and the results of that survey indicate that MDA has been very successful in most places, resulting in decreased prevalence of these diseases compared to the mapping results from 2009. However, there are some areas that have persistently or newly higher levels of disease where higher frequency of treatment has been implemented.

A stop-MDA survey occurred in July and August 2017 in Maritime, a region that is thought to be hypo-endemic. The goals for the stop-MDA survey are as follows: 1) Determine if MDA can be stopped in four endemic districts (Ave, Yoto, Zio, and Bas-Mono) and 2) Confirm that the other districts in Maritime that are non-endemic remain free of onchocerciasis (Lacs, Vo, and Golfe). The MOH and HDI will determine the prevalence of onchocerciasis antibodies in children 2 to 9 years of age using OV16 ELISA. Work is planned for the fall of 2017 to measure the prevalence of infection in the vector (black flies) using O-150 pool screen PCR. These data will be used to determine the future of onchocerciasis treatment in the Maritime region.

## **8. Short Term Technical Assistance**

In April 2017, FHI 360 led a training session on the NTD Database and the data quality assessment (DQA) tool in Togo. The new MOH NTD team, as well as HDI-Togo representatives participated in this training.

## **9. Transition and Post-Elimination Strategy**

The MOH is demonstrating commitment to the integrated NTD project in a number of important ways. The Togo MOH has had an NTD five-year plan in place for several years and is taking on additional responsibility for management and analysis of the Integrated NTD Program data, including the completion of drug requests, analysis of the MDA data, and production of the FOG deliverables. The Togo MOH has achieved WHO verification of the elimination of LF as a public health problem in Togo. Finally, the MOH has taken the lead on plans for the elimination of NTDs in Togo, specifically onchocerciasis and trachoma. A good example of this is the consistent collaboration between the Togo and Benin Ministries of Health. They recently held their 12<sup>th</sup> annual cross-border meeting to discuss onchocerciasis in the border areas, during which they shared information about onchocerciasis elimination activities that have occurred in each country, and made plans for the upcoming year.

## **10. Government Involvement**

The government of Togo continues to be strongly supportive of the Integrated NTD Control Program. The MOH has held numerous coordination meetings over the past six months to discuss the August MDA implementation and NTD elimination. The Togo MOH is also developing their data management and analytical capabilities and has plans to develop a streamlined data entry system, in which the MDA data that are currently entered at the district level are sent to the central level, obviating the need for central level data entry. This will allow the Integrated NTD Program to operate more efficiently and sustainably.

The MOH is developing partnerships within the government (e.g., WASH, malaria, onchocerciasis, education, etc.), as well as with other non-governmental organizations (UNICEF, Sightsavers, Red Cross, Plan Togo, etc.) to participate in integrated NTD activities. Collaborations among the Integrated NTD Program, HDI-Togo, Sightsavers, and the Onchocerciasis Program are being strengthened with

onchocerciasis elimination activities, such as the stop-MDA survey in Maritime that took place in August and September 2017, and the investigation into persistent high prevalence onchocerciasis areas that occurred in July 2017. Sightsavers and HDI are sharing the cost of the onchocerciasis assessment that will take place in Savanes in late September 2017. The MOH, HDI, and Onchocerciasis Program are developing ways to further integrate onchocerciasis into the integrated platform, including collaborative development of detailed and integrated implementation plans for distribution of medications and data analysis. The MOH and HDI are also working to bring together other partners (CDC, the Taskforce for Global Health) to support onchocerciasis and trachoma surveillance and elimination activities, and operational research on onchocerciasis. HDI is continuing to work with the Bill & Melinda Gates Foundation to identify cases of trichiasis in the community using the MDA platform.

#### **11. Proposed Plans for Additional Support to National NTD Program**

The Togo Integrated NTD Program has relied on broad partnerships to accomplish goals and continues to encourage active participation by a variety of partners. For example, the Integrated NTD Program works with the WHO to successfully obtain the duty-free release of the MDA medication and materials for epidemiologic assessments from Customs, and with the Onchocerciasis Program to implement integrated MDAs. The collaboration with the Onchocerciasis Program will be strengthened in order to facilitate integrated MDAs over the short-term, and over the long-term, to more easily accomplish the goal of onchocerciasis elimination in Togo. Finally, HDI has used USAID-funded activities to leverage support from multiple other organizations: PATH, the NTD Support Center at the Task Force for Global Health, Emory University, CDC, and the Bill & Melinda Gates Foundation. As an example, the MOH has recently received funding from the CDC to implement trichiasis research.

#### **12. Lessons Learned/Challenges**

Integrated MDA coverage in Togo has always been very high; however, the Togo MOH continues to improve the training in several ways. The data from the previous year were analyzed and geographic locations were identified in which coverage was relatively low or in which individuals were inappropriately treated. Trainers stressed the use of the educational flip charts, which were not being widely used in some areas, as determined by a previous coverage survey.

The nation-wide MDA has historically been scheduled in April to avoid the rainy season; however, this year the MDA was delayed due to a late delivery of albendazole. The NTD RPRG met in October 2016 to discuss Togo's drug requests and had some questions that were sent to the former NTD Focal Point who did not respond. A new NTD Focal Point was appointed in February 2017, and did not learn of the questions from the RPRG until he inquired in early April 2017 about the shipment date for the requested albendazole. The NTD Focal Point responded to the RPRG's questions in May, but the albendazole was not received until July, and was released from Customs in early August. These problems were primarily due to a change in Integrated NTD Program management and team; however, they underscore the need for frequent communication with the RPRG and drug donors to determine if problems exist with the drug shipment schedule.

Due to the delay of the first round of calendar year 2017, it is unclear when or if the MOH will hold a second MDA in calendar year 2017. Normally, a second MDA is planned for November 2017, and would be delivered to areas with high rates of STH (6 HDs), SCH (21 HDs), and/or oncho (15 HDs). However, given the abbreviated timeline for FY 2018 due to the end of the grant, it is unclear if there is enough time to implement the second MDA in those high burden districts. This demonstrates one of the main challenges associated with integrated activities – if one of the integrated resources is delayed, the entire activity is delayed, and this has repercussions on the activity schedule beyond the current MDA.

### **13. Major Activities for the next six months**

- October 2017 – Prepare for MDA in high STH-, SCH-, and oncho-burden areas; Collect and enter data from August 2017 MDA; Analyze data and produce report of August 2017 MDA; Continue stop MDA survey in Maritime (entomology), analyze collected samples; Onchocerciasis Elimination Committee meeting
- November 2017 – HDI-Togo and HDI-HQ team participates in ASTMH meeting in Baltimore, MD; Continue MDA preparations; Participate in MDP meeting in Togo
- December 2017 – Implement MDA in high-burden areas; Revise MDA tools;
- January 2018 – MDA data are collected, entered, and analyzed; Print MDA tools for March MDA; Onchocerciasis elimination meeting; Conduct NTD Program stakeholder meeting; Finalize MDA microplans, budget
- February 2018 – Final report of December 2017 MDA is produced; Revise, produce, distribute messages for social mobilization; Receive and distribute all medication and materials; Community Sensitization in high onchocerciasis prevalence villages; Implement training of supervisors, nurses, and CDDs
- March 2018 – Implement March 2018 MDA; Finalize Praziquantel application; Onchocerciasis surveillance activities