The ENVISION Impact

FINAL REPORT
SEPTEMBER 30, 2011 - DECEMBER 31, 2019

envision
a world free of NTDs
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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.

DEDICATION

The principal 'secret' to the success of USAID's ENVISION Project has been the pervasive spirit of partnership, cooperation, and determination among all participating individuals and organizations – beginning with the dedicated staff at USAID and the longstanding bipartisan support in the U.S. Congress; followed by major philanthropic cooperation from pharmaceutical companies, bilateral development agencies and foundations; the effectiveness of the implementing NGOs (both international and local); the wholehearted engagement of WHO; the leadership of Ministries of Health and Ministries of Education; and the communities whose dedication has powered progress against NTDs.

ENVISION is a story shared by many and its impact is part of a larger NTD elimination story, which is part of what made it so special. All of those engaged with these NTD-fighting efforts should feel very privileged to be part such a successful and meaningful endeavor. As this chapter closes, we look forward to the future collaboration that will carry forward progress to achieve NTD control and elimination goals.

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ENVISION Project Director (FY15-FY19)

Eric Ottesen
Former Project Director (FY12-FY15)
ACRONYMS

DEC  Diethylcarbamazine
DLNTD  District Level Management NTD Course
DQA  Data Quality Assessment
DRC  Democratic Republic of the Congo
DSA  Disease-Specific Assessment
FOG  Fixed Obligation Grant
GTMP  Global Trachoma Mapping Project
ITI  International Trachoma Initiative
LF  Lymphatic Filariasis
M&E  Monitoring and Evaluation
MDA  Mass Drug Administration
MOH  Ministry of Health
NGO  Nongovernmental Organization
NNN  Neglected Tropical Disease NGO Network
NOEC  National Onchocerciasis Expert Committee
NTD  Neglected Tropical Disease
OV  Onchocerciasis
PMTC  Program Managers Training Course
SAC  School-Age Children
SAE  Serious Adverse Event
SAFE  Surgery, Antibiotics, Facial Cleanliness, and Environmental Improvements
SCH  Schistosomiasis
STH  Soil-Transmitted Helminth Infections
TAS  Transmission Assessment Survey
TIPAC  Tool for Integrated Planning and Costing
USAID  US Agency for International Development
WHO  World Health Organization

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INTRODUCTION

There are few opportunities in global health – and in international development – to reach hundreds of millions of people annually with interventions, in the most remote and resource-barren communities. There are few collaborative partnerships enabling national governments to access private sector donations of safe, effective medicines free of charge and at massive scale over decades. Even fewer allowing a bilateral donor such as the U.S. Government to leverage these donations for an overall return on investment of $1: $26. Additionally, opportunities to support a ministry of health to achieve disease elimination in just a handful of years do not come often.

In the following pages, you will learn about the impact of the United States Agency for International Development (USAID) ENVISION project. Over the course of eight years, RTI International and partners supported national health and education ministries to assess and address neglected tropical diseases. By aligning with the World Health Organization’s control and elimination targets and methodologies for Neglected Tropical Diseases (NTDs), ENVISION was able to reach disease-endemic communities at a scale never-before-achieved.

Along the way, many technical, operational, and strategic lessons were learned by national NTD programs and ENVISION partners. As routine practice, ENVISION gathered, studied, and disseminated the preferred practices, ensuring they reached not only ENVISION-supported programs but the global academic, technical, implementation, and guideline-setting communities. ENVISION’s global influence as USAID’s NTD flagship project was prolific and impactful, through peer-reviewed publications, conference presentations, and leadership of technical, strategic, and advisory groups.

Though countries achieved much with the support of ENVISION, communities and individuals are still at-risk of or even currently suffering from NTDs worldwide. The global effort continues, and in this final report, you will find quantifiable evidence of impact, descriptive strategies for success, as well as inspiration and drive to continue our accelerated journey toward a world free of NTDs. Just ENVISION it.
The US Agency for International Development (USAID) ENVISION project (FY12–FY19) supported the vision of the World Health Organization (WHO) and its member states by targeting the control and elimination of seven neglected tropical diseases (NTDs): lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), trachoma, and three soil-transmitted helminths (STHs; roundworm, whipworm, and hookworm) that affect 1 billion of the world’s poorest and most vulnerable people. ENVISION strengthened NTD programming at the global and country levels and supported ministries of health (MDHs) in achieving their NTD control and elimination goals.

As a global flagship NTD initiative, the vision of USAID’s ENVISION project was to support disease-endemic countries to scale-up integrated NTD control and elimination activities and to strengthen national health systems to control and eliminate these diseases. ENVISION contributed significantly to USAID’s overall goal of reducing the burden of the seven targeted NTDs so they are no longer a public health problem.

At the project’s inception in FY12, ENVISION supported 8 countries, expanding to support 19 countries in Africa, Asia, and the Caribbean. ENVISION-supported countries included Bangladesh, Benin, Cambodia, Cameroon, Democratic Republic of the Congo (DRC), Ethiopia, Guinea, Haiti, Indonesia, Laos, Mali, Mozambique, Nepal, Nigeria, the Philippines, Senegal, Tanzania, Uganda, and Vietnam. Throughout the project lifecycle, ENVISION provided technical assistance, delivered comprehensive trainings, developed innovative yet practical tools and resources for global use, and influenced NTD policy worldwide.
GLOBAL PARTNERSHIPS

Country leadership was the very core of ENVISION, with host governments at the center of programming, fostering national, regional, and district-level direct engagement in NTD programming. Through direct engagement with national NTD programs, ENVISION supported and bolstered host governments’ efforts to address and anticipate programmatic challenges and institute effective plans to target and deliver treatment to those at risk. Furthermore, ENVISION ensured that first-hand knowledge about the national NTD programs’ realities, including lessons learned and in-country best practices, reached global forums and ultimately influenced the global agenda. As a result of ENVISION’s efforts to enhance two-way information sharing, the NTD community has improved the planning, resource allocation, and implementation around policy priorities.

Underpinning the ENVISION project’s success is the long-held tenet within the NTD community that success comes through cooperation and consensus building. Strong engagement among ENVISION, USAID, and MOHs ensured that the project complied with WHO’s NTD guidelines, performed to the utmost technical integrity, and anticipated and addressed challenges new to the NTD community. Moreover, ENVISION’s achievements in supporting countries with endemic NTDs and accelerating their progress toward control and elimination would not have been possible without strong, collaborative partnerships with national governments through MOHs and other possible without strong, collaborative partnerships with national governments through MOHs and other potential investments of other bilateral and public-private partnerships.

At the country level, ENVISION provided support to national NTD programs by providing strategic technical, operational, and financial assistance for a comprehensive package of NTD interventions. Depending on disease endemcity, existing funding sources, and each country’s existing capacity, ENVISION’s support covered a range of interventions, including the following:

- NTD program capacity strengthening
- Strategic planning
- Advocacy for building a sustainable national NTD program
- Social mobilization to facilitate and promote NTD program activities
- Mapping
- Mass drug administration (MDA)
- Drug and commodity supply management
- Supervision
- Monitoring and evaluation

At the global level, ENVISION—in coordination with WHO, USAID, and other stakeholders—contributed to several technical areas in support of global NTD control and elimination goals, including the following:

- Technical assistance
- Monitoring and evaluation (M&E)
- Global policy leadership
- Grants and financial management
- Capacity strengthening at the global and country levels
- Dissemination of tools and resources
- Operational research

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- Supervision
- Monitoring and evaluation


USAID’S INVESTMENT IN NTD PROGRAMMING

USAID support for NTDs began in 2006 as a proof-of-concept, and has since scaled into unprecedented NTD programming where a total of more than 935 million individuals have been reached with over 2 billion NTD treatments in 33 USAID-supported countries. ENVISION’s contributions to USAID’s achievements is substantial, with the project’s efforts reaching 296 million people and accounting for more than 1.4 billion treatments provided. Over the last 13 years, USAID’s investment in targeting NTDs has grown into arguably the largest public-private partnership in its history. To date, every $1 invested by USAID in NTDs leverages $26 in pharmaceutical donations for MDA. Throughout the life of the project, ENVISION celebrated the positive outcomes through high-level advocacy to maintain the gains of years of USAID’s investment.

Additionally, ENVISION’s quality programming and excellent return on investment have stimulated the investments of other bilateral and public-private collaborations targeting NTDs. Sharing ENVISION’s experience and expertise at global/country NTD conferences, workshops, and trainings has directly influenced the way other donors and country programs invest, design, and implement their NTD programs.

PHARMACEUTICAL DONATIONS

Longstanding commitments from pharmaceutical companies that donate NTD medicines have been critical to the success of integrated treatment and scale-up of mass drug administration (MDA). In fact, six of the drugs needed to treat NTDs—albendazole, Vermox® (mebendazole), Mectizan® (ivermectin), praziquantel, Zithromax® (azithromycin), and diethylcarbamazine (DEC)—have been generously donated by GlaxoSmithKline, Johnson & Johnson, Merck and Co., Inc., Merck KGaA/EMD Serono, Pfizer, Inc., and Eisai, respectively. These unprecedented donations have vastly accelerated progress toward elimination of these diseases and represent the largest sustained donation by the industry in history. From FY12-FY18, pharmaceutical companies donated more than US$16.2 billion in drugs to ENVISION-supported countries.

ENVISION worked closely to coordinate with the pharmaceutical industry and their respective donation programs. This coordination has been an essential component in achieving successful treatment campaigns and advancing toward NTD goals. ENVISION coordinated between national NTD and drug donation programs, helping to track applications, approvals, and shipments of donated drugs. At the global level, ENVISION also participated in NTD global medicines forums, including the NTD Supply Chain Forum, a group formed by pharmaceutical companies that donate NTD medicines. These forums provide essential exchanges of information from national programs, donors, WHO, pharmaceutical companies, and NGO partners.
SECTION SUBTITLE
THE ENVISION IMPACT

ENVISION IMPACT
In support of national Ministries of Health and Education, ENVISION has strengthened national NTD programs, increased the reach of treatment to those that need it, and supported the tracking of progress.

More than 1,600 districts were mapped for at least one NTD

More than 1.4 billion NTD treatments were delivered with ENVISION support from 2012-2018

Leveraged over $US 16.2 billion in drugs donated to countries across the ENVISION portfolio

Trained more than 1 million government officials, health workers, teachers, and community drug distributors on skills needed to effectively carry out mass treatment campaigns

More than 2,800 districts completed surveys or assessments to measure impact
ENVISION MILESTONES

USAID launches ENVISION, its flagship NTD project, in 8 countries.

ENVISION receives approval to provide fixed obligation grants (FOGs) directly to governments.

More than 1,700 FOGs were administered to governments from FY12-FY19, a critical part of strengthening health systems.

Light for the World and Fred Hollows Foundation join the ENVISION consortium of partners.

USAID celebrates its 10-year anniversary of investment in NTDs.

USAID delivers its one billionth treatment.

Nepal eliminates trachoma as a public health problem, becoming the first country in the South-East Asia region to achieve this accomplishment.

Vietnam eliminates LF as a public health problem.

WHO releases the NTD Roadmap, setting ambitious 2020 control and elimination targets.

ENVISION supports mapping for at least one NTD across more than 600 districts in this fiscal year alone.

DRC, Ethiopia, and Nigeria are added to the ENVISION portfolio, significantly expanding the reach of USAID’s support.

The United Nations General Assembly adopts the Sustainable Development Goals, including goal 3.3 on ending NTDs.

The value of drugs donated to ENVISION-supported countries surpasses US$10 billion.

ENVISION delivers its one billionth treatment.

Cambodia eliminates lymphatic filariasis and trachoma as a public health problem, the first ENVISION-supported country to achieve WHG validation of elimination.

Nigeria and Uganda announce areas no longer at risk for river blindness, bringing the total of persons no longer at risk for DV in ENVISION-supported countries to 6.1 million.

Laos eliminates trachoma as a public health problem.

Nepal eliminates trachoma as a public health problem, becoming the first country in the South-East Asia region to achieve this accomplishment.

Vietnam eliminates LF as a public health problem.

USAID celebrates its 10-year anniversary of investment in NTDs.

USAID delivers its one billionth treatment.

Nepal eliminates trachoma as a public health problem, becoming the first country in the South-East Asia region to achieve this accomplishment.

Vietnam eliminates LF as a public health problem.

More than 1.4 billion treatments delivered

$16.2 billion in drugs donated to ENVISION-supported countries

ENVISION begins supporting Bangladesh, Cambodia, Laos, the Philippines, and Vietnam.

Laos eliminates trachoma as a public health problem.

USAID celebrates its 10-year anniversary of investment in NTDs.

USAID delivers its one billionth treatment.

Cambodia eliminates lymphatic filariasis and trachoma as a public health problem, the first ENVISION-supported country to achieve WHG validation of elimination.

Nigeria and Uganda announce areas no longer at risk for river blindness, bringing the total of persons no longer at risk for DV in ENVISION-supported countries to 6.1 million.

ENVISION MILESTONES

130 MILLION

2013

295 MILLION

2014

459 MILLION

2015

675 MILLION

2016

966 MILLION

2017

1.2 BILLION

2018

1.4 BILLION

2019

ENVISION MILESTONES

1.2 BILLION

966 MILLION

2017

1.4 BILLION

2018

$16.2 billion in drugs donated to ENVISION-supported countries

More than 1.4 billion treatments delivered
STATUS OF 2020 CONTROL AND ELIMINATION GOALS

ELIMINATION OF LF AS A PUBLIC HEALTH PROBLEM

CONTEXT

In FY12, at the beginning of ENVISION, almost 1.4 billion people in 73 countries were at risk for LF, a mosquito-borne disease that can cause severe pain, disability, and social stigma.

At the 1997 World Health Assembly, countries agreed to eliminate LF as a public health problem, and the Global Programme to Eliminate LF was started in 2000. To achieve elimination, at least five years of large-scale annual treatment campaigns—along with access to treatment for the clinical conditions of lymphedema and hydrocele—were needed in all at-risk areas. As of FY19, 18 countries have achieved validation of elimination; however, as of FY17, 893 million people are still at risk for the disease in 49 countries.

From FY12 to FY19, ENVISION was one of the largest global projects working toward the elimination of LF, providing key technical and financial assistance to 18 MDHs in Africa, Asia, and the Caribbean, including all ENVISION-supported countries except for Mozambique. Although ENVISION did not support mass treatment for LF, the project provided critical-level support to the national LF program, including assistance with annual planning and strategy development.

Countries Supported by ENVISION for LF

Bangladesh, Benin, Cambodia, Cameroon, DRC, Ethiopia, Guinea, Haiti, Indonesia, Laos, Mali, Nepal, Nigeria, Philippines, Senegal, Tanzania, Uganda, and Vietnam

ENVISION’S IMPACT

Through strong government leadership and the support of USAID’s ENVISION project and partners:

• 43% of those living in endemic areas in ENVISION-supported countries—more than 230 million people—are no longer at risk for LF.
• Cambodia and Vietnam have achieved WHO validation of LF elimination.
• Eight countries are on track to be validated for the elimination of LF by 2025, while the rest of ENVISION-supported countries are projected to be validated no later than 2029.

ENVISION supported countries’ elimination goals in various ways, helping them:

1. Understand the scope of the disease

   ENVISION assisted 291 districts in 6 countries to conduct the baseline mapping necessary to fully assess each country’s LF burden. Mapping is an essential first step in determining where or where not to treat. Mapping for LF is complete in all ENVISION-supported countries, except a few districts in the Himalayas in Nepal originally not suspected as being endemic, but which now have reported vector-borne diseases and need confirmatory mapping.

2. Scale up consistent, high-coverage MDA

   ENVISION supported the delivery of approximately half a billion LF treatments across 13 countries through large-scale annual treatment campaigns. ENVISION’s support for MDA included providing financial assistance, assisting with logistics and drug management, and training health officials and volunteers to effectively implement campaigns. Most important, ENVISION supported countries to conduct MDA with high quality, with 96% of districts achieving sufficient epidemiological coverage during treatment campaigns in FY18. DRC and Nigeria are continuing to scale up LF treatment; all other ENVISION-supported countries are implementing MDA at full scale, scaling down, conducting post-MDA surveillance, or have achieved validation of LF elimination.

3. Track progress to elimination

   ENVISION assisted more than 443 LF transmission assessment surveys (TAS) across 12 countries; the project’s support focused on helping countries improve the process, quality, and standardization of surveys. Over the life of the project, 96% of ENVISION-supported surveys demonstrated lowered disease prevalence to levels where interventions could be stopped, reaching the critical threshold to advance to the next stage in program implementation. ENVISION also took a proactive approach to any TAS failures, creating checklists and best practices to better understand why a survey showed continued intervention is needed and to improve future MDA.

4. Validate elimination and sustain progress

   As countries progressed toward LF elimination, ENVISION also shifted support from a focus on mass treatment to a focus on post-MDA surveillance and preparing countries for the validation process. In Bangladesh, Cambodia, Laos, Indonesia, the Philippines, Uganda, and Vietnam, ENVISION supported MDHs in the development of dossiers to document the elimination of LF.

GLOBAL LEADERSHIP

In addition to country-level support, ENVISION provided critical leadership and expertise to the global movement to eliminate LF. ENVISION contributed to the development of global LF guidance and training tools on LF M&E, morbidity management and disability prevention, and dossier development. Project staff also facilitated operational research on LF programming, created job aids for NTD program managers, and organized webinars to disseminate tools and lessons learned. Additionally, ENVISION staff served as experts on WHO’s LF Morbidity and Disability Prevention Core Group, chaired the LF Non-Governmental Development Organization Network, and were members of the Global Alliance to Eliminate LF Steering Committee.
more than
230 million people
are no longer at risk for
lymphatic filariasis
Cambodia & Vietnam

achieved LF elimination
ELIMINATION OF TRACHOMA AS A PUBLIC HEALTH PROBLEM

CONTEXT

In 2010, just before ENVISION began, about 324 million people worldwide were known to be at risk for trachoma, a bacterial infection that is the world’s leading cause of preventable blindness. Since then, national trachoma programs—with the support of many partners—have dramatically scaled up efforts to eliminate trachoma using the recommended WHO SAFE strategy (surgery, antibiotics, facial cleanliness, and environmental improvements). Trachoma has now been eliminated as a public health problem in eight countries globally. As of FY19, 142 million people are no longer at risk—a decline of more than 50%.

From FY12 to FY19, ENVISION was one of the largest global projects working toward the elimination of trachoma, providing key technical and financial assistance to 15 MOHs in Africa and Asia. These countries represented about 70% of the global at-risk population based on the 2018 WHO World Epidemiological Record.

ENVISION’S IMPACT

Through strong government leadership and the support of USAID’s ENVISION project and partners:

- 41% of those living in endemic areas—about 86 million people—are no longer at risk for trachoma in ENVISION-supported countries.
- Cambodia, Laos, and Nepal have achieved WHO validation of elimination of trachoma as a public health problem.
- Benin, Cameroon, and Senegal have stopped MDA countrywide, having attained elimination thresholds for trachomatous inflammation-follicular (TF) across all formerly endemic districts.

ENVISION supported countries’ elimination goals in various ways, helping them—

1. Understand the scope of the disease

   Mapping is an essential first step in determining where or where not to treat for trachoma. ENVISION assisted 42D districts in 10 countries to conduct mapping necessary to fully assess their burden of disease. Mapping for trachoma is now believed to be complete in all ENVISION-supported countries, except DRC; in addition, ENVISION supported mapping in refugee camps of Cameroon, Ethiopia, and Uganda.

2. Scale up consistent, high-coverage MDA

   ENVISION supported the delivery of more than 181.7 million trachoma treatments across 12 countries through large-scale annual treatment campaigns. ENVISION’s support for MDA included providing financial assistance, assisting with logistics, training health officials and volunteers to effectively implement campaigns, supporting countries to receive drug donations, and helping countries manage relationships between MOHs and the International Trachoma Initiative (ITI) who manage the donation of Zithromax® from Pfizer.

   Most important, ENVISION supported countries to conduct MDA with high quality, with 96% of districts achieving sufficient epidemiological coverage during treatment campaigns in FY18—a dramatic increase from 42% of districts achieving target epidemiological coverage in FY12.

3. Track progress to elimination

   Across 12 countries, ENVISION assisted 359 districts to conduct impact surveys and 137 districts to conduct surveillance surveys. These surveys were necessary to track progress toward the elimination of trachoma. Over the life of the project, 70.5% of impact surveys and 98.5% of surveillance surveys demonstrated TF <5%, indicating that treatment was no longer necessary. ENVISION also helped countries improve the process, quality, and standardization of trachoma surveys, particularly by facilitating use of the Tropical Data system. By FY17, all ENVISION-supported countries were using Tropical Data to conduct trachoma surveys. ENVISION's support for the standardized survey system reached beyond the project’s focus countries; the project supported training for 376 health professionals from 49 countries in clinical grading, electronic data collection, and general engagement with the Tropical Data system.

4. Validate elimination and sustain progress

   As countries progress toward trachoma elimination, ENVISION shifted support from a focus on mass treatment to a focus on post-MDA surveillance and preparing countries for the validation process. ENVISION has supported nine MOHs in the development of draft dossiers to document the elimination of trachoma, including four countries that have since received WHO validation for elimination: Cambodia, Laos, Nepal, and Vietnam.

GLOBAL LEADERSHIP

In addition to country-level support, ENVISION provided critical leadership and expertise to the global movement to eliminate trachoma. ENVISION contributed technical support for the Global Trachoma Mapping Project (GTMP) and the development of global trachoma guidelines, particularly providing policy guidance on when to start and stop treatment for trachoma. The project also created essential trachoma job aids for NTD program managers, including a widely used aid on conducting trachoma surveys. ENVISION team members held the leadership positions of Chair and Vice Chair for the International Coalition for Trachoma Control and chaired annual meetings of the Global Alliance to Eliminate Trachoma by the Year 2020. Various ENVISION staff also participated at ITI’s Trachoma Expert Committee meetings as members and observers and technical contributions.

Countries Supported by ENVISION for Trachoma

Benin, Cambodia, Cameroon, DRC, Ethiopia, Guinea, Laos, Mali, Mozambique, Nepal, Nigeria, Senegal, Tanzania, Uganda, and Vietnam

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3. https://www.who.int/wer/2012/wer8717.pdf?ua=1
more than
86 million people
are no longer at risk for trachoma
CONTROL AND ELIMINATION OF OV

CONTEXT

About 26 million of the world’s poorest and most vulnerable people are affected by OV, a painful disease caused by a parasitic worm infection spread by black flies that can cause skin disease and blindness.

After significant progress in Latin America, almost all of those still affected live in sub-Saharan Africa. African organizations such as the Onchocerciasis Control Programme (1974–2002) and the African Programme for Onchocerciasis Control (1995–2015) have led progress against the disease through the spraying of insecticides and mass treatment with the drug ivermectin, or Mectizan®, donated by Merck and Co., Inc. Now, new cases of OV-related blindness or severe skin disease are rare, and control measures have been so successful that many countries are planning for OV elimination.

From FY12 to FY19, ENVISION supported activities to control or eliminate OV in 10 African countries. Importantly, this was achieved by tailoring approaches based on each country’s unique context.

ENVISION’S IMPACT

Through strong government leadership and the support of USAID’s ENVISION project and partners:

• 38 districts in three ENVISION-supported countries—Mali, Nigeria, and Uganda—reached the criteria to stop MDA for OV.
• More than 6 million people are no longer at risk for the disease.

ENVISION supported countries’ control and elimination goals in various ways, helping them –

1. Understand the scope of the disease

Mapping for OV in areas with high- to mid-level prevalence is complete in all ENVISION-supported countries, with 16 districts mapped by the project. To achieve elimination, however, it is necessary to identify low-prevalence areas that must also be treated. ENVISION, therefore, funded OV elimination mapping exercises in Tanzania and Uganda to determine whether mass treatment should be initiated in areas not previously assessed.

2. Scale up consistent, high-coverage MDA

To shift the focus of national OV efforts from control to elimination where possible, ENVISION supported the scale-up of mass treatment in target countries. From FY12 to FY19, ENVISION supported the delivery of more than 213 million treatments across 10 countries through large-scale annual treatment campaigns. ENVISION’s support for MDA included providing financial support, assisting with logistics and drug management, and training health officials and volunteers to effectively implement campaigns. Most important, ENVISION supported countries to conduct MDA with high quality; in FY18, 99% of ENVISION-supported districts achieved sufficient coverage for OV MDA, the highest coverage percentage of all seven diseases. In districts where OV and LF were co-endemic, these were treated together since ivermectin is the drug used for both (in combination with albendazole for LF). This provided economies of scale and scope for the individual countries’ programs and helped focus attention and resources effectively.

3. Track progress to elimination

ENVISION supported 246 surveys in eight countries—Benin, Ethiopia, Guinea, Mali, Nigeria, Senegal, Tanzania, and Uganda—monitoring the progress to determine whether districts met the criteria to stop mass treatment or whether infection had returned following the stoppage of treatment. To reduce cross-border transmission and to understand the impact of treatment in Uganda on neighboring countries, ENVISION also supported OV surveys in border areas of the DRC and Republic of South Sudan.

4. Sustain progress to elimination

ENVISION supported the establishment of national OV expert committees (NOECs) in all ten focus countries to coordinate and drive progress toward elimination. Four of these countries—Ethiopia, Nigeria, Tanzania, and Uganda—have well-established committees that developed national elimination action plans. The other countries launched NOECs within the past two years, and the committees are working to establish themselves; ENVISION collaborated with other partners to jointly fund NOEC meetings in several countries.

GLOBAL LEADERSHIP

In addition to country-level support, ENVISION provided critical leadership and expertise to the global movement to eliminate OV. ENVISION contributed to the development of global OV guidelines, particularly providing input into WHO’s guidelines for stopping OV MDA, which were released in FY16. The project also facilitated operational research on OV programming and created essential OV job aids for national program managers. ENVISION’s team members served on the WHO Onchocerciasis Technical Advisory Subgroup, contributed to meetings of the Mectizan Expert Committee, and participated in the Nongovernmental Development Organization Coordination Group for OV.
more than 6 million people are no longer at risk for Onchocerciasis
CONTROL OF SCH

CONTEXT
Schistosomiasis, also known as bilharzia, is a parasitic worm transmitted by freshwater snails and found in many parts of Africa, Asia, and Latin America and the Caribbean. About 90% of the 221 million people who need treatment for SCH live in Africa.

Efforts to control SCH have mainly focused on the mass distribution of praziquantel—to clear current infections and to prevent morbidity—administered to school-age children (SAC), the population most at risk for infection. Over the past decade and a half, national deworming programs have steadily reached more and more children with SCH treatment. Globally, SAC coverage reached 68% by 2017 and is on track to reach the target of 75% coverage by 2020—a promising sign on the road to controlling the disease.

From FY12 to FY19, ENVISION supported nine countries in Africa with a high SCH burden to bring the disease under control—through the periodic treatment of those at risk to clear infection and prevent morbidity, in line with WHO guidance—and to build strong country platforms that can continue treatment into the future.

ENVISION’S IMPACT

Through strong government leadership and the support of USAID’s ENVISION project and partners, the impact of multiple years of SCH activities can be seen in ENVISION-supported countries.

ENVISION supported countries’ control goals in various ways, helping them—

1. Understand the scope of the disease
ENVISION supported the mapping of 345 districts for SCH across 7 countries—an essential exercise to help countries understand their SCH burden and to plan programs accordingly. Baseline mapping for SCH is now complete across ENVISION-supported areas.

2. Improve access to treatment
With ENVISION support, about 90 million SCH treatments were distributed from FY12 to FY18, with a maximum of 18.8 million people reached in FY16. Most of these treatments reached SAC through MDA campaigns that used schools as primary distribution platforms; ENVISION supported the development of effective collaboration between MOHs and ministries of education required by this effort. Throughout the project, countries made progress each year in achieving treatment coverage targets. In FY18, 88% of districts treated with ENVISION support achieved the minimum target of 75% epidemiological coverage of SAC.

3. Track progress
ENVISION assisted 6 countries to carry out the surveys and evaluations necessary to track progress against SCH control goals. Given national programs’ evolving needs for global guidelines for SCH, ENVISION developed standard survey protocols across the project-supported countries, advocated for strengthened global guidelines, and encouraged countries to implement surveys appropriately and use the results to adapt their program design.

4. Sustain efforts
ENVISION supported MOHs and ministries of education, as well as partners, to build on established integrated platforms for deworming and to look toward strong foundations for sustainable SCH control. As treatment for elimination diseases decreased and their platforms were no longer an option for co-treatment, ENVISION helped develop countries’ capacity to establish independent and country-owned deworming platforms that can continue to leverage drug donation programs. ENVISION’s support included assisting with policy planning, domestic resource mobilization, and the exploration of various distribution platforms. In FY19, ENVISION worked with USAID and partners to advocate for country-led expert committees on SCH and STH—with Tanzania and Uganda as pilot countries—learning from the successful NOECs in several countries. These committees will lead the review of programmatic data, inform the design of the national control programs, and, eventually, look to identify sustainable platforms for these programs.

GLOBAL LEADERSHIP

ENVISION actively participated on several global committees working to control and eliminate SCH, including the Global Schistosomiasis Alliance; the Neglected Tropical Disease NGO Network (NNN); SCH/STH Working Group; and the WHO SCH/STH Morbidity Working Group. Through these roles, ENVISION experts contributed to global processes, such as the development of a global SCH action plan and the update of morbidity control targets. In addition, ENVISION team members were part of a WHO working group that developed SCH mapping and impact guidelines. ENVISION experts also worked with a core group of partners to develop and implement the MORBID (morbidity operational research for bilharzia implementation decisions) project, which is using operational research to identify updated evidence-based morbidity targets for SCH. These data will be used to update WHO’s guidelines and will provide a metric for programs to gauge their process. Additionally, ENVISION provided technical guidance and a programmatic platform to test the development of new SCH diagnostics.

Countries Supported by ENVISION for SCH
Benin, Cameroon, DRC, Guinea, Mali, Nigeria, Senegal, Tanzania, and Uganda
CONTROL OF STH

CONTEXT

Soil-transmitted helminth infections, also known as intestinal worms, are one of the most common infections worldwide. About 1.5 billion people—mostly in tropical and subtropical areas in Africa, Asia, and Latin America and the Caribbean—are infected with STHs. SAC are often at particular risk of infection; adults, especially those who often come into contact with soil, are also at risk.

Since 2009, there has been remarkable growth in the scale and quality of national deworming programs, which have steadily reached more and more people—particularly SAC—with STH treatment. Globally, coverage of SAC reached 69% by 2017 and is on track to reach the target of 75% by 2020—a promising sign on the way to controlling the disease.

From FY12 to FY19, ENVISION supported 14 countries in Africa and Asia to control STH—periodically treating people at risk with donated albendazole and Vermox® in line with WHO guidelines to clear infection, cure mild symptoms, and prevent more severe symptoms. ENVISION also helped build strong country platforms that can continue treatment into the future.

ENVISION’S IMPACT

Through strong government leadership and the support of USAID’s ENVISION project and partners, the impact of multiple years of deworming can be seen in ENVISION-supported countries.

ENVISION supported countries’ control goals in various ways, helping them –

1. Understand the scope of the disease

ENVISION supported the mapping of 357 districts for STH—an essential exercise to help countries fully assess their STH burden and to plan and budget their programs effectively. Baseline mapping in all ENVISION-supported areas has been completed.

2. Improve access to treatment

Treatment coverage for STH increased yearly since the beginning of ENVISION. By FY18, 90% of the 410 districts supported by ENVISION reached the epidemiological coverage target of 75% of SAC. With ENVISION support, approximately 502 million STH treatments were distributed from FY12 to FY18, with a maximum of 91.8 million people reached in FY16. About 202 million of those treatments were delivered to SAC. Treatment activities for STH were frequently combined with treatments for other NTDs, most notably through MDA campaigns integrated with LF treatment.

3. Track progress

ENVISION assisted ten countries (Benin, Cameroon, DRC, Haiti, Indonesia, Mali, Nepal, Senegal, Tanzania, and Uganda) to carry out the surveys and evaluations necessary to track progress against STH control goals. Where possible, ENVISION helped these countries to integrate STH impact assessments with those of other diseases, particularly SCH and LF assessments.

4. Sustain efforts

ENVISION supported MOHs and ministries of education, as well as partners, to help establish and to highlight strong foundations for sustainable STH control. As LF-endemic districts have met the criteria to stop MDA, countries have increasingly had to identify alternative platforms for sustainable and country-owned deworming (because STH treatments were often carried out in conjunction with LF activities). ENVISION began the process of helping countries to analyze effective solutions to this transition, plan transition policies, and advocate for additional domestic resources and partner funding. In Indonesia, Nepal, and Uganda, the MOHs provided approaches to effectively support deworming and integrate it into other health or education programs. For instance, in Nepal, the Ministry of Health and Population financially supports deworming treatment for pre-SAC and SAC in all of the country’s 77 districts. In FY19, ENVISION worked with USAID and partners to advocate for country-led expert committees on STH and SCH—piloting it in Tanzania and Uganda—to lead complex transition efforts.

GLOBAL LEADERSHIP

ENVISION worked with international partners such as the STH Coalition, WHO, and the NNN to support the development of international guidelines and best practices for STH control efforts. ENVISION experts represented the project on the STH Coalition’s Members’ Group and contributed to the group’s twice-yearly meetings. The coalition is based at the Task Force for Global Health and represents endemic countries, NGOs, implementers, and the pharmaceutical donors of albendazole (GlaxoSmithKline) and mebendazole (Johnson & Johnson). ENVISION members also represented the project on the NNN SCH/STH NGO Working Group, which provided a forum for countries and WHO to discuss challenges and opportunities in STH control, and attended the STH Advisory Committee. Additionally, ENVISION provided technical guidance and a programmatic platform to test the development of a new diagnostic for STH in Uganda.
Nepal, Cambodia, & Laos achieved trachoma elimination.
ENVISION IMPACT BY COUNTRY
ENVISION IMPACT BY COUNTRY

BENIN

Nearly 9.7 million people in Benin are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Benin’s National Program for the Fight against Communicable Diseases (PNLMT) leads the country’s efforts against NTDs.

From FY13 to FY19, the US Agency for International Development (USAID) supported Benin to reach its NTD control and elimination goals through the ENVISION project. Led by RTI International, ENVISION in Benin supported the PNLMT to complete disease mapping and expand treatment to all people at risk for NTDs. As a result, more than 46.6 million treatments for the five NTDs have been delivered to more than 6.3 million people. The country is on track to achieve LF, trachoma, and OV elimination goals by 2025.

ENVISION IMPACT IN BENIN

Nearly
3.5 million people are no longer at risk for LF

Nearly
700,000 people are no longer at risk for trachoma

An expert committee for OV elimination was created with ENVISION support and is working toward a strategic action plan

Treated 6.3 million people for at least one NTD across 72 districts

Trained more than 37,500 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA)

NATIONAL LEADERSHIP AND SUSTAINABILITY

Benin’s Ministry of Health, and the PNLMT specifically, have worked to ensure that NTD control and elimination efforts are prioritized in the government and that the impressive progress made to date is sustainable. In FY13, the PNLMT began training district-level NTD focal points to supervise and build the capacity of local staff—an important activity not just for NTD control but also for health systems strengthening. The PNLMT also committed to working across sectors; in FY14, the PNLMT collaborated with the Ministry of Education to formalize drug distribution in schools as part of schools’ package of regular activities. And in FY16, thanks to the PNLMT’s strong advocacy targeting local officials and stakeholders, some districts began including funds to support MDA in their local budgets.

ENVISION supported Benin’s government to strengthen its leadership and commitment to NTDs. For example, ENVISION enhanced the skills of health officials, project management and technical staff, and local stakeholders to implement all types of NTD activities — from mapping to coverage surveys — with rigor and high quality.

“I will always remember the excellent collaboration with [the ENVISION team] who provided us with accurate and useful technical assistance... [ENVISION support] has allowed Benin to make a great leap forward in the fight against neglected tropical diseases. Also, thanks to this support, Benin is very close to fulfilling the criteria of elimination for LF and trachoma.”

Dr. Wilfrid Batcho, National Coordinator of the PNLMT
**ENVISION IMPACT BY DISEASE IN BENIN**

**LYMPHATIC FILARIASIS**

Beginning in FY13, ENVISION supported the PNLMT to scale up MDA to all 48 endemic districts, enabling treatment in 25 previously uncovered districts. As of FY18, 32 out of 48 districts have suppressed infection sufficiently to stop treatment and are moving through the surveillance phase. ENVISION provided technical support to the PNLMT to conduct 59 surveillance surveys in 36 districts, which confirmed that more than 3.4 million people are no longer at risk for LF. Benin is expected to be able to stop MDA in all LF-endemic districts by the end of 2021. ENVISION also helped the government to set up an expert committee that will support the country’s future LF elimination activities and, importantly, increase country ownership and the use of data for decision making.

**ONCHOCERCIASIS**

From FY13 to FY19, ENVISION supported the PNLMT to implement MDA for OV control and elimination. This technical and financial assistance improved the quality of the MDA campaigns, which have been conducted for 30 years in Benin. From FY17 to FY19, following new World Health Organization targets, ENVISION supported the PNLMT to work toward OV elimination wherever possible and helped the program set up an expert committee to develop a strategic plan for OV elimination. ENVISION also supported the tracking of epidemiologic and entomologic data to guide the committee’s work and helped organize cross-border meetings on OV with Togo.

**TRACHOMA**

With ENVISION support, by the end of FY15 the PNLMT mapped all areas of the country suspected to be endemic for trachoma—an exercise that guided the PNLMT’s development of an action plan for trachoma control. Since then, ENVISION has provided technical and financial assistance to implement MDA campaigns in all eight endemic districts and to implement subsequent impact assessments. Four surveys in 4 districts have confirmed that more than 700,000 people are no longer at risk for trachoma. Benin stopped MDA in all trachoma-endemic districts at the end of FY19.

**SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS**

Starting in FY13, ENVISION supported the mapping of all districts for SCH and STH—a process that took about three years. Concurrently, ENVISION supported MDA implementation for both diseases, scaling up every year depending on information collected in the mapping exercise. The number of districts achieving sufficient epidemiological coverage of school-age children for both diseases improved greatly with ENVISION support. For SCH, the number improved from 1 district (13%) in FY13 to 30 districts (90%) in FY18. For STH, the number of districts achieving sufficient epidemiological coverage improved from 29 (59%) in FY15 to 48 (96%) in FY17.

**ENVISION LESSONS LEARNED**

ENVISION in Benin faced challenges as a result of strikes—particularly strikes by local health and education workers or those related to elections. Strikes often made local stakeholders unavailable for collaboration during critical NTD activities such as MDA campaigns. To meet this challenge, ENVISION and the PNLMT developed and followed these steps:

- **Account** for the political landscape in the planning and organization of activities.
- **Collaborate** with regional health and education authorities for frequent advocacy geared toward local stakeholders.
- **Communicate** directly with school officials during strikes to receive their cooperation and ask parents to send their children to school on the day that treatment is scheduled.
- **Reschedule** activities when the risk for unsuccessful implementation is too high.
About 24 million people are at risk for one or more neglected tropical diseases (NTDs) in Cameroon. Lymphatic filariasis (LF), onchocerciasis (OV), schistosomiasis (SCH), soil-transmitted helminths (STHs), and trachoma are all endemic in the country. Cameroon’s Ministry of Health (MOH), through its NTD program, provides overall leadership for the country’s efforts to fight these diseases.

From FY12-FY19, the US Agency for International Development (USAID) supported Cameroon to reach its NTD control and elimination goals through the ENVISION project. ENVISION’s activities in Cameroon were implemented by Helen Keller International, with technical and operational support from RTI International.

ENVISION’s technical and financial support helped to strengthen and expand Cameroon’s NTD program, enabling the scale-up of MDA to all people at risk for the five targeted diseases. As of 2019, all but one district endemic for LF and all districts that were endemic for trachoma can stop mass treatment—an important step on the road to elimination.

**ENVISION IMPACT IN CAMEROON**

- More than 16 million people are no longer at risk for LF
- More than 3.2 million people are no longer at risk for trachoma
- Mapped 98 districts for at least one NTD
- Treated 16.1 million people for at least one NTD across 189 districts
- Trained more than 118,000 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA)
- Conducted 353 surveys to assess the impact of NTD interventions

**NATIONAL LEADERSHIP AND SUSTAINABILITY**

Cameroon’s government has shown leadership to reach ambitious NTD goals and to strengthen the health systems that will sustain NTD progress into the future. For instance, the MOH created a National Coordination Unit within its NTDs and malaria program areas to foster coordination, integration, and collaboration. The MOH also championed and co-signed memorandums of understanding (MOU) to guide cross-sector collaboration. For example, an MOU with the Ministry of Basic Education and the Association of United Communes and Cities helped to combine resources for SCH and STH.

ENVISION supported Cameroon’s government in its goal to strengthen its leadership and commitment to NTD control and elimination efforts. For example, technical and financial support from ENVISION enabled the MOH, the Ministry of Basic Education, and the Ministry of Secondary Education to reinforce the integrated platform used to prepare and implement deworming campaigns for school-age children. ENVISION also trained health officials to implement key aspects of NTD programming, such as surveys for trachoma and the management of serious adverse events.
ENVISION IMPACT BY DISEASE IN CAMEROON

LYMPHATIC FILARIASIS

ENVISION provided technical and financial assistance to complete mapping for LF and scale up MDA in all 137 endemic health districts. Of these districts, 38 have entered the surveillance phase and Cameroon is on track to submit its LF elimination dossier by 2022. Data entry for the dossier, led by the National Program for the Control of Onchocerciasis with support from ENVISION, began in FY19.

99.3% of people living in endemic areas are no longer at risk for LF

TRACHOMA

ENVISION supported the mapping of three regions where trachoma prevalence was suspected, and supported MDA campaigns in 21 health districts endemic for trachoma. Each of these districts has now stopped MDA and is moving through survey and surveillance stages. ENVISION also provided technical support for Cameroon’s Trachoma Action Plan workshop, where the World Health Organization made recommendations regarding data collection and further mapping in regions where trachoma prevalence was suspected. ENVISION made resources available for this mapping and preliminary results confirmed that the prevalence in these areas was below thresholds and MDA was not needed.

100% of people living in endemic areas are no longer at risk for trachoma

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

Cameroon aims to eliminate SCH by 2025 and to control STH. ENVISION supported the mapping of these diseases and worked with various stakeholders—especially in the education sector—to provide treatment to school-age children, who are disproportionately affected by these illnesses. ENVISION provided funding and technical expertise for these MDA activities, as well as for social mobilization and training. In FY18, ENVISION funded an SCH–STH evaluation survey in 92 health areas that showed a substantial decrease of STH prevalence in all three regions. SCH prevalence increased in some health districts in the Littoral region; however, the Center region saw an overall decrease.

ENVISION IMPACT BY DISEASE IN CAMEROON

ONCHOCERCIASIS

To reach Cameroon’s goal of eliminating OV by 2025, ENVISION supported MDA campaigns in all 113 endemic districts, reaching more than 8.8 million people. Recently, ENVISION helped organize the first meeting of the National Committee for the Elimination of OV and LF, which will aid in OV elimination activities. ENVISION also conducted a coverage survey to determine causes for poor district performances and worked with the MOH to identify solutions, including the implementation of a flexible and integrated planning approach for community activities.

ENVISION LESSONS LEARNED

Cameroon developed innovative strategies when faced with challenges during the planning of mass treatment campaigns:

• After teachers went on strike during the FY17 school-based deworming campaign, teams in the Northwest and Southwest regions developed a door-to-door community approach to continue reaching children.

• In FY17, when the team in Mokolo health district noticed that more community members participated in treatment prevention campaigns for malaria than OV, the district launched its next OV campaign during the 10-day interval between malaria treatments. As a result, community drug distributors reached more people since many were still at home waiting for the second round of malaria treatment.
Nearly 91.8 million people in the Democratic Republic of Congo (DRC) are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). DRC’s national NTD program leads the country’s efforts against these diseases.

From 2013 to 2019, the US Agency for International Development (USAID) supported DRC to reach its NTD control and elimination goals through the ENVISION project. Implemented by RTI International, CBM International, IMA World Health, and World Vision, ENVISION in DRC initially provided limited support for health zone-level mass drug administrations (MDA) for all five targeted diseases in ten health zones, complementing other partner activities. In 2017, to better integrate with DRC’s overall NTD efforts, ENVISION shifted to focus solely on trachoma activities. The project spearheaded the mapping of 149 health zones for trachoma, representing 29% of the country’s 519 health zones. With ENVISION funding, trachoma MDA was initiated in DRC in 2016, and the first two health zones met the criteria for stopping mass treatment for trachoma in 2019.

**ENVISION IMPACT IN THE DEMOCRATIC REPUBLIC OF CONGO**

- Trained more than 13,340 government officials, health workers, teachers, and community drug distributors on skills to effectively carry out MDAs
- Conducted the first 2 surveys to assess the impact of the trachoma programs; both health zones met the criteria for stopping MDA treatment
- Mapped 149 health zones for trachoma
- Trained 92 trachoma graders and recorders to use Global Trachoma Mapping Project (GTMP) and Tropical Data methodologies
- Treated nearly 1.8 million people for at least one NTD across 10 health zones

**NATIONAL LEADERSHIP AND SUSTAINABILITY**

In 2016, the DRC’s Ministry of Health (MOH) brought together individual and separate NTD divisions under the direction of a single program unit, the National Program for Control of NTDs through Chemotherapy. This integrated program unified the management and reporting functions of various NTD efforts and helped implement standardized policies and procedures for each disease.

ENVISION’s technical and financial support assisted this newly integrated NTD program. For example, ENVISION supported the adoption and use of the WHO Integrated NTD Database by training national-level staff on its use in 2018 and 2019. ENVISION also supported the MOH to complete its first trachoma action plan in 2015—the National Trachoma Control Plan of 2016–2020. In coordination with the national NTD program, USAID and ENVISION’s funding and advocacy resulted in significant scale-up of the trachoma program, including funding commitments from additional implementing partners to support trachoma MDA and trachomatous trichiasis surgery.
ENVISION IMPACT BY DISEASE IN THE DEMOCRATIC REPUBLIC OF CONGO

TRACHOMA

ENVISION supported trachoma baseline surveys in 149 health zones and trachoma rapid assessments in 111 health zones. Through complementary use of these two evaluation methods, ENVISION assisted the MOH to identify previously unknown endemic health zones, and determine where trachoma was not a public health problem. In addition, ENVISION supported training for 92 trachoma graders and recorders to use the Tropical Data system, ensuring a stable pool of trained professionals to complete mapping and conduct trachoma impact assessments. By the end of ENVISION, 29% of the country was mapped and endemicity status was known in 38% of the country.

In 2016, ENVISION began supporting the national NTD program to initiate trachoma MDA campaigns. Initially ENVISION supported three health zones in Katanga region, and scaled up to a fourth in 2017. ENVISION’s support included training for provincial and health zone personnel to implement, supervise, and monitor community-based and house-to-house distributions. Despite immense logistical challenges, epidemiological coverage of ENVISION-supported MDA was well over 80% in all health zones. ENVISION’s substantial technical and logistical support also enabled the antibiotics used in trachoma MDA to be imported and to clear customs efficiently.

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LYMPHATIC FILARIASIS

In 2014, ENVISION conducted baseline sentinel site surveys for LF in 13 villages across 10 health zones, in coordination with the Task Force for Global Health. DRC has 242 LF-endemic health zones; from 2015 to 2017, ENVISION supported MDA implementation in 6 of these zones, including 3 zones that are co-endemic for LF, OV, STH, and SCH. These zones were selected by the government as part of a pilot for integrated MDA.

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ONCHOCERCIASIS

From 2015 to 2017, ENVISION supported integrated MDA implementation in six health zones in Maniema and Mai-Ndombe Provinces.

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

ENVISION conducted baseline surveys for SCH and STH in six health zones, establishing that SCH was not endemic in two of the zones. For SCH, ENVISION supported MDA implementation from 2015 to 2017 in four health zones in Maniema Province. For STH, ENVISION supported integrated MDA implementation from 2015 to 2017 in six health zones in Maniema and Mai-Ndombe Provinces.

ENVISION LESSONS LEARNED

In 2013, ENVISION began supporting the national NTD program to conduct integrated MDA for four diseases. Given the vast size of DRC and the limited scale of ENVISION’s work, ENVISION could not align with the MOH’s program objectives of a single partner supporting all NTD activities in a province. Thus in 2014, ENVISION shifted its focus to supporting trachoma activities. ENVISION began by mapping, identifying several endemic health zones. Initial survey data indicated far more trachoma prevalence than the MOH and international partners had expected. With ENVISION assistance, the MOH developed a trachoma action plan, identified 65 health zones warranting MDA treatment, and initiated MDA. As of 2018, 49 of 52 endemic health zones (94%) were approved for treatment. Through USAID’s leadership, ENVISION has encouraged other partners to start investing in DRC’s trachoma elimination program.
Approximately 92.1 million people in Ethiopia are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STHs). Ethiopia’s Federal Ministry of Health (FMOH) leads the country’s efforts against these diseases.

From FY13-FY19, the US Agency for International Development (USAID) supported Ethiopia to reach its NTD control and elimination goals through the ENVISION project. Led by RTI International, the Fred Hollows Foundation, and Light for the World, ENVISION in Ethiopia supported the treatment of more than 38 million people across four regional states: Beneshangul-Gumuz, Gambella, Oromia, and Tigray. ENVISION also supported the FMOH to assess the prevalence of NTDs in refugee camps and to provide treatment where necessary.

ENVISION IMPACT IN ETHIOPIA

More than 3.2 million people are no longer at risk for trachoma
Treated 38.6 million people for at least one NTD across 416 districts
Mapped 40 districts for at least one NTD
Conducted 89 surveys to assess the impact of trachoma interventions
Trained more than 229,000 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA) campaigns

NATIONAL LEADERSHIP AND SUSTAINABILITY

In addition to establishing an integrated NTD unit nationally and regionally, Ethiopia’s FMOH set ambitious NTD control and elimination goals and developed plans, guidelines, and working groups to guide its progress. The FMOH also showed impressive leadership on improving its monitoring and evaluation (M&E) processes by establishing a robust data management system that facilitated the use of data for program-related decision making.

ENVISION supported these efforts by providing continuous technical support to the federal and regional NTD teams, particularly in the areas of program and data management. ENVISION’s M&E expert also provided technical support that helped Ethiopia improve its progress tracking, data management, and the use of data for decision making at all levels of the health system. Through the administration of fixed obligation grants to help regions and zones fund their NTD activities, ENVISION contributed to improved capacity of regional and zonal NTD teams in the areas of program planning and financial management.

“What we see in Ethiopia is what can be achieved when partners come together under the strong leadership of the Federal Ministry of Health to work with a common purpose. Because of this, Ethiopia, one of the most endemic countries in the world for NTDs, has achieved amazing progress. It stands at the cusp of ensuring that future generations of Ethiopians will never see these diseases in their own communities.”

Sharone Backers, ENVISION Chief of Party, Ethiopia
ENVISION IMPACT BY DISEASE IN ETHIOPIA

LYMPHATIC FILARIASIS

In 2015, ENVISION began supporting the FMOH to conduct MDA campaigns for LF. By 2017, ENVISION directly supported MDA in 25 out of 72 endemic districts and three refugee camps, reaching about 1.5 million people. As a result of ENVISION’s support and support from other partners, the FMOH reached all 72 endemic districts with mass treatment by 2017. As of 2019, ENVISION continued to support all 25 districts, including MDA in 7 districts and 4 refugee camps, and targeted pre-TAS in 18. Additionally, ENVISION supported seven pre-transmission assessment surveys for LF.

4.9 million treatments delivered (FY12-FY18)

TRACHOMA

ENVISION began supporting the FMOH to conduct MDA campaigns for trachoma in 2013, prioritizing areas with no existing partner support or MDA schedule. By 2019, ENVISION had directly supported MDA activities in 378 endemic districts across the 4 aforementioned regional states and 9 refugee camps, reaching about 36.6 million people. Overall, ENVISION contributed to achieving 34% of geographical coverage for the disease.

79.2 million treatments delivered (FY12-FY18)

ONCHOCERCIASIS

As of 2019, 196 districts are endemic for OV in Ethiopia and almost all are reached with MDA. From 2015 to 2018, ENVISION supported biannual mass treatment campaigns in 86 of these districts, contributing to 43% of OV geographical coverage. To date, more than 5.2 million people from two regional states, including refugee camps of Ethiopia, have been treated.

24.5 million treatments delivered (FY12-FY18)

ENVISION LESSONS LEARNED

As part of Ethiopia’s strategy to eliminate all NTDs in the country, leaving no one behind, the FMOH mapped the prevalence of five NTDs in all refugee camps in Gambella and Benishangul-Gumuz regional states. This was followed by ENVISION support for MDA in the camps where needed. ENVISION adapted to the particular challenges of working in refugee camps by:

- Coordinated mapping of all 5 PC-NTDs is particularly well-suited to the refugee camp landscape given the proximity of housing structures to each other.
- Establishing the amount of drugs needed for each camp is challenging given the constantly fluctuating population of the camps.
- The mapping and MDA exercise conducted by ENVISION led the global NTD technical community to create mapping and treatment guidance for the refugee camp landscape.
More than 11.4 million people in Guinea are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Guinea’s Ministry of Health (MOH), through the National Program for Onchocerciasis Control and Blindness/NTDs (PNLOC/MTN), leads the country’s efforts to eliminate and control these diseases.

From FY12-FY19, the US Agency for International Development (USAID) supported Guinea in reaching its NTD control and elimination goals through the ENVISION project. Implemented in Guinea by Helen Keller International, with technical and operational support from RTI International, ENVISION enabled Guinea to complete mapping of the prevalence of all five NTDs across the country and to scale up treatment where needed. Guinea successfully piloted a triple-therapy approach (ivermectin, praziquantel, albendazole) to mass drug administration (MDA) and scaled up this strategy to 19 health districts with ENVISION support. As a result, Guinea has made great strides toward the elimination of both LF and trachoma, despite the presence of the Ebola virus disease in previous years.

**ENVISION IMPACT IN GUINEA**

- More than 4.6 million people are no longer at risk for trachoma
- Treated 6.7 million people for at least one NTD across 26 districts
- Mapped 37 districts for at least one NTD
- Conducted 66 surveys to assess the impact of trachoma interventions
- Trained more than 14,000 government officials, health workers, teachers, and community drug distributors to effectively carry out MDA campaigns

**NATIONAL LEADERSHIP AND SUSTAINABILITY**

Guinea’s MOH, and particularly the PNLOC/MTN, demonstrated leadership in setting goals and crafting innovative strategies in the fight against NTDs. In FY12, with the start of USAID funding for integrated NTD control in Guinea, the MOH developed its first NTD strategy. ENVISION supported the most recent iteration of Guinea’s NTD strategy, which set bold objectives for the control and elimination of NTDs up to 2023. The MOH also implemented creative new strategies to improve MDA implementation. For example, national health officials coordinated with their education counterparts to ensure school-based drug delivery programs were effective. They also decentralized NTD program implementation to districts and communities.

ENVISION supported Guinea’s government in its goal to strengthen its leadership and commitment to NTD control and elimination efforts. For example, ENVISION improved Guinea’s ability to monitor and evaluate its progress against NTDs by helping to set up and update an integrated database for NTD information. ENVISION also trained health officials, local stakeholders, and project management and technical staff to implement a range of NTD activities. In 2017, to help improve coordination among NTD partners in Guinea, ENVISION began supporting an NTD technical group meeting.

“**The ENVISION project has contributed immensely, not only to fight NTDs but also [in] helping communities understand and feel comfortable with government health efforts. Through this project, the population has become aware of the existence of NTDs [that can be treated with preventive chemotherapy] in their communities, enabling health workers to disseminate [information, education, and communication] messages among the population with a view to adopting behaviors favorable to the fight against NTDs...**”

Dr. Andre Goepogui, Head of the PNLOC/MTN
ENVISION IMPACT BY DISEASE IN GUINEA

LYMPHATIC FILARIASIS

With ENVISION support, Guinea mapped eight districts that had not yet been evaluated for LF prevalence. Six of these districts were found to be endemic. Since FY14, technical and financial assistance from ENVISION enabled Guinea to scale up MDA from 4 to 24 endemic districts, with ENVISION directly supporting MDA campaigns in 19 of these districts, and partner organizations supporting MDA in the remaining 5 districts. It is anticipated that all endemic districts will stop MDA for LF by the end of 2022, and the country will begin impact assessments in the same year.

15.8 million treatments delivered

ONCHOCERCIASIS

Guinea is aiming to eliminate OV by 2025. The disease is endemic in 24 districts—20 of which are also endemic for LF. With ENVISION support, Guinea implemented MDA in 17 districts through integrated administration of albendazole and ivermectin for LF, reaching more than 4 million people with treatment in FY18 (compared with less than 1 million people in FY14). In September 2016, ENVISION provided financial and technical assistance for Guinea to establish an expert committee to develop an OV elimination plan.

13.4 million treatments delivered

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

Guinea is aiming to control both SCH and STH in endemic districts by 2025. ENVISION helped to complete mapping for both STH and SCH in Guinea from FY12-FY14. For SCH, Guinea’s strategy focused on reaching school-age children with praziquantel during school-based drug administration. With ENVISION support, SCH treatment numbers improved: in FY17, more than 1.3 million children were reached with treatment, compared with almost 700,000 in FY12. For STH, Guinea’s strategy focused on an integrated MDA for LF, STH, and OV. With ENVISION support, STH treatment numbers also improved greatly: in FY18, more than 3.2 million people were treated for STH, compared with almost 700,000 in FY12. A partnership with the MOH and the water, sanitation, and hygiene sector has also contributed directly to advances made in STH treatment reaching children.

5.8 million treatments delivered

5.6 million treatments delivered

TRACHOMA

With ENVISION support, Guinea mapped trachoma prevalence in 26 districts, providing the data needed to plan for national trachoma elimination. Since FY13, ENVISION supported MDA campaigns in 14 trachoma-endemic districts. In FY17 and FY18, with ENVISION support, 10 districts conducted and passed impact assessments—and no longer need mass treatment. Of those living in endemic areas, 77.4%—more than 4.6 million people—are no longer at risk for trachoma. It is anticipated that all trachoma-endemic districts will stop MDA by 2020.

77% of people in endemic areas are no longer at risk for trachoma

ENVISION LESSONS LEARNED

The 2013 Ebola outbreak made Guineans skeptical of MDA activities and contributed to low coverage during FY14–FY15 MDA. To address this challenge, ENVISION worked with the MDH in the following ways:

- Collaborated with community, religious, and district-level leaders to raise awareness for MDA activities at the grassroots level.
- Created a multi-pronged communications strategy, including creation of multiple outposts to share educational materials about treatment, fostering the involvement of community leaders to help manage case refusals, and organizing social mobilization activities for communities prior to the MDA rounds to answer questions and allay fears.
- Conducted mandatory mop-ups after MDA rounds (follow-up distribution to reach those who had missed the MDA during the original schedule) in all districts with low coverage, an approach that was successfully piloted in Guinea in FY16 and repeated in FY18.
HAITI

Approximately 11.5 million people in Haiti are at risk for at least one neglected tropical disease (NTD). In 2012, in line with global lymphatic filariasis (LF) elimination goals, Haiti set a goal to eliminate LF by 2020 and to continue implementing control activities for soil-transmitted helminths (STH) throughout the country. Although this date has changed to 2025 due to “last mile” elimination challenges in a few districts, the Haiti Neglected Tropical Diseases Control Program (HNTDCP), led by the Ministry of Public Health and Population (Ministère de la Santé Publique et de la Population [MSPP]), has driven tremendous progress against LF and STH.

From FY12-FY19, the US Agency for International Development (USAID) supported Haiti in reaching its NTD control and elimination goals through the ENVISION project. Implemented in Haiti by IMA World Health, with technical and operational support from RTI International, ENVISION bolstered Haiti’s capacity to fight NTDs, supporting the implementation of MDA in 125 communes and transmission assessment surveys (TAS) in 110 communes. Recent surveys have shown tremendous progress toward LF elimination: By FY19, Haiti stopped MDA for LF in 118 districts and an increasing number of people are no longer at risk for the disease.

ENVISION IMPACT IN HAITI

More than 7 million people are no longer at risk for LF

Treated nearly 8.9 million people for at least one NTD across 125 districts

Trained more than 19,868 government officials, health workers, teachers, and community drug distributors on skills to effectively carry out MDA campaigns

Conducted 157 surveys to assess the impact of the LF interventions

NATIONAL LEADERSHIP AND SUSTAINABILITY

The HNTDCP is a joint effort between the MSPP, the Ministry of Education, and other partners. Through its LF coordinator, Haiti’s MSPP has shown leadership in the planning and implementation of NTD interventions, as well as complementary NTD programs. At national, departmental, and communal levels, MSPP representatives have been fully involved in training community volunteers, supervising MDAs, and conducting disease specific assessments. As a sign of commitment from the HNTDCP, the MSPP requested domestic financing to sustain the morbidity management component of the LF program.

Through support for numerous formal and on-the-job trainings, ENVISION has worked with the MSPP to ensure health officials and community health workers are prepared to implement a range of NTD activities. Twice a year, the HNTDCP and ENVISION organize partner meetings to review previous activities, strategize on upcoming events, and develop solutions to identified challenges and gaps. Additionally, ENVISION supported the HNTDCP to train lab technicians to conduct TAS for LF. Since FY15, ENVISION trained 30 lab technicians across the country to perform pre-TAS and TAS, and trained additional lab technicians annually since then.
ENVISION IMPACT BY DISEASE IN HAITI

LYMPHATIC FILARIOISIS

By FY12, the HNTDCP had reached 100% geographic coverage for LF with funding and technical support from partners, including the ENVISION project. ENVISION has supported MDA in 125 districts using a network of more than 32,000 community volunteers and through supportive supervision.

As of FY18, 118 of 140 communes (84%) are under post-MDA surveillance through ENVISION support. The remaining 22 communes are considered endemic. Three are eligible for TAS1, and 19 need to continue MDA activities. Many of these communes have experienced multiple rounds of MDA beyond five years and are now coined “rebel” communes given the challenges faced. ENVISION and MSPP have begun implementing strategies — such as the supervision coverage tool followed by mop-up and microplanning — in rebel communes to strengthen MDA and consequently reduce LF transmission. In addition, ENVISION contributed to the development of a revamped urban MDA strategy, which successfully increased MDA coverage from 41% in FY17 to 80% in FY18 across five communes in metropolitan Port-au-Prince.

As a result of these activities, about 7 million people are no longer at risk for LF. Barring any delays, Haiti is expected to implement its final TAS3 by 2025.

SOIL-TRANSMITTED HELMINTHS

STH is endemic throughout Haiti, as determined by a mapping exercise conducted by MSPP and partners in 2002. The HNTDCP aims to control STH in school-age children (SAC) through annual treatment campaigns conducted in schools by community drug distributors. The largest deworming campaigns are conducted during the LF MDA, an integrated approach that is strongly supported by partners and donors.

ENVISION contributed to the scale up of MDA for STH across Haiti, reaching about 8.9 million people across 125 districts. To complement the integrated MDA supported by ENVISION, the Inter-American Development Bank has supported albendazole-only MDA since FY15. ENVISION also supported STH prevalence assessments in 70 unique districts. These surveys showed a tremendous reduction of STH infections in SAC, although the threshold is not yet low enough to stop mass treatment. ENVISION also supported a meeting among STH partners in Haiti to harmonize interventions and report existing data and gaps for decision making to MSPP and the STH technical committee.

ENVISION LESSONS LEARNED

In Haiti, ENVISION conducted significant research, learning, and adaptation surrounding urban MDA. Key strategies or lessons learned from Haiti are as follows:

• Due to the diversity and size of many urban areas, “microplanning” or dividing the city into smaller implementation units, is essential to a successful MDA. By using microplanning, ENVISION could determine specific distribution points related to population and need, which ensured a better allocation of resources for MDA.

• MDA campaigns should be adapted to address urban populations. Because of the range of urban communities, peri-urban, single family homes, large complexes, slums, and urban migratory groups, MDA messaging should be tailored to the specific beneficiary group. For Haiti’s urban settings, the project developed different message strategies to reach one urban area.

• Typically, MDA distribution takes place at schools or conducted door to door, and sometimes at fixed posts. In urban environments, fixed posts are often the best choice for distribution. ENVISION established fixed posts based on strategic locations such as in markets, at intersections, and at the door to large complexes. Additionally, flexible hours for distribution posts were established, based on urban settings in Haiti.
Nearly 264.4 million people in Indonesia are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), schistosomiasis (SCH), and soil-transmitted helminths (STHs). Indonesia’s national Ministry of Health (MOH), through its NTD program, leads the country’s efforts against these diseases, working to eliminate LF and STH, and control SCH.

From FY12-FY19, the US Agency for International Development (USAID) supported Indonesia to reach these goals through the ENVISION project. Implemented by RTI International, ENVISION in Indonesia supported mass drug administrations (MDAs) across 59 districts, providing more than 77.8 million treatments for LF/STH between FY13-FY18. The project also helped the MOH strengthen its district and regional capacity to appropriately plan quality MDAs and surveys, use data, and track progress as Indonesia nears elimination and control.

ENVISION IMPACT IN INDONESIA

More than 48.3 million people are no longer at risk for LF

Treated nearly 19.2 million people for at least one NTD across 59 districts

Mapped 163 districts for at least one NTD

Conducted 53 surveys to assess the impact of LF interventions

Trained 105,695 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA) campaigns

ENVISION provided key technical assistance to strengthen Indonesia’s NTD-fighting efforts, particularly related to monitoring and evaluation. The program assisted the development of an integrated database for NTDs at the MOH, helped build capacity in data management and analysis at all levels, and supported data assessments and data review meetings to improve data quality.

“USAID and RTI’s support has had great significance, including mapping the burden of disease, distributing preventive treatments, supporting follow-up surveys, and strengthening national as well as regional capacity...We applaud RTI's support [through ENVISION] in the fight against lymphatic filariasis in Indonesia. We look forward to continue having RTI's support to end the LF burden in Indonesia.”

Dr. Elizabeth Jane Soepardi, former Director of Vector Borne and Zoonotic Diseases, Ministry of Health, Indonesia

INDONESIA

NATIONAL LEADERSHIP AND SUSTAINABILITY

Indonesia has shown remarkable commitment to the fight against NTDs. The country steadily increased its domestic budget commitment to NTD control and elimination until it fully funded the implementation of all required LF/STH MDAs in FY19. Indonesia also increased its capacity to sustainably implement surveys by collaborating with a network of provincial and regional environment laboratories. This collaboration has now been formalized, and these laboratories will continue to fund and implement surveys into the future. To reach its elimination and control goals, the MOH also worked to expand partnerships and collaborations with other sectors. For example, the MOH established an important cross-sectoral program in response to the problem of stunting, which includes the distribution of STH treatments to pre-school and school-age children, as well as pregnant women.

More than 48.3 million people are no longer at risk for LF

Conducted 53 surveys to assess the impact of LF interventions

Trained 105,695 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA) campaigns

Mapped 163 districts for at least one NTD

Treated nearly 19.2 million people for at least one NTD across 59 districts
ENVISION assisted the MOH to complete its mapping of LF across the entire country and expand the implementation of joint LF and STH MDA campaigns to reach 100% geographic coverage. ENVISION also helped improve the quality of MDA campaigns by funding comprehensive activities in 59 endemic districts—including advocacy, coordination meetings, trainings, promotion, drug distribution, and supervision. As a result, ENVISION-supported districts became models for other endemic districts.

ENVISION also built the capacity of health officials to manage quality surveillance by providing extensive training on Transmission Assessment Surveys (TAS), Pre-TAS, supervision, and microscopic skills for laboratory technicians.

By FY18, 20 out of 236 endemic districts have successfully completed TAS3, and a total of 79 districts have stopped mass treatment for LF, with more than 48.3 million people no longer at risk for the disease. Indonesia is expected to eliminate LF by 2027. ENVISION has supported technical assistance for Indonesia to begin the process of compiling data and developing its pre-dossier to prepare for the elimination of LF for submission to the World Health organization.

"Our collaboration with the ENVISION project has had a real and lasting impact on the entire population of Bireuen District. We have greatly appreciated the solid, competent teamwork that ENVISION has provided. ENVISION staff have always been quick to respond, and have shared their discipline, expertise, and enthusiasm with the entire health network in the district. We strongly believe that, together with ENVISION, we will be able to celebrate the elimination of lymphatic filariasis in Bireuen by 2020, and sincerely thank ENVISION for [its] outstanding support."

Dr. Irawati, CDC, District Health Services, Bireuen, Aceh

ENVISION IMPACT BY DISEASE IN INDONESIA

LYMPHATIC FILARIASIS AND SOIL-TRANSMITTED HELMINTHS

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“..."
Mali’s MOH has shown leadership to set goals, develop strategies, and advocate for additional resources to create long-lasting progress against NTDs. For example, while ENVISION supported the construction of a storage facility for drugs used in MDA, the MOH raised additional funds to recruit a dedicated pharmacist to oversee NTD drug management. Mali also developed several national strategic plans for NTDs, as well as disease-specific plans to guide its NTD program and keep progress on track.

ENVISION supported Mali’s government to strengthen its leadership and commitment to NTD control and elimination efforts. For example, ENVISION helped improve the MOH’s capacity for NTD drug management and trained health officials to implement key aspects of NTD programming, including drug logistics and data quality assessments (DQA). With ENVISION’s support, a consultant developed a Drug Management Manual that provides guidelines on all aspects of drug management, enabling the MOH to hold regular inventory checks, plan according to drug needs, and carry out reverse logistics.

“ENVISION’s contribution to Mali has had a very significant impact on the elimination of lymphatic filariasis. ENVISION provided frank technical support in the implementation of the program’s activities through trainings and the introduction to tools such as the Tool for Integrated Planning and Costing and Data Quality Assessment. ENVISION has assisted the National Program for the Elimination of Lymphatic Filariasis in the annual distribution of ivermectin and albendazole, and evaluations to stop-MDA (pre-TAS, TAS 1, TAS 2) in the districts covered by the project from 2014 to 2019.”

Dr. Massitan Dembele, Coordinator of the National Program for the Elimination of Lymphatic Filariasis

MALI

All of Mali’s population, over 19.7 million people, are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Since 2007, Mali has implemented an integrated NTD control program with support from the US Agency for International Development (USAID). The Ministry of Health (MOH), through its national NTD program, has led Mali’s efforts to integrate strong disease-specific programs with well-established elimination and control strategies for each disease.

From FY14-FY19, the US Agency for International Development (USAID) supported Mali to reach its NTD control and elimination goals through the ENVISION project. Implemented by Helen Keller International, with technical and operational support from RTI International, ENVISION supported Mali’s progress toward the elimination of LF, trachoma, and OV, and the control of SCH and STH. Mali has made incredible progress against NTDs despite disruptions due to insecurity and political instability. As of 2019, all 65 trachoma-endemic districts no longer require mass drug administration (MDA) and 49 out of 75 LF-endemic districts have reached the same milestone. Mali is on track to eliminate LF by 2019.

ENVISION IMPACT IN MALI

More than 17.1 million people are no longer at risk for LF

More than 8.6 million people are no longer at risk for STH

More than 16.6 million people are no longer at risk for trachoma

Nearly 0.8 million people are no longer at risk for OV

Mapped 75 districts for at least one NTD

Treated nearly 14.2 million people for at least one NTD across 75 districts

Trained more than 58 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA) activities

Conducted 209 surveys to assess the impact of LF and trachoma interventions

NATIONAL LEADERSHIP AND SUSTAINABILITY

Mali’s MOH has shown leadership to set goals, develop strategies, and advocate for additional resources to create long-lasting progress against NTDs. For example, while ENVISION supported the construction of a storage facility for drugs used in MDA, the MOH raised additional funds to recruit a dedicated pharmacist to oversee NTD drug management. Mali also developed several national strategic plans for NTDs, as well as disease-specific plans to guide its NTD program and keep progress on track.

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Dr. Massitan Dembele, Coordinator of the National Program for the Elimination of Lymphatic Filariasis
ENVISION IMPACT BY DISEASE IN MALI

LYMPHATIC FILARIASIS

All of Mali’s 75 districts are endemic for LF. In 2014, ENVISION began supporting MDA activities for LF in 17 districts, reaching nearly 900,000 people. By 2016, ENVISION-supported MDA reached more than 13 million people across 73 districts. As of 2019, 49 LF-endemic districts conducted evaluations that indicated mass treatment for LF is no longer necessary. The remaining 26 health districts are now preparing to move through surveillance phases and Mali is aiming to eliminate LF as a public health problem by 2019.

87% of people in endemic areas are no longer at risk for LF

ONCHOCERCIASIS

Endemic in 22 districts, OV is present in the regions of Kayes, Koulikoro, Mopti, Segou, and Sikasso. From 2014 to 2019, ENVISION supported MDA in 18 endemic districts, treating up to 3.9 million people annually. Epidemiological coverage during treatment campaigns has been high: 82% of targeted districts achieved sufficient coverage in 2015, followed by 80% in 2016 and 100% in 2017. To help Mali reach its goal of eliminating OV by 2025, ENVISION supported the creation of a committee to develop an overall elimination strategy and identify appropriate plans to reach this goal. In addition, ENVISION-supported epidemiological evaluations in eight districts and entomological evaluations in four districts determined that two of those districts no longer required MDA for OV.

12% of people living in endemic areas are no longer at risk for OV

TRACHOMA

Mali has made tremendous progress against trachoma over the past two decades—mass treatment has stopped in all 65 endemic districts and Mali has begun to prepare the dossier for the validation of trachoma elimination. Although ENVISION did not support mass treatment for trachoma, the project provided critical central-level support to the national trachoma program, including assistance with annual planning, strategy development, and the management of trachoma medicines.

45% of people living in endemic areas are no longer at risk for STH

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

From 2014 to 2017, ENVISION supported impact assessments for both STH and SCH in 46 districts. Survey results showed that 38 districts have reduced STH infection sufficiently that they no longer require MDA and 28 districts have achieved the control of morbidity for SCH. From 2014 to 2018, ENVISION-supported annual MDA for SCH reached up to 4.4 million people per year and MDA for STH reached up to 12.6 million people per year.

ENVISION LESSONS LEARNED

The region of Kidal, which borders Algeria and Nigeria, missed two consecutive MDA for LF because of insecurity in 2012 and 2013. To renew MDA activities in Kidal, ENVISION worked with the national NTD program to integrate LF mass treatment with child immunization campaigns, which had continued despite security challenges. This integration minimized the number of health workers needed to conduct both activities and streamlined the amount of time beneficiaries spent receiving both health interventions. When surveyed, community drug distributors, beneficiaries, and health workers found the integration to be advantageous. And, despite social and political challenges in the region, integrating MDA with the vaccine campaign yielded favorable coverage of the target population for both efforts.
All of the 27.8 million people living in Mozambique are at risk for at least one neglected tropical disease (NTD). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Mozambique’s Ministry of Health (MOH), through the National NTD Program and the National Ophthalmology Program, leads the country’s efforts against these NTDs.

From FY12-FY19, the US Agency for International Development (USAID) supported Mozambique in reaching its NTD control and elimination goals through the ENVISION project. Led by RTI International, ENVISION in Mozambique supported the MOH to scale up district-level mass drug administration (MDA) for trachoma and provided support at the central level for the program management of all endemic NTDs. As a result of ENVISION’s support, a major portion of the population is no longer at risk for trachoma, and the country is on track to eliminate the disease by 2023.

**NATIONAL LEADERSHIP AND SUSTAINABILITY**

Mozambique’s MDH has demonstrated leadership in directing and coordinating all NTD elimination efforts in the country. The MOH established a Master Plan for the control and elimination of NTDs, appointed a dedicated national NTD coordinator, and hired NTD focal points to work at provincial and district levels. The Ministry also established a National NTD Steering Committee and regularly convened and led meetings of the committee and other stakeholders, including cross-sectoral colleagues from the Departments of School Health, Social Communication, and Water and Public Works.

While ENVISION support in Mozambique focused on trachoma activities, the project also provided central-level support for the NTD Department’s program management of all endemic NTDs. ENVISION provided training to department staff, including training on monitoring and evaluation systems, and regularly collaborated with other NTD partners to share lessons learned. ENVISION also provided short-term secondments to the MOH to support monitoring and evaluation and supply chain management. Through the administration of fixed obligation grants to provinces to help fund their NTD activities, ENVISION also helped to strengthen the capacity of Provincial Health Directorates to effectively plan and manage high-quality MDA implementation.

**ENVISION IMPACT IN MOZAMBIQUE**

- **Nearly 4.1 million people** are no longer at risk for trachoma
- **Treated 5.2 million people** for trachoma across 45 districts
- **Mapped 71 districts** for trachoma
- **Conducted 55 surveys** to assess the impact of trachoma interventions
- **Trained more than 1,000** government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA)
ENVISION IMPACT BY DISEASE IN MOZAMBIQUE

TRACHOMA

Beginning in FY12, ENVISION assisted in completing baseline mapping of trachoma prevalence across 71 districts. Based on the results of this exercise, ENVISION supported the development of national and provincial Trachoma Action Plans and the nationwide scale-up of trachoma MDA implementation. With ENVISION support, the MDH launched trachoma mass treatment in FY13 and reached all districts that had a baseline prevalence of ≥10% by FY15. This expansion represented a scale-up from less than half a million people treated in 2013 to nearly 3 million people treated in FY16. By FY19, all endemic districts were reached with MDA, bringing geographic coverage to 100%.

With ENVISION funding, the country also completed impact and surveillance surveys in 40 districts. The results show that nearly 4.1 million people living in 37 districts are no longer at risk for trachoma. It is anticipated that all districts will be able to stop mass treatment by 2021 and that Mozambique will be officially be validated as having eliminated trachoma as a public health problem.

In FY16, ENVISION began supporting the MOH to complete the data collection portion of its trachoma elimination dossier and has continued to provide technical guidance on dossier development to the MDH. ENVISION also supported the participation of MOH Ophthalmology Department staff in trainings for Tropical Data, a system used to effectively track trachoma progress by ensuring collection of standardized, high quality data. As a result, more than 40 people in Mozambique are now certified as trachoma graders and recorders for Tropical Data.

ENVISION LESSONS LEARNED

At the beginning of their collaboration, Mozambique’s MOH faced challenges in the management of donated NTD medicines.

To overcome this, ENVISION provided funding and technical support to the country’s Central Medical Stores to introduce unique stock-keeping units for donated trachoma medicines. ENVISION also supported the establishment of joint MDA and supply chain training at all levels prior to each MDA round, involving both NTD focal points and drug warehouse managers.

As a result, drug management guidelines and forms introduced during training were found to be widely used during MDA. The Central Medical Stores has also streamlined and simplified the process by identifying a focal point to assist with the importation of NTD drugs.
NEPAL

All of Nepal's population is at risk for at least one neglected tropical disease (NTD), with lymphatic filariasis (LF) and soil-transmitted helminths (STHs) both endemic in the country. In FY18, the World Health Organization (WHO) validated that Nepal eliminated trachoma as a public health problem. Nepal's Ministry of Health and Population (MoHP) and the Ministry of Education provide overall leadership for NTD activities and are aiming to eliminate LF as a public health problem by 2026 and to control STH in school-age children.

From FY12-FY19, the US Agency for International Development (USAID) supported Nepal to reach its NTD elimination goals through the ENVISION project. Implemented by RTI International, ENVISION in Nepal supported district-level treatment campaigns across 56 districts and monitored disease levels across 61 districts. As a result, Nepal is making considerable progress towards LF elimination.

The Government of Nepal showed continued commitment and increased ownership of its NTD program using the existing government health delivery system. For example, Nepal used its NTD program’s success to support the development of policy changes, such as having health workers manage drug distributions and increasing the number of days for each MDA. Nepal also gradually increased its domestic resource allocation for NTDs. As of FY19, Nepal contributed funding to deworming activities for pre-school and school-age children in all districts, and funded LF MDA campaigns in 11 out of 15 districts being treated, and ENVISION supported the other 4 districts. In June 2019, Nepal’s parliament passed a budget for the next fiscal year that includes funding to support MDA for all 15 districts.

ENVISION supported these efforts by advocating for increased and sustained resource allocation for LF MDA activities in the remaining endemic districts. At the national level, ENVISION assisted in the development of an integrated NTDs database while also building capacity in data management and analysis. Locally, ENVISION provided key technical support to strengthen Nepal's NTD control and elimination efforts, including by helping to develop policies and build capacity at the municipal level.

“ENVISION’s technical support in implementation of the lymphatic filariasis elimination program activities, including training of health workers, advocacy, social mobilization, and periodic disease-specific assessments (TAS) have been a strong assistance to decrease prevalence in more than half of endemic districts.”

Mahendra Prasad Shrestha, Chief of the Health Coordination Division, MoHP Nepal and NTD Technical Working Group Chair
ENVISION IMPACT BY DISEASE IN NEPAL

TRACHOMA

In April 2018, Nepal was successfully validated as having eliminated trachoma as a public health problem, ridding the country’s 20 endemic districts of the world’s leading infectious cause of blindness. ENVISION played an important role in this achievement through its support for the government’s National Trachoma Program, which was implemented through the existing government health system in partnership with a national nongovernmental organization Nepal Netra Jyoti Sangh (NNJS). Through NNJS, ENVISION supported the implementation of trachoma impact surveys and trachoma surveillance surveys in 20 districts and assisted in the development of a trachoma elimination dossier.

ENVISION IMPACT BY DISEASE IN NEPAL

LYMPHATIC FIIARIASIS

With ENVISION’s support, Nepal achieved 100% geographical coverage of LF MDA in FY13, one year earlier than planned. The government’s political and financial leadership, combined with ENVISION’s support, helped ensure timely implementation of LF surveys, which led to 46 out of 61 endemic districts where the stop MDA criteria have been achieved. 28% of those living in endemic areas, about 77 million people, are no longer at risk for the disease. As of FY19, only 15 districts, the hardest and most challenging in the country, still require MDA. Nepal is aiming to eliminate LF as a public health problem by 2026.

SOIL-TRANSMITTED HELMINTHS

ENVISION supported a prevalence survey in FY15 that found a national STH prevalence of 20.7%. Based on the recommendations of this survey, the government revised the frequency of its treatment for school-age children. ENVISION only provided support for STH treatment in districts where LF MDA is implemented with ENVISION funding.

ENVISION LESSONS LEARNED

False rumors about the side effects of LF medications contributed to low coverage of LF MDAs in some communities. To address this challenge, ENVISION provided financial and technical support to help the MoHP implement a targeted treatment strategy in those communities. This strategy included:

- Enhanced monitoring and supervision;
- An advocacy campaign that targeted health facility staff, professional bodies, schools, local clubs of ethnic minorities, municipality staff, and media personalities;
- The establishment of additional treatment booths for drug administration in public places, such as hospitals, schools, and community clubs; and,
- The use of health workers, rather than community-based health volunteers, to carry out house-to-house visits for drug administration so the health worker’s expertise could help relieve fears about adverse events.

ENVISION’s support to the MoHP helped to define the necessary adaptations quickly and extend their reach.
NIGERIA

Nigeria has the highest neglected tropical disease (NTD) burden in Africa, with an estimated 173.4 million people at risk for at least one NTD. The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). The Federal Ministry of Health (FMOH) leads the country’s ambitious efforts to control or eliminate these diseases.

From FY13 to FY19, the US Agency for International Development (USAID) supported Nigeria to reach its NTD control and elimination goals through the ENVISION project. Implemented by RTI International and The Carter Center, ENVISION in Nigeria supported the national NTD program to carry out mass drug administration (MDA) across 10 states: Abia, Anambra, Cross River, Delta, Ebonyi, Edo, Enugu, Imo, Nassarawa, and Plateau. With ENVISION support, Nigeria has successfully stopped MDA for LF in 37 local government areas (LGAs), trachoma in 18 LGAs, and OV in 12 LGAs.

ENVISION IMPACT IN NIGERIA

Nearly 6.8 million people are no longer at risk for LF

Nearly 8.3 million people are no longer at risk for trachoma

Nearly 2.5 million people are no longer at risk for OV

Treated 30.4 million people for at least one NTD across 185 districts

Conducted 165 surveys to assess the impact of the LF and trachoma interventions

NATIONAL LEADERSHIP AND SUSTAINABILITY

The Government of Nigeria established national coordination structures to ensure the NTD program runs smoothly—both technically and operationally. These structures include the National NTD Steering Committee, the Nigeria Onchocerciasis Elimination Committee, and the National Nongovernmental Development Organization Network. Providing an opportunity for more effective NTD coordination, these mechanisms contributed to reduced treatment gaps in several states and facilitated coordination with critical non-health sectors, such as education. The national-level government established similar structures at state and LGA levels.

ENVISION provided numerous tools to facilitate the management of NTD programs in Nigeria, including data management systems and an online NTD toolbox full of useful guidance to help the health sector plan, implement, and evaluate programs. ENVISION’s support for data management systems helped the FMOH improve its drug inventory tracking, which resulted in improved completion and submission of the World Health Organization’s Joint Application Package for NTD medicines.
**ENVISION IMPACT BY DISEASE IN NIGERIA**

**LYMPHATIC FRAILARIASIS**

In FY13, ENVISION supported the mapping of LF prevalence in nine states in South South and South East Nigeria, enabling a huge expansion of treatment in states that had not yet received LF treatment. In FY14, ENVISION supported MDAs reaching 9.7 million people, and the number of people reached by MDA implementation has exceeded 18 million each year since. In ENVISION-supported states, approximately 6.8 million people are no longer at risk for LF. In FY17, two states—Plateau and Nasarawa—eliminated LF as a public health problem. Although ENVISION support in these states began after transmission had been halted, the project supported the final evaluations that enabled Nigeria to definitively conclude that transmission had been eliminated.

**ONCHOERCIASIS**

After decades of good treatment coverage, the FMOH was able to stop MDA for OV in Plateau and Nasarawa in FY17. Approximately 2.5 million people in these states no longer need treatment, making this the largest stop-MDA decision in the history of global OV elimination efforts. ENVISION supported several years of necessary treatments to reach this unprecedented milestone. Success in these two states set a pattern for similar success throughout the rest of Nigeria and provided an instructive example for other highly endemic countries. Additionally, ENVISION’s data management system enabled the FMOH to target all people in endemic areas based on updated census data, rather than partial population figures.

**TRACHOMA**

In FY13, ENVISION supported the development of Nigeria’s first National Trachoma Action Plan, a blueprint to conduct impact and surveillance surveys in Plateau and Nasarawa States. ENVISION also supported the piloting of Tropical Data—an electronic system to effectively grade and track progress against trachoma elimination goals—during these surveys. In FY18, ENVISION supported MDA implementation in four LGAs in Ebonyi State and one LGA in Edo State. It is anticipated that these five LGAs will be able to stop mass treatment for trachoma in FY19.

**SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS**

ENVISION contributed to new or updated mapping for SCH prevalence across nine states in North Central, South South, and South East Nigeria. Based on mapping results, ENVISION supported mass treatment for SCH in all districts that met the treatment threshold in the ten ENVISION supported states; previously, funding supported mapping and treatment in only six of the nine states. Further, ENVISION included STH in its package of disease interventions, resulting in a drastic expansion of STH treatments across the nine states—from fewer than one million treatments in FY13 to more than 7.5 million in FY18.

**SUCCESS STORY**

Mr. Yusuf Maikeffi is a trained community drug distributor in Gidan Gimba, a community in Nasarawa State. He serves approximately 200 people, some of whom have reported improved vision. Mr. Maikeffi says he has observed a decline in vision issues in his village since he began distributing treatment, and he attributes the improvement to a reduction in river blindness.

“I enjoy being a [community drug distributor] because it is important to me to help protect my community,” said Mr. Maikeffi.

A father of six children, Mr. Maikeffi is one of 80,000 community-based volunteers and health workers dedicated to improving health in Nigeria.

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**LYMPHATIC FILARIASIS**

6% of people in endemic areas are no longer at risk for LF

**TRACHOMA**

26% of people living in endemic areas are no longer at risk for trachoma
Nearly 105 million people in the Philippines are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), schistosomiasis (SCH), and soil-transmitted helminths (STH). The Department of Health (DOH) leads the nationwide programs needed to support the elimination of LF and SCH, and the control of STH.

From FY15 to FY19, the US Agency for International Development (USAID) supported the Philippines to reach these goals through the ENVISION project. Implemented by RTI International, ENVISION in the Philippines provided enabling tools and methods that supported the Philippines to reach its control and elimination goals and prepare for a sustainable NTD response into the future. ENVISION, with its global network, also helped to share the Philippines’ innovative NTD-fighting initiatives as examples for other NTD country programs. For example, ENVISION developed a technical brief detailing how the STH program manager in the Philippines fostered collaboration with the Department of Education (DOE) to create a sustainable platform for STH control among school-age children.

Supported development of a national strategic plan for LF elimination

Supported incorporation of NTD modules into pre-service curricula for health professionals

Began development of an LF elimination dossier, which will be reviewed by the World Health Organization to validate elimination

The Philippines is dedicated to the fight against NTDs as part of its drive to achieve the United Nations Sustainable Development Goals. The country’s commitment was reflected in ambitious budget allocations; in FY17, the Philippines budgeted US$20 million for NTDs. To reach its goals, the DOH also worked to expand partnerships and collaborations with other sectors. For example, DOH worked closely with the DOE to harmonize STH MDA for school-age children both in and out of school. By synchronizing the timing of MDA rounds, providing joint trainings, and improving reporting forms and systems, the two departments improved the effectiveness of STH MDA implementation.

At the request of the DOH, ENVISION helped strengthen a key activity to ensure sustainability of a robust NTD surveillance system. Starting in FY15, ENVISION provided technical and logistic support to conceptualize and begin the NTD Laboratory Network and Response system, a network designed to ensure capacity for surveillance activities for six NTDs, including those diseases that will need surveillance after validation of elimination. ENVISION’s support included shepherding policy change through the DOH process, facilitating collaboration between programs within the DOH, and reviewing training materials to ensure they were technically accurate and in line with global guidance.

ENVISION IMPACT IN THE PHILIPPINES

NATIONAL LEADERSHIP AND SUSTAINABILITY

A poem from Roderick Poblete (Dr. Oknoy), on the ENVISION Philippines team
The Philippines’ health system is decentralized; the national government is responsible for strategic planning, overall technical guidance, capacity building, and logistical support, while local governments implement and provide program services. Effective and accurate feedback is crucial to achieve a cohesive national and local response to NTDs.

To help achieve this cohesion, the ENVISION team created an initiative for in-depth data review meetings—Data for Action—in provinces that are still undergoing MDA for LF. This consultative process analyzed data and developed context-specific solutions to improve MDA for each province. ENVISION also supported assessment methods to measure program effectiveness. For example, the project mentored a local NGO to implement a Coverage Evaluation Survey in one province that had failed an impact survey and used those results to improve the next round of MDA. The Philippines aims to have all provinces in the post-MDA surveillance phase by 2020.

Approximately 12 million people are at risk for SCH in the Philippines. As of FY19, 11 out of 28 endemic provinces have attained elimination status at the provincial level and the country is on track to meet its national elimination goal in 2025. To help reach this goal, ENVISION provided technical support to the development of the Philippines’ Schistosomiasis Strategic Plan, helping to ensure that all strategic efforts contribute to the goal of eliminating SCH as a public health problem by 2025.

STH is endemic in all 82 provinces; the Philippines aims to control the illness in the next five years by scaling up beyond pre-school and school-age children to vulnerable, at-risk adults, such as women of reproductive age. ENVISION funded a consultant to write the Soil Transmitted Helminthiasis Strategic Plan 2018–2022, and ENVISION staff provided technical review of the plan. ENVISION also facilitated the consultation process required for the plan’s approval within DOH and DOE structures.

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To help achieve this cohesion, the ENVISION team created an initiative for in-depth data review meetings—Data for Action—in provinces that are still undergoing MDA for LF. This consultative process aimed to harmonize and analyze national, subnational, and local epidemiological and program information for LF on a common platform. With this shared understanding, stakeholders developed consensual and replicable solutions to recurring issues and crafted innovative approaches to challenging situations. As a result of this iterative process, local, regional, and national NTD stakeholders realized the importance of reliable data for progress and the potential of informed, collective solution-making to improve MDA implementation.
More than 13.5 million people in Senegal are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Senegal’s Ministry of Health and Social Work (MSAS), through its Disease Control Directorate that supervises the Neglected Tropical Diseases Control Program (PLMTN), leads the country’s efforts to eliminate and control these diseases.

From FY13-FY19, the US Agency for International Development (USAID) supported Senegal in reaching its NTD control and elimination goals through the ENVISION project. Implemented by RTI International, ENVISION supported the country to develop a national NTD strategy and implement a comprehensive package of NTD interventions.

ENVISION IMPACT IN SENEGAL

More than 530,000 people are no longer at risk for LF

More than 106,000 people are no longer at risk for SCH

Mapped 18 districts for at least one NTD

Trained more than 17,752 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA)

Treated nearly 8.6 million people for at least one NTD across 76 districts

Conducted 35 surveys to assess the impact of the LF and trachoma programs

More than 5.9 million people are no longer at risk for trachoma

Nearly 1.4 million people are no longer at risk for STH

NATIONAL LEADERSHIP AND SUSTAINABILITY

Senegal’s MSAS and the PLMTN, have demonstrated leadership in developing and implementing national NTD plans and in working across sectors. For example, the MSAS collaborated with the Ministry of Education, education stakeholders, and the communication sector to implement MDA. To build a sustainable base for NTD efforts, the MSAS also facilitated strong community involvement in NTD activities, providing human resources and logistical support for the local implementation of MDA rounds. ENVISION staff were also placed directly within regional health offices to facilitate collaboration.

ENVISION supported these efforts by training health officials to implement key aspects of NTD programming, such as MDA implementation and monitoring and evaluation. Further, technical and financial support from ENVISION enabled the cross-sector collaboration between the MSAS and the education and communication sectors.

“RTI support [through ENVISION] was great. Indeed, RTI has supported the PLMTN to reach coverage objectives as per WHO criteria, to adhere to WHO directives for SCH control, to develop and use data collection and management tools, and to build the capacities of MSAS staff in NTD control. RTI also contributed to the overall quality of diseases mapping in Senegal, and to the development and implementation of impact assessment surveys for LF, OV, STH, SCH, and trachoma.”

Dr. Boubacar Diop, National Coordinator for SCH and STH control, PLMTN, MSAS
ENVISION IMPACT BY DISEASE IN SENEGAL

LYMPHATIC FILARIASIS

In FY15, Senegal scaled up MDA implementation to all 50 endemic districts—with ENVISION directly supporting 33 of these districts. To further strengthen Senegal’s efforts against LF, in FY16 ENVISION supported health districts to use a daily reporting form that provided daily coverage data for immediate action and decision making. As a result, each ENVISION-supported district achieved its coverage objective. In FY18, ENVISION supported surveys in 3 districts, which indicated that all 3 have now reached the criteria to stop MDA. Currently, more than half a million people are no longer at risk for LF, and Senegal is on track to eliminate LF by 2027.

6% of people in endemic areas are no longer at risk for LF

TRACHOMA

In FY14, ENVISION supported a baseline assessment of trachoma prevalence in 17 health districts, completing Senegal’s trachoma map and ensuring the PMLTN had correct information on trachoma prevalence in each district. ENVISION then targeted support to eight districts in FY16 and two in FY17, with each district achieving sufficient program coverage in both years. ENVISION also supported the implementation of impact surveys in all eligible health districts, and the results showed that more than 5.9 million people are no longer at risk for trachoma. MDA for trachoma has now ceased across Senegal, and the country is on track to reach trachoma elimination by 2020.

100% of people living in endemic areas are no longer at risk for LF

ONCHOCERCIASIS

The PLMTN has treated DV for 25 years. ENVISION supported the program to develop a clear roadmap for OV elimination by participating in epidemiological and entomological assessments in FY14 and FY15, providing technical support and orientation, and organizing a technical review with international and local experts.

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

ENVISION support improved the quality of Senegal’s efforts to fight SCH and STH through impact assessments and support for country adherence to WHO guidelines. Senegal began following WHO directives for both diseases, conducting a round of treatment every year or two (depending on prevalence), a process that saves precious time and resources. For SCH, ENVISION supported impact assessments in 36 out of 59 endemic districts. Using this information, the PLMTN determined that two districts are now able to stop treatment, and four others have reduced their treatment frequency. For STH, ENVISION-supported prevalence mapping showed that only 11 out of 76 districts required treatment. Since 2016, ENVISION-supported impact assessments in 36 districts showed that 13 districts had reached the criteria to stop STH treatment and 7 districts could reduce treatment frequency.

18% of people in endemic areas are no longer at risk for STH

ENVISION LESSONS LEARNED

Before 2016, the PLMTN did not follow World Health Organization (WHO) directives for STH and SCH control. The program systematically treated all districts for the illnesses without considering baseline prevalence. ENVISION organized several meetings with the PLMTN coordinator and the program’s technical staff to advocate for adherence to WHO directives, and to improve the quality of their reports. With consistent advocacy and technical support from ENVISION, the PLMTN developed a clear roadmap for STH and SCH control in line with global standards. To date, 2 districts have reached the criteria to stop treatment for SCH and 13 districts can stop treatment for STH.
Neglected tropical diseases (NTDs) affect over 278.3 million people in Bangladesh, Cambodia, Laos, and Vietnam. National NTD programs in each of these countries have made considerable progress toward the control and elimination of these diseases, often serving as examples for the global NTD community.

Bangladesh, Cambodia, Laos and Vietnam joined ENVISION in FY16, with previous support from USAID’s END in Asia project (FY10–FY15). Implemented by RTI international, ENVISION in these countries focused on providing targeted technical assistance to national trachoma and lymphatic filariasis (LF) programs to consolidate their remarkable successes to reach elimination. In FY17, Cambodia and Laos achieved validation of elimination for trachoma from the World Health Organization (WHO), with Cambodia (in FY17) and Vietnam (in FY19) also achieving the elimination of lymphatic filariasis (LF).

In addition, ENVISION supported strategic planning and advocacy for schistosomiasis (SCH) programs in Cambodia and Laos to ensure that appropriate measures were in place to sustain gains through improved water, sanitation, and hygiene measures and intensified animal and human surveillance. Bangladesh is on track to eliminate LF by 2020.

**ENVISION IMPACT IN SOUTH EAST ASIA**

Developed schistosomiasis elimination strategies (FY16-FY20), in partnership with Ministries of Health and Agriculture in Laos and Cambodia and WHO, to ensure continued low prevalence in border communities along the Mekong River.

Developed dossiers to document the elimination of LF or trachoma as public health problems in Bangladesh, Cambodia, Laos and Vietnam.

Trained more than 4,900 government officials, health workers, teachers, and community drug distributors on skills to effectively carry out MDA campaigns.

Sustained and solidified remarkable progress against NTDs, including by supporting strategic planning and advocacy activities.

Coordinated with national and global stakeholders in Cambodia, Laos, and Vietnam to provide resources and support data collection for confirming the elimination of LF and trachoma.

**NATIONAL LEADERSHIP AND SUSTAINABILITY**

The national NTD programs in Bangladesh, Cambodia, Laos, and Vietnam have demonstrated longstanding leadership and commitment to the fight against NTD control and elimination. As these countries progress toward or meet their elimination targets, their focus has rightly turned toward sustaining their progress. For example, in Cambodia, the LF program manager collaborates with the US Centers for Disease Control and Prevention and the Expanded Program on Immunization (EPI) program to develop and test an integrated post-elimination surveillance survey. In Vietnam, the LF program has included funds for post-validation surveillance activities in the Ministry of Health budget. When requested, ENVISION provided technical support and guidance on effective post validation surveillance methods after elimination is achieved.
ENVISION IMPACT IN SOUTH EAST ASIA

BANGLADESH

Bangladesh is in the post-MDA surveillance phase for LF in all 19 endemic districts. ENVISION supported the development of a pre-dossier draft for the validation of elimination by the WHO, as well as support to write the full dossier draft and determine the data necessary for completion.

100% of people living in endemic areas are no longer at risk for LF

CAMBODIA

Cambodia officially eliminated both LF and trachoma as public health problems in FY17. For both diseases, ENVISION provided technical support for the development and submission of elimination dossiers to WHO. For trachoma, ENVISION also supported the re-examination of the FY15 survey data to determine whether elimination criteria were achieved—a critical data point before finalizing the dossier. The project played a limited role in efforts to eliminate SCH in Cambodia, supporting a consultant to review the animal component of the country’s SCH elimination strategy for 2016–2020.

LAOS

Laos officially eliminated trachoma as a public health problem in FY17 and is currently in the post-MDA surveillance phase for LF. ENVISION provided dossier development technical support for both diseases, provided facilitators for trainings on LF surveys, and supported the Ministry of Health’s national celebration for the elimination of trachoma. From FY16–FY17, ENVISION supported a consultant to work with WHO and the ministries responsible for human health, animal health, and sanitation in Laos to finalize an SCH elimination strategy for 2016–2020.

ENVISION IMPACT IN SOUTH EAST ASIA

VIETNAM

Vietnam officially eliminated LF as a public health problem in FY19. ENVISION provided support for dossier development and submission, as well as data collection to fill gaps. When data collected as part of dossier development showed clusters of lymphedema patients in areas without MDA, ENVISION supported three confirmatory mapping surveys to rule out ongoing transmission. For trachoma, ENVISION supported Vietnam to develop a pre-dossier and to develop a trachoma elimination plan. In addition, after one trachoma hotspot was found after the FY14 mapping surveys, ENVISION supported additional district-level mapping surveys as recommended by WHO and supported one round of MDA in the hotspot. Implemented by the Fred Hollows Foundation in Vietnam, with technical support from RTI International, ENVISION staff have also facilitated survey trainings and supervision. The project also conducted baseline surveys in three more districts to confirm that the rest of the country could be classified as non-endemic/no longer suspected endemic. The three districts were selected based on an educated hypothesis that they would be the next most likely districts where active trachoma may be a public health problem. The survey data showed that trachomatous trichiasis and trachomatous inflammation-follicular prevalence were below WHO’s threshold for intervention.
Nearly 51.6 million people in Tanzania are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Within the Ministry of Health, Community Development, Gender, Elderly and Children (MOHCDGEC), Tanzania’s NTD Control Program leads the country’s efforts against these diseases.

From FY12-FY19, the US Agency for International Development (USAID) supported Tanzania in reaching its NTD control and elimination goals through the ENVISION project. Led by IMA World Health, with technical and operational support from RTI International, ENVISION in Tanzania worked with other partners to help scale up mass drug administration (MDA) from 61 to 134 endemic districts, reaching more than 25.8 million people. As a result, recent surveys show considerable progress toward reducing the burden of both LF and trachoma in the country.

ENVISION IMPACT IN TANZANIA

More than
21.5 million people are no longer at risk for LF
More than
16 million people are no longer at risk for trachoma

Treated nearly
25.8 million people for at least one NTD across 141 districts

Mapped 92 districts for at least one NTD

Trained more
than 118,876 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA)

Conducted 258 surveys to assess the impact of LF and trachoma interventions

Tanzania’s MOHCDGEC and its NTD Control Program have demonstrated willingness to lead and coordinate all NTD elimination efforts in line with World Health Organization guidelines. For sustainability, the Ministry has decentralized the NTD Control Program to the district level, and each district incorporates NTD control and elimination activities into their annual district health plans. These plans are an important vehicle to ensure that resources continue to be allocated to NTD control and elimination implementation when external support ends.

ENVISION supported these sustainability efforts by helping to build the capacity of district and local governments to plan and implement NTD activities. For example, ENVISION supported regional and district review and planning meetings, which produced context-appropriate strategies for NTD control activities. ENVISION also provided fixed obligation grants (FOGs) to districts and regions in support of their planned NTD elimination activities, including capacity building for the health workers and teachers directly involved in distributing medicine during MDA. These financial mechanisms were an important complement to funds allocated in district health plans. FOGs contribute to sustainability because they build managerial and programmatic capacity of the host country government to successfully design, implement, and monitor NTD activities.
ENVISION IMPACT BY DISEASE IN TANZANIA

LYMPHATIC FILARIASIS

At the start of ENVISION, the national program suspected that LF was endemic throughout the country. After LF remapping in 10 districts in Tanzania, ENVISION helped the national program to use the methodology to “shrink the map,” remapping a further 55 districts. The result was that all 65 districts were non-endemic. ENVISION helped Tanzania gain an accurate picture of LF prevalence across the country, resulting in Tanzania reaching 100% geographic scale. As of FY19, 86 of 120 endemic districts have reached criteria to stop MDA, and ENVISION supported 18 of the remaining districts, all of which are expected to stop MDA by 2021. ENVISION also supported routine program monitoring and surveillance and built the capacity of the national NTD Control Program to carry out required assessments and evaluations.

89% of people in endemic areas are no longer at risk for LF

ENVISION supported Tanzania’s goal of eliminating OV as a public health problem by 2025. When the African Program for Onchocerciasis Control ended its support in FY15, ENVISION stepped up to extend MDA support in each of the country’s 28 endemic districts. ENVISION also built the capacity of Tanzania’s NTD Control Program to implement effective elimination strategies, providing technical support via the OV Expert Elimination Committee and supporting the continued monitoring of OV through epidemiological surveys.

21.7 million treatments delivered

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

Tanzania is aiming to control both STH and SCH as public health problems. ENVISION supported one of Tanzania’s main strategies to reach this goal: the distribution of medicines to school-age children. In FY16, Tanzania achieved full geographic coverage for both diseases with ENVISION support. As of FY19, ENVISION supported 134 out of 185 endemic districts with MDA, while the Schistosomiasis Control Initiative supported the remaining endemic districts.

ENVISION LESSONS LEARNED

To improve social mobilization approaches among mobile populations, ENVISION supported the national NTD Control Program to complete a survey among Masaai and other nomadic communities. The survey showed that these communities were aware of NTDs but lacked knowledge about their transmission and control methods. The survey also found that when given good information on NTDs, these communities are ready to engage in both community- and school-based MDA. The survey identified the rainy season as a good time for MDA implementation because community members were stationary and at home in the mornings and evenings. As a result of the survey, the program engaged closely with “clan heads” to prepare communities for MDA and ensure effective uptake of treatment.

In FY14, ENVISION supported the completion of a trachoma mapping exercise that found 71 districts to be endemic. ENVISION provided technical and financial assistance that enabled Tanzania’s MDA implementation to reach 100% geographic coverage in FY15. ENVISION also supported surveys to track progress, finding that only 8 of 71 endemic districts required MDA by mid-FY19. Of those living in endemic areas, 89%—more than 15.9 million people—are no longer at risk for trachoma.

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To improve social mobilization approaches among mobile populations, ENVISION supported the national NTD Control Program to complete a survey among Masaai and other nomadic communities. The survey showed that these communities were aware of NTDs but lacked knowledge about their transmission and control methods. The survey also found that when given good information on NTDs, these communities are ready to engage in both community- and school-based MDA. The survey identified the rainy season as a good time for MDA implementation because community members were stationary and at home in the mornings and evenings. As a result of the survey, the program engaged closely with “clan heads” to prepare communities for MDA and ensure effective uptake of treatment.

89% of people in endemic areas are no longer at risk for LF

In FY14, ENVISION supported the completion of a trachoma mapping exercise that found 71 districts to be endemic. ENVISION provided technical and financial assistance that enabled Tanzania’s MDA implementation to reach 100% geographic coverage in FY15. ENVISION also supported surveys to track progress, finding that only 8 of 71 endemic districts required MDA by mid-FY19. Of those living in endemic areas, 89%—more than 15.9 million people—are no longer at risk for trachoma.

89% of people in endemic areas are no longer at risk for trachoma

ENVISION supported Tanzania’s goal of eliminating OV as a public health problem by 2025. When the African Program for Onchocerciasis Control ended its support in FY15, ENVISION stepped up to extend MDA support in each of the country’s 28 endemic districts. ENVISION also built the capacity of Tanzania’s NTD Control Program to implement effective elimination strategies, providing technical support via the OV Expert Elimination Committee and supporting the continued monitoring of OV through epidemiological surveys.

21.7 million treatments delivered

SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS

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Nearly 39.3 million people in Uganda are at risk for one or more neglected tropical diseases (NTDs). The country is endemic for lymphatic filariasis (LF), onchocerciasis (OV), trachoma, schistosomiasis (SCH), and soil-transmitted helminths (STH). Uganda’s Ministry of Health (MOH), through its NTD Control Program (NTDCP), leads the country’s efforts against these diseases.

From FY12-FY19, the US Agency for International Development (USAID) supported Uganda in reaching its NTD control and elimination goals through the ENVISION project. Led by RTI International and The Carter Center, ENVISION in Uganda provided technical and financial assistance for district-level mass drug administration (MDA) across four regions, reaching more than 16.5 million people. ENVISION also helped the MOH to strengthen its integrated platform for NTD interventions, providing the structure needed to sustain future NTD-fighting efforts. As of FY19, Uganda is within reach of elimination for LF, trachoma, and OV and has made substantial gains toward the control of SCH and STH.

**ENVISION IMPACT IN UGANDA**

- More than 12.7 million people are no longer at risk for LF
- More than 9.9 million people are no longer at risk for trachoma
- More than 2.8 million people are no longer at risk for STH
- Trained more than 161,457 government officials, health workers, teachers, and community drug distributors to effectively carry out mass drug administration (MDA)
- Mapped 35 districts for at least one NTD
- Treated nearly 16.5 million people for at least one NTD across 88 districts
- Conducted 171 surveys to assess the impact of the LF and trachoma interventions

**NATIONAL LEADERSHIP AND SUSTAINABILITY**

USAID was the first international NTD donor to support the central- and district-level integration of Uganda’s NTD program and to help ensure coordinating structures were in place so each NTD was addressed effectively. These integrated and coordinated structures enabled Uganda’s progress against NTDs. For example, the MOH’s effective coordination with the National Drug Authority and National Medical Stores ensured program medicines and equipment could be efficiently imported and made available for use. Additionally, all NTD-endemic districts recruited district NTD focal persons who are responsible for coordinating the planning, implementation, and evaluation of program activities in their districts according to the national NTD guidelines.

“For the program, [medicines] were imported into the country, cleared, stored, and delivered to programs and/or districts without any delays or encumbrances (due to taxes, demurrages, logistical difficulties, etc.). Without all these [processes] in place, supported by ENVISION, the national NTDCP would have faced serious challenges and obstacles and could not have achieved near elimination of LF, trachoma, and OV and the gains made in the control of [SCH] and STH. ENVISION support to the NTDCP is viewed by programs as the most significant [contribution] that put Uganda squarely on the global NTD map.”

Ben Binagwa, ENVISION Chief of Party, RTI International
I am grateful that my work on NTDs in my village has been recognized by the entire world. I am now going to work extremely hard to make sure we eliminate all these diseases from our district.

Grace Aciro, a community health volunteer and a recipient of a “Women in Focus” award, which recognized women around the world who have made significant contributions to the fight against NTDs.

**ENVISION IMPACT BY DISEASE IN UGANDA**

**LYMPHATIC FILARIASIS**

Uganda has made tremendous progress toward the elimination of LF. To date, 48 out of 57 endemic districts have reached the criteria to stop MDA, and it is anticipated that Uganda will stop MDA in the remaining 9 districts by 2020. In ENVISION-supported districts, 80% of people living in endemic areas—more than 12.7 million people—are no longer at risk for LF. ENVISION also supported rapid assessments of LF in refugee camps along Uganda’s borders with the Democratic Republic of Congo (DRC) and the Republic of South Sudan (RSS). These surveys determined that MDA was not necessary in the camps. ENVISION also helped develop a draft of the country’s LF elimination dossier.

**TRACHOMA**

ENVISION supported trachoma elimination efforts in Uganda by providing financial and technical assistance for baseline mapping of disease prevalence, MDA implementation, and capacity strengthening. To date, 47 out of 50 endemic districts have reached the criteria to stop MDA, and trachoma is virtually eliminated from the country. In ENVISION-supported districts, 98% of people living in endemic areas—more than 9.9 million people—are no longer at risk for trachoma. ENVISION also supported the impact and surveillance surveys needed to provide program planning data. The remaining 3 districts are expected to pass their assessments and stop mass treatment in FY19.

**ONCHOCERCIASIS**

In 2012, 37 districts were endemic for OV. From FY12-FY19, ENVISION supported annual mass treatment campaigns (MDA) in up to 32 of these districts. ENVISION’s contribution has led to 24 districts stopping treatment. As a result, more than 2.2 million people are no longer at risk for OV. ENVISION also funded the drafting of Uganda’s first strategic plan for cross-border OV NTD activities, covering the period 2019–2023.

**SOIL-TRANSMITTED HELMINTHS AND SCHISTOSOMIASIS**

Along with the Schistosomiasis Control Initiative, ENVISION supported MDA implementation to control SCH in endemic districts. As a result, the prevalence and intensity of SCH has decreased in most districts supported by ENVISION. For example, urinary schistosomiasis, which used to be very common in the Lango sub-region, from the area.

ENVISION contributed to the control of STH in districts where the project supported MDA for LF and OV. In FY16, a World Health Organization assessment indicated that STH had declined in LF-endemic districts.

**ENVISION LESSONS LEARNED**

Cross-border transmission of OV between Uganda and the DRC and South Sudan potentially threatened Uganda’s progress to eliminate the disease. To overcome this challenge, the ENVISION team implemented the following actions:

- Maintained good coordination between the ministries of health in all countries;
- Worked together with relevant administrators, security agencies, and customs officials to ensure personnel with required supplies crossed borders without any problems and received relevant support when working with endemic communities, and;
- Provided funds to Uganda’s MOH to support teams that trained, mentored, and worked with their counterparts in DRC and South Sudan.
MAPPING THE DISEASE BURDEN

HIGHLIGHT

• More than 1,600 districts were mapped for at least one NTD with ENVISION’s support.

For national NTD programs to scale up, they needed to first determine where treatment was needed. In collaboration with many partners and donors, ENVISION coordinated with national programs to ensure that districts requiring mapping were reached.

From FY12 to FY19, ENVISION supported mapping in more than 1,600 districts for LF, trachoma, OV, SCH, and STHs.

With guidance available from WHO, ENVISION supported countries to:

• Determine the geographic areas to be mapped
• Identify the best protocol and methodology to use

• Train NTD program staff on disease mapping and provide necessary tools and diagnostics
• Provide technical and financial support for mapping suspected areas, using electronic data collection (where possible), and data analysis and interpretation.

As a key partner of the GTMP, ENVISION supported 390 trachoma mappings in 10 ENVISION-supported countries. GTMP was the largest infectious disease survey ever undertaken, spanning 29 countries and collecting data from 2.6 million people from FY12 to FY15. GTMP helped advance the use of smartphones for electronic data collection, whereby more reliable infection data at the household level, including data about age, sex, and water and sanitation conditions, were available for planning. ENVISION ensured that...
all collected data were standardized and consistent, allowing for reliable and actionable programmatic results. With these new data and the resulting analyses, MDHs had the information needed to plan their trachoma programs using the SAFE strategy. Notably, through GTMP, ENVISION also extended its trachoma mapping support to countries outside the ENVISION portfolio to accelerate global progress toward achieving the trachoma elimination goals. Trachoma mapping was completed in FY18 for all ENVISION-supported countries except DRC, where mapping continues in some districts that are suspected to be endemic for trachoma.

As countries near elimination and begin dossier preparation, ENVISION also conducted mapping or remapping of several districts that were not considered endemic for trachoma or LF, particularly districts contiguous to formerly endemic districts. In addition, as the global OV program has changed from a control to an elimination goal, additional mapping is now necessary in hypo-endemic areas. This increased need to map additional areas extended the timeline to finish mapping.

With partners such as the NTD Support Center, ENVISION staff helped test global protocols for confirmatory LF mapping in Ethiopia and Tanzania, as well as implemented operational research for LF mapping in urban areas in Benin. In addition, ENVISION’s technical experts have worked with WHO and partners to develop new global SCH guidance for precision mapping.

By September 30, 2019, remapping activities were still being conducted for LF in Nepal, and strategies for progressive, priority mapping of trachoma in the DRC were still underway.

Mapping results from ENVISION-supported countries were widely published throughout the project in several different journals (see page 124). GTMP results were published in two journal supplements through *Ophthalmic Epidemiology*, including results from Benin, Mozambique, Senegal, Vietnam, and many others (see full list in Publications).
With ENVISION support, national NTD programs:

- Scaled up high-quality MDA for LF, trachoma, and OV.
- 230.9 million people are no longer at risk for LF, 85.9 million people are no longer at risk for trachoma, and 6.1 million people are no longer at risk for OV.
- Improved access to treatment for STH and SCH to control diseases and provided more than 446 million NTD treatments to SAC for at least one NTD.

ENVISION’s approach comprised a comprehensive package of technical and financial support to help countries implement high-coverage MDA for LF, trachoma, OV, SCH, and STH. The project’s support for MDA campaigns included providing grants for MDA implementation, assisting with logistics and social mobilization, developing key job aids and tools, training health officials and volunteers, using data to guide action and adaptive management, and supporting countries to manage the supply of procured and/or donated drugs.

ENVISION also worked with national NTD programs to innovate and share best practices on how to conduct social mobilization and on treating harder-to-reach populations, including urban populations, migrants, persons living in conflict areas, and refugees. ENVISION has also helped increase collaboration between health and education ministries, strengthening the use of schools as a platform to reach SAC across NTDs.

As a result, the quality—and not just the scale—of MDA has increased due to ENVISION’s support. The proportion of districts achieving sufficient coverage increased from 67% in FY12 to 94% in FY18.

ENVISION has shared its extensive MDA experience, gathered by collaboration with national NTD programs, with the global community. Results are seen in the tools and publications produced.

**Reasons for Increased MDA Coverage Include**

- Strengthened quality of routine MDA, including social mobilization, supervision, and training, and of supply chain management and data management
- Increased political will
- Innovation on reaching the hard-to-reach populations
- Enhanced collaboration with schools
- Use of new urban MDA strategies, including microplanning

Through multiple rounds of mass treatment using safe and effective medicines, all NTDs targeted by ENVISION can be controlled or eliminated. From FY12 to FY16, as countries were added to ENVISION’s portfolio and geographic coverage increased, the project supported a rapid scale up of MDA. The number of persons treated during ENVISION-supported MDA has decreased since FY17—a promising trend that reflects the increasing number of districts no longer needing disease due to programmatic impacts. As of FY18, ENVISION supported the delivery of 1.4 billion cumulative treatments, to more than 214 million people. The unprecedented support of pharmaceutical partners and the established drug donation programs have been critical to this success.
SUPPLY CHAIN MANAGEMENT

ENVISION has provided support for supply chain management in a number of countries to ensure the seamless operation of NTD programs—including importation, clearance, storage, transport, and distribution of donated drugs and diagnostics.

In particular, supply chain management support in Ethiopia, Tanzania, and Mozambique has been critical, as these countries worked to scale up treatment to populations at risk for NTDs. Further information on support provided in these countries is provided below:

**Ethiopia:** With ENVISION’s support, Ethiopia integrated all NTD drugs into its national drug management system. To facilitate this integration, ENVISION seconded a staff member to the Pharmaceuticals Fund and Supply Agency. The seconded staff coordinated between the Agency and the Federal Ministry of Health to ensure timely distribution of NTD drugs during the country’s first integrated MDA. Additionally, ENVISION developed terms of reference for a newly established NTD supply chain management technical working group.

**Tanzania:** ENVISION seconded a Drug and Logistics Officer in Tanzania to facilitate the seamless operation of the NTD supply chain. A well-functioning supply chain included coordination between the NTD program, Tanzania Food and Drugs Authority, the NTD drug donation programs, and National Medical Stores, to ensure smooth importation, clearance, and transport of all donated medicines and diagnostics. The Drug and Logistics Officer also built national supply chain capacity by developing guidelines for NTD drug management at all levels.

**Mozambique:** ENVISION hired a drug logistics consultant in Mozambique to assist the MOH with drug management for trachoma MDA. In FY17, through physical inventory and program assessment, ENVISION and ITI discovered the possible mismanagement of donated Zithromax (ZTH) in Mozambique. In response, ENVISION’s drug logistics consultant coordinated with the MOH and the national medical store to establish unique stock-keeping units for the donated ZTH. The consultant also conducted spot checks throughout Mozambique to determine whether ZTH had entered the general health system or private pharmacies. During this process, ENVISION and the MOH communicated closely with each provincial and district health team and, as a result, successfully responded to the program assessment and additional drug security measures requested by ITI. Because of these more secure measures, ITI agreed to resume ZTH shipments for the 2019 MDA. Additionally, ENVISION funded a supply chain assessment to detect potential issues and provide corrective measures in DRC. ENVISION also partnered with USAID and Management Sciences for Health to support regional supply chain trainings in Ethiopia, Benin, and Guinea, as well as host two Nigeria-focused supply chain trainings. Altogether, staff from nine ENVISION-supported countries participated in these supply chain trainings.

### Serious Adverse Event (SAEs) Prevention and Management

Public health programs have an obligation both to provide benefits to populations and to minimize harm to individuals. ENVISION prioritized the safety of individuals treated for NTDs, working with MOHs and partners to enhance and standardize the prevention and management of SAEs.

**ENVISION:**

- **Supported countries to use the safest possible methods during MDA.** For example, when ITI revised its dosing guidelines, ENVISION helped countries develop, distribute, and provide training on a new dosing pole to adhere to these guidelines safely.

- **Supported communities to anticipate, prevent, and respond to SAEs.** ENVISION-supported MDA campaigns featured strong social mobilization components to ensure that target populations accessed treatment, understood its importance, had the opportunity to address worries (such as the potential of SAEs), and could recognize and report these events.

- **Improved the tracking and follow-up of possible SAEs.** All ENVISION-supported countries now have a trained SAE Focal Person based at the MOH or an appropriate regulatory agency. Moreover, ENVISION codified a notification process implemented by ENVISION country staff to ensure that reported SAEs follow clear steps of notification, and the project created a tracker to organize and analyze reported SAEs for all USAID-supported MDA campaigns across the portfolio.

- **Promoted and developed prevention and response materials.** ENVISION supported the dissemination, uptake, and use of WHO’s SAE resources in supported countries and developed user-friendly materials—such as a handbook and an eLearning course—to ensure broad understanding and uptake of SAE guidelines and best practices in country health systems.
DISEASE SPECIFIC ASSESSMENTS

HIGHLIGHTS

• ENVISION supported countries to conduct more than 2,800 disease-specific assessments (DSAs).
• Innovative use of electronic data collection for LF, STH, SCH surveys.

As countries move toward NTD control and elimination goals, DSAs have become an increasingly important part of national NTD programming. These assessments measure and document progress against NTD goals and provide the critical data needed to make programmatic decisions, ensuring that NTD programming is as effective and efficient as possible. Since the beginning of the project, ENVISION supported 16 countries to conduct more than 2,800 DSAs.

ENVISION supported countries to

• Conduct high-quality DSAs that follow WHO guidelines and correspond with country-appropriate timelines.
• Analyze and use data from DSAs to adapt and improve NTD programming.

ENVISION offered technical and financial assistance to help countries conduct high-quality DSAs. Specifically, the project provided guidance on survey protocols, training, data collection, data management, data analysis, and reporting; supported the procurement of supplies and equipment; developed and promoted relevant job aids and other tools; and trained surveyors and key health officials. ENVISION also contributed to developing and/or reviewing global guidance, training materials and regional trainings for both LF and trachoma DSAs, as well as coverage surveys.

ENVISION prioritized LF and trachoma surveys given their proximity to elimination status. ENVISION assessed progress against LF control and elimination goals through 1,384 pre-TAS and TAS, determining that more than 230 million people are no longer at risk for the disease. For trachoma, 497 ENVISION-supported surveys determined that more than 86 million people are no longer at risk for the disease. For OV, SCH, and STH, ENVISION helped governments complete surveys and assessments that were critical for decision making, for example to change the frequency of treatment.

ENVISION supported country partners to use the data gleaned from DSAs to continually adapt and improve interventions and ensure programming was as effective as possible. Using tools such as checklists and investigation templates (see resources box), ENVISION helped country programs determine appropriate approaches for enhanced MDA in areas where DSAs showed that disease prevalence targets were not met or that other challenges persisted. To help countries use data in a valuable way, ENVISION championed standardized and electronic systems for DSA data collection and management that facilitated real-time data access, management, and analysis. For LF, SCH, and STH, ENVISION helped countries use the service to process electronic surveys—chiefly on an Open Data Kit platform—and secure online access to data from DSAs. For trachoma, ENVISION championed and facilitated use of the Tropical Data system (see Tropical Data section).
**HIGHLIGHTS**

- ENVISION strengthened the capacity of nearly 4,000 trainees across 17 countries by providing training on skills related to Monitoring & Evaluation.
- 15 ENVISION-supported countries have used the WHO Integrated NTD Database, or a similar tool, to track progress.

Effective and standardized M&E practices are key to tracking both national and global progress toward achieving NTD goals. Recognizing the need for improved M&E systems and practices in many countries, ENVISION focused on improving data quality, management, and use. Also, ENVISION strengthened national NTD programs’ capacity to conduct M&E and added “Learning” as a standard component of the project’s M&E practice by promoting the use of data for decision making and programmatic adaptation.

ENVISION supported countries to

- Improve data collection and management to track progress toward achieving NTD goals.
- Use data to inform programmatic strategy and action.
- Create and maintain a culture of data quality, reporting, and use that would last beyond the project.

ENVISION used numerous methods to help countries improve data collection and management, including coordinating exchange visits with national program staff, providing targeted technical assistance, creating job aids, and conducting data quality assessments (DQAs). ENVISION also supported the development and promotion of many key M&E tools that helped countries address issues of data access and quality (see box).

In FY12, at the beginning of ENVISION, none of the project’s focus countries had access to a centralized M&E database for NTDs. Today, 15 ENVISION-supported countries have used the WHO Integrated NTD Database (developed with support from ENVISION), or a similar tool, to track progress against NTDs. Throughout the period of performance, ENVISION continuously revised and refined its M&E tools based on experience, context, and need.

ENVISION also supported countries to train their health officials at all levels on key aspects of MEL, from completing registers and synthesizing historical coverage trends to interpreting DSA results. Since the beginning of the project, ENVISION has strengthened the capacity of nearly 4,000 trainees across 17 countries on M&E-related skills. The project focused on providing trainings to ensure that countries could independently use tools like the WHO Integrated NTD Database, the DQA, and coverage evaluation surveys.

By improving national governments’ capacity to collect and manage quality data, ENVISION facilitated the consistent supply of accurate and up-to-date data that are critical for decision making. Encouraging data use for learning and adaptation was a central component of ENVISION’s efforts. For example, ENVISION helped countries use data to investigate DSA failures and implement related policy changes. ENVISION also helped national NTD programs examine data at a subdistrict level in response to low coverage, enabling national efforts to be more targeted and effective with interventions. The project also helped countries disaggregate data by sex, thus supporting the advancement of gender equity and inclusion in NTD programs.

ENVISION also worked to foster a culture that prioritized MEL across the project. For example, the project hosted roundtable webinars, convened MEL communities of practice, and supported the publication of project accomplishments and lessons in peer-reviewed journals.

**Key M&E Tools Supported by ENVISION**

- With partners, ENVISION helped develop the WHO Integrated NTD Database, which enables countries to have a central place to store, analyze, report, and use data.
- ENVISION developed and managed USAID’s NTD Database, which stores and analyzes data reported by USAID-supported NTD projects.
- ENVISION worked with WHO to develop and roll out a DQA Tool, which helped national programs better understand their data quality and make improvements if needed.
- ENVISION supported the use of the Tool for Integrated Planning and Costing (TIPAC) to generate WHO’s Joint Request for Selected Medicines, support strategic decisions, and produce information for use in advocacy materials.
- ENVISION provided input on WHO’s field guide for coverage evaluation surveys and the NTD Support Center’s web tool to facilitate analysis of coverage evaluation survey data.

**RESOURCES**

- NTD Data for Action Guide
- Integrated NTD Database Case Studies
- Data Quality Assessment for NTDs
- Data Quality Assessment for NTDs Training: Facilitator Manual
- Harnessing Real-Time Data During Mass Drug Administration for Neglected Tropical Disease Control (Technical Brief)
- Daily Data Reporting and Use
- LF Subdistrict Data Collection Tool
- How to Respond When NTD Survey Results Show that More Mass drug Administration (MDA) is Needed (Technical Brief)
- M&E Tool Job Aid
- Data Quality Assessment during Supervision (DQA-S) Guidance & Tool

**ACCESS THE RESOURCES LISTED ABOVE AT NTDToolbox.org**
TROPICAL DATA

HIGHLIGHTS

• By FY17, all ENVISION-supported countries had successfully transitioned to using Tropical Data for trachoma surveys.
• Globally, from April 2016 to September 2019, Tropical Data has supported surveys in more than 1,800 evaluation units in 43 countries, examining more than 5.2 million people for trachoma.
• ENVISION supported the training of 376 participants from 49 countries to be trainers and champions for the Tropical Data system.

High-quality, accurate, and standardized data are critical to properly track and assess progress towards trachoma elimination. The Tropical Data system fills this need with a cutting-edge electronic system coupled with customized advice, support, tools, and resources that countries can use to plan and carry out surveys that conform to World Health Organization (WHO) recommendations. Using Tropical Data, countries can quickly gather and analyze data to determine where interventions are no longer needed and whether the disease has been effectively controlled or eliminated. Launched in FY16, the system is led by a consortium of scientific, technological and implementing partners, including RTI International with direct support through ENVISION. To date, Tropical Data has supported more than 1,800 surveys in 43 countries across five WHO regions (AFRO [27], EMRO [5], PAHO[3], SEARO [2], WPRO [6]), examining more than 5.2 million people for trachoma.

ENVISION:
• Provided leadership, coordination, epidemiological guidance, and systems support for Tropical Data.
• Assisted project-supported countries to use the system successfully for trachoma surveys.
• Supported regional trainings of trainers for Tropical Data.

At a global level, ENVISION collaborated with the WHO, the London School of Hygiene and Tropical Medicine, Sightsavers, and the International Trachoma Initiative (ITI) to facilitate the effective operational planning and management of Tropical Data. The project also provided key systems and epidemiological support to Tropical Data, including management of the overall system technology, support for survey protocol development, and assistance for the country-specific certification of trachoma graders and recorders. While Tropical Data currently supports surveys for trachoma, ENVISION provided technical support to pilot the use of Tropical Data for LF TAS in Guyana and schistosomiasis surveys in Dominican Republic.

ENVISION also supported regional trainings of Tropical Data trainers worldwide. ENVISION supported the training of eye care and health workers from five WHO regions through these super trainings: AFRO, EMRO, PAHO, SEARO, and WPRO. The goal of these so-called ‘super-trainings’ was to train eye specialists and health workers who return to their countries to train others in the highest-quality methods to implement trachoma surveys. Globally, 349 people have been trained as graders and recorders with ENVISION support, a crucial part of the health workforce for eliminating trachoma.

At the national level, ENVISION helped countries to undertake quality training and effectively use Tropical Data to conduct trachoma surveys. ENVISION provided support on epidemiological protocol development, country-level training, survey supervision, and survey data use and decision-making on implementation. By FY17, all ENVISION-supported countries had successfully transitioned to using the system for all trachoma surveys that estimated trachomatous inflammation-follicular (TF) and trachomatous trichiasis (TT) prevalence.

TROPICAL DATA
**CAPACITY STRENGTHENING AND TRAINING**

**HIGHLIGHTS**
- In FY18, ENVISION supported the training of nearly 1 million people to implement NTD programs.
- Through global training efforts, ENVISION has trained individuals from more than 81 countries.
- More than 4,500 unique visitors accessed the NTD Toolbox from FY12-FY19.
- ENVISION established a peer-to-peer Community of Practice to facilitate cross-country and cross-disease learning.

To help countries implement sustainable and successful NTD programming, ENVISION prioritized capacity strengthening for NTD control and elimination efforts. Through trainings, knowledge transfer, the promotion of existing resources, and the development of new tools, ENVISION helped reinforce the capacity of national NTD programs—led by MOHs—so that they could manage and sustain their work toward meeting NTD programs—led by MOHs—so that they could manage and maintain their work toward meeting country-specific goals. The project adopted a learning approach built on experience-sharing, knowledge transfer, the promotion of existing NTD tools and resources, such as webinars and job aids, for national NTD programs. Countries started adopting the NTD Toolbox as evidenced by usage data demonstrating the fact that more than 4,500 unique visitors accessed the repository from FY12-FY19 and 54% of visits were made by return users.

As the project progressed, its capacity strengthening strategy moved from a passive approach focused on tool development and training, to an increasingly active one that focused on on-the-job trainings, customized mentorships, and peer learning. For example, ENVISION staff from the US headquarters worked to ensure cross-country and cross-disease learning in its capacity strengthening activities. In FY18, ENVISION launched its Community of Practice, a peer-to-peer platform through which members could learn from one another by sharing experiences, stories, tools, and solutions. The community gathered regularly via technical roundtables and an online forum. This approach has been replicated by the MEL team, which developed its own Community of Practice to foster peer learning around key MEL topics—a tactic that has proven effective for generating discussion and experience sharing between countries. In addition, ENVISION worked to ensure country experiences and lessons learned were shared with less-experienced countries where new activities were implemented. For example, in FY18, ENVISION supported TAS experts to provide short-term technical assistance and country-to-country technical assistance to Cameroon and Mali during TAS implementation.

Finally, ENVISION supported capacity strengthening for NTD efforts globally by assisting the rollout of several key WHO regional trainings, including the NTD Program Managers Training Course (PMTC) and the District Level Management NTD Course. In addition to supporting content development, implementation, and online setup for these courses, the project provided facilitation, organizational, and financial assistance to implement the first in-country trainings in FY14—PMTC in Ethiopia and Nigeria—and in FY16—PMTC in DRC and District Level Management NTD Course in Mozambique.

**Fixed Obligation Grants (FOGs)**

**Supporting host government entities or local NGOs to plan, implement, and evaluate NTD programming**

ENVISION used FOGs to promote efficiencies and foster host government-led programming at the national and subnational levels. Under ENVISION, RTI processed more than 1,600 FOGs over 7 years, totaling more than US$60 million, with 77% directly supporting host government entities.

**Elimination of trachoma in Nepal in FY18**—through the administration of FOGs to Nepal Nteru Jyoti Singh, a Nepal NGO, ENVISION supported trachoma mapping of 21 districts, the distribution of more than 2.4 million treatments through MDA, conducted trachoma impact surveys in 20 districts, and assisted in developing a trachoma elimination dossier—all critical to achieving WHO’s validation of the elimination of trachoma as a public health problem.

FOGs heighten subnational actors’ awareness of NTDs in their catchment areas; their direct engagement through the management of funds and responsibility for grant deliverables ensures the highest levels of local ownership and program leadership.

In FY18, ENVISION supported the training of nearly 1 million people to implement NTD programs. Training focus areas included MEL, financial management, grant administration, supply chain management, DSAs, and implementation of MDA campaigns. Individuals trained included health officials and health workers, teachers, lab technicians, and community volunteers.

Additionally, ENVISION both created key training tools and provided training on the use of tools. For example, ENVISION helped countries use TIPAC—jointly developed by ENVISION and WHO—to gather, analyze, and share costing data. ENVISION also established the NTD Toolbox, an online repository of important NTD tools and resources, such as webinars and job aids, for national NTD programs. Countries started adopting the NTD Toolbox as evidenced by usage data demonstrating the fact that more than 4,500 unique visitors accessed the repository from FY12-FY19 and 54% of visits were made by return users.

As the project progressed, its capacity strengthening strategy moved from a passive approach focused on tool development and training, to an increasingly active one that focused on on-the-job trainings, customized mentorships, and peer learning. For example, ENVISION staff from the US headquarters worked to ensure country experiences and lessons learned were shared with less-experienced countries where new activities were implemented. For example, in FY18, ENVISION supported TAS experts to provide short-term technical assistance and country-to-country technical assistance to Cameroon and Mali during TAS implementation.

Finally, ENVISION supported capacity strengthening for NTD efforts globally by assisting the rollout of several key WHO regional trainings, including the NTD Program Managers Training Course (PMTC) and the District Level Management NTD Course. In addition to supporting content development, implementation, and online setup for these courses, the project provided facilitation, organizational, and financial assistance to implement the first in-country trainings in FY14—PMTC in Ethiopia and Nigeria—and in FY16—PMTC in DRC and District Level Management NTD Course in Mozambique.

**RESOURCES**
- [NTD Toolbox](https://ntdtoolbox.org)
- [WHO National Programme Managers Training Course](https://www.who.int/neglected_diseases/training/)
- [WHO District Programme Managers Training Course](https://www.who.int/neglected_diseases/training/)

**ACCESS THE RESOURCES LISTED ABOVE AT NTDToolbox.org**
HEALTH SYSTEMS STRENGTHENING

HIGHLIGHTS

• In FY18, ENVISION supported the training of nearly 1 million people to implement NTD programs.
• ENVISION supported development of 209 knowledge management products (training materials, job aids, tools etc.), which have been disseminated and will continue to be available beyond the life of the project.

As countries move closer to meeting control and elimination goals, strong national health systems will be critical to ensure that progress against NTDs not only accelerates, but is also sustainable, recognizing that these targets can only be met by health systems that can successfully prevent, detect, and treat NTDs. National MOHs and NTD programs led the success and gains seen to date in the fight against NTDs, and they drove efforts to work toward sustainability; ENVISION provided targeted technical assistance that aimed to strengthen the institutions that carry out these efforts and catalyze lasting transformations in health systems.

ENVISION supported countries to
• Strengthen their health systems’ ability to respond to NTDs.
• Build platforms that can be used to deploy NTD-fighting experience and tools in the future.

ENVISION supported country leadership in NTD programs, often assisting during strategic planning, including development of NTD master plans, action plans, and annual operational plans; the establishment and functioning of national NTD expert committees; and the health financing efforts that help countries make efficient use of donor resources. On financing specifically, ENVISION supported countries to use TIPAC, which helps to forecast NTD program costs and funding gaps, and facilitated advocacy for domestic NTD resource mobilization, along with a detailed cost analysis of trachoma programming.

For the areas of drug management, monitoring and evaluation, laboratories, and more, ENVISION provided targeted technical assistance to bolster key systems essential to NTD program success and sustainability in the future. Specifically, ENVISION supported countries to adopt and use the WHO Integrated NTD Database and Data Quality Assessment Tool, helped countries leverage global drug donation programs and procure diagnostics, and supported the bolstering of laboratory capacity for continued NTD surveillance.

One of the most critical ways that ENVISION worked to build strong national health systems was by helping to build and sustain an empowered and robust community workforce for NTDs. In FY18 alone, ENVISION supported the training of nearly 1 million people to implement NTD programs and supported countries to develop a wide range of training curricula and job aids (see NTD Toolbox). To further strengthen this workforce, ENVISION supported mentorship, refresher courses, and on-the-job training, in addition to expanding access to job aids and other useful tools. Throughout the project, ENVISION supported the development of 209 knowledge management products, which have been disseminated and will continue to be available to the global community.

Additionally, as mentioned previously, ENVISION established and maintained the NTD Toolbox, an online repository of the most-used NTD tools and resources for national NTD programs.

Finally, ENVISION supported countries to build on established integrated platforms for deworming (e.g., in conjunction with LF MDA) and to look toward strong foundations for sustainable SCH and STH control. As the number of districts requiring treatment for elimination diseases decreased and their platforms were no longer an option for co-treatment, ENVISION helped develop countries’ capacity to establish independent and country-owned deworming platforms that can continue to leverage drug donation programs by assisting with policy planning, domestic resource mobilization, and the exploration of various distribution platforms.

RESOURCE:

» Health Systems Strengthening (Technical Brief)

ACCESS THE RESOURCES LISTED ABOVE AT NTDToolbox.org
As the largest operational NTD platform globally, ENVISION had a unique role in the global NTD community and as an influencer for global policy. At the project’s inception, national NTD programs faced enormous challenges—gaps existed in global guidelines, tools, and funding. With the launch of ENVISION in FY12, USAID’s investment catalyzed the development of global standards in NTD programming. On the heels of the ENVISION launch, WHO released its NTD Roadmap in 2012, the NTD Support Center and Coalition for Operational Research on NTDs launched in 2013, NTDs were included in goal 3.3 of United Nations’ Sustainable Development Goals in 2015, and WHO began to release elimination dossier templates in 2015. ENVISION remained a strong, steady, and important influencer among the global landscape, contributing to effective policies and tool development and, ultimately, achieving elimination of LF and trachoma in several ENVISION-supported countries.

In addition to supporting national NTD programs to comply with established WHO guidance, ENVISION also leveraged its ability to recognize and highlight programmatic challenges; identify and disseminate best practices; engage in operational research; share programmatic knowledge with the broader NTD community; work with global partners to formulate new, more effective strategies; and, finally, help countries implement programmatic improvements. ENVISION experts regularly provided inputs on strategic technical and operational issues, including (1) via various technical, policy, and advocacy working groups; (2) leading or reviewing global technical guidance; (3) reviewing or commenting on NTD strategic initiatives and proposals; (4) identifying NTD research gaps and priorities; (5) resolving supply chain logistics issues for drug donation programs; and (6) coordinating and complementing other donors’ NTD investments.

ENVISION’s advocacy for the national NTD programs it supported encouraged other donors and partners to join the fight against NTDs, both at country and global levels. This increase in support allowed NTD programs to achieve higher coverage and greater, faster impact.
**PUBLICATIONS**

**FY12**
Integrated implementation of programs targeting neglected tropical diseases through preventive chemotherapy: identifying best practices to roll out programs at national scale. *AJTMH*

**FY13**
Measuring treatment coverage for neglected tropical disease control programs: analysis of a survey design. *American Journal of Epidemiology*
Prevalence of trachoma in the far north region of Cameroon: results of a survey in 27 health districts. *PLoS-NTD*
The effects of integration on financing and coverage of neglected tropical disease programs. *AJTMH*

**FY14**
Electronic data capture tools for global health programs: evolution of LINKS, an Android-, web-based system. *PLoS-NTD*
Transmission assessment surveys (TAS) to define endpoints for lymphatic filariasis mass drug administration: a multicenter evaluation. *PLoS-NTD*

**FY15**
Blinding onchocerciasis in Pader district, northern Uganda. *Journal of Ophthalmology of Eastern, Central and Southern Africa*

**FY16**
Brugia Rapid™ antibody responses in communities of Indonesia in relation to the results of ‘transmission assessment surveys’ (TAS) for the lymphatic filariasis elimination program. *Parasites & Vectors*
Controlling Neglected Tropical Diseases (NTDs) in Haiti: implementation strategies and evidence of their success. *PLoS-NTD*
Ecological Drivers of Mansonella perstans Infection in Uganda and Patterns of Co-endemicity with Lymphatic Filariasis and Malaria. *PLoS-NTD*
Ethiopia and its steps to mobilize resources to achieve 2020 NTD elimination and control goals. *International Health*

Evaluation of Lymphatic Filariasis and Onchocerciasis in Three Senegalese Districts Treated for Onchocerciasis with Ivermectin. *PLoS-NTD*
Integrating Neglected Tropical Disease and Immunization Programs: The Experiences of the Tanzanian Ministry of Health. *AJTMH*
The Neglected Tropical Disease Non-governmental Development Organization Network (NNN): the value and future of a global network aiming to control and eliminate NTDs. *International Health*

**FY17**
Baseline trachoma surveys in Kaskazini A and Micheweni districts of Zanzibar: results of two population-based prevalence surveys conducted with the Global Trachoma Mapping Project. *Ophthalmic Epidemiology*
Building a global schistosomiasis alliance: an opportunity to join forces to fight inequality and rural poverty. *Infectious Diseases of Poverty*
Costs of Transmission Assessment Surveys to Provide Evidence for the Elimination of Lymphatic Filariasis. *PLoS-NTD*
First Evidence of Lymphatic Filariasis Transmission Interruption in Cameroon: Progress towards Elimination. *PLoS-NTD*
Impact of mass drug administration for elimination of lymphatic filariasis in Nepal. *PLoS-NTD*
Initiating NTD programs targeting schistosomiasis and soil-transmitted helminthiasis in Democratic Republic of the Congo: Establishing baseline prevalence using POC-CCA and Kato-Katz diagnostic techniques. *Acta Tropica*
Integrated morbidity management for lymphatic filariasis and podoconiosis, Ethiopia. *Bull WHO*
Partnering for impact: Integrated transmission assessment surveys for lymphatic filariasis, soil transmitted helminths and malaria in Haiti. *PLoS-NTD*
Prevalence of Trachoma in Niger State, North Central Nigeria: Results of 25 Population-Based Prevalence Surveys Carried Out with the Global Trachoma Mapping Project. *Ophthalmic Epidemiology*
Prevalence of trachoma in northern Benin: results from 11 population-based prevalence surveys covering 26 districts. *Ophthalmic Epidemiology*
Progress of Trachoma Mapping in Mainland Tanzania: Prevalence of baseline surveys in 2012 to 2014. *Ophthalmic Epidemiology*
Success of lymphatic filariasis control in Benin: Effects of Ivermectin and Abendazole on microfilaraemia. *Journal of Parasitology and Vector Biology*
Surveillance Surveys for Reemergent Trachoma in Formerly Endemic Districts in Nepal From 2 to 10 Years After Mass Drug Administration Cessation. *JAMA Ophthalmol*
The Epidemiology of Trachoma in Mozambique: Results of 96 Population-Based Prevalence Surveys. *Ophthalmic Epidemiology*

Trachoma in the Democratic Republic of the Congo: Results of 46 Baseline Prevalence Surveys Conducted with the Global Trachoma Mapping Project. *Ophthalmic Epidemiology*

**FY18**

Baseline trachoma prevalence in Guinea: Results of national trachoma mapping in 31 health districts. *PLOS-NTD*

How elimination of lymphatic filariasis as a public health problem in the Kingdom of Cambodia was achieved. *Infectious Diseases of Poverty*

Prevalence of trachoma in the Kayes region of Mali eight years after stopping mass drug administration. *PLOS-NTD*

Schistosomiasis in Africa: improving strategies for long-term and sustainable morbidity control. *PLOS-NTD*

Strengthening the links between mapping, planning, and global engagement for disease elimination: Lessons learned from trachoma. *BR J Ophthalmol*

The role of national committees in eliminating onchocerciasis. *International Health*

**FY19**

Assessment of treatment impact on lymphatic filariasis in 13 districts of Benin: progress toward elimination in nine districts despite persistence of transmission in some areas. *Parasit Vectors*

Completing Baseline Mapping of Trachoma in Nepal: Results of 27 Population-Based Prevalence Surveys Conducted in 2013 and 2014. *Ophthalmic Epidemiology*

Completing baseline mapping of trachoma in Uganda: results of 14 population-based prevalence surveys conducted in 2014 and 2018. *Ophthalmic Epidemiology*

Eliminating NTDs in Urban Areas: A review of challenges, strategies, and research directions for successful mass drug administration. *Trop Med Infect Dis*

Gender equity in mass drug administration for neglected tropical diseases: data from 16 countries. *International Health*

Human schistosomiasis in Benin: Countrywide evidence of Schistosoma haematobium predominance. *Acta Tropica*

Prevalence of trachoma in Senegal - results of baseline surveys in 17 districts. *Ophthalmic Epidemiology*

Quality Assurance and Quality Control in the Global Trachoma Mapping Project. *AJTMH*

The costs of monitoring trachoma elimination: Impact, surveillance, and TT-only surveys. *PLOS-NTD*


Trachoma in Viet Nam: results of 11 surveillance surveys conducted with the Global Trachoma Mapping Project. *Ophthalmic Epidemiology*
ENVISION PRESENCE ON GLOBAL NTD WORKING GROUPS FY12-FY19

WHO
AFRO Coordinated Mapping Group
Alliance for Global Elimination of Trachoma by the Year 2020 (GET2020)
ESPEN Program Managers Meeting
GET2020
WHO ESPEN Steering Committee
WHO LF Morbidity Management & Disease Prevention Expert Committee
WHO Regional Program Review Groups (AFRO, SEARO, WPRO, AMRO)
WHO SCH Technical Working Group
WHO Strategic Technical and Advisory Group (STAG)
WHO Working Group on Drug Access
WHO Working Group on M&E for NTDs
WHO Working Group on NTD Capacity Strengthening

GLOBAL WORKING GROUPS BEYOND WHO
Association of Southeast Asian Nations (ASEAN) LF Forum
BMGF Macrofil Advisory
Coalition for Operational research on NTDs (CDR-NTD)
Global Alliance to Eliminate Lymphatic Filariasis (GAELF)
Global Development Alliance
Global Schistosomiasis Alliance (GSA)
Global Trachoma Mapping Project (GTMP)

GSA Implementation Working Group
GTMP Advisory Committee & Tropical Data Development Group
ICTC Communications Working Group
ICTC MDA Practices and Capacity Strengthening
International Coalition for Trachoma Control (ICTC)
Mectizan Expert Committee
NGO Coordination Group on DV Elimination
NTD NGO Network (NNN)
NNN Disease Management, Disability and Inclusion
NNN Executive Committee
NNN Morbidity Management and Disability Working Group
NNN Sustainable Systems Cross Cutting Group
NNN WASH Working Group
NTD Supply Chain Forum
Oncho and LF Operational Research (DOLF)
Onchocerciasis Elimination
Schistosomiasis Consortium for Operational Research (SCORE)
STH Coalition
Trachoma Expert Committee (TEC)
Uniting to Combat NTDs Communications Working Group
Uniting to Combat NTDs Stakeholder Working Group
Uniting to Combat NTDs, Advocacy and Resource Mobilization Working Group

APPENDICES
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