Volume 23, Number 1

Winter 2022

# $EYE \, {\rm of } \, {\rm the} \, EAGLE$

What's Inside

- 2 Brazil, Venezuela Share Achievements at IACO 2021
- 3 Residents Discuss Strides Made in Uganda District
- 4 States in Nigeria Reach 'Transmission Eliminated'
- 4 Partners Key to Nigeria's Success
- 5 11 Uganda Foci Have Eliminated River Blindness

- 6 USAID Support Sustains Success in Latin America
- 6 River Blindness Veteran Receives Award
- 7 Ethiopia Halts MDA in Jimma Zone
- 8 Graders Use Photos to Diagnose Trachoma
- 9 Joint Effort Provides Surgeries in South Sudan

- 9 Fellow Helps Amhara Lab
- 10 Students Contribute While Learning
- 11 Dawd Handles Finances with Patience
- 11 Guinea Worm Update
- 12 Staff Present on NTDs

#### THE CARTER CENTER



Above: In Plateau state, Nigeria, a neighbor helps Adanku Ayina (left), who is blind due to river blindness, reach home. Plateau state has now eliminated transmission of the disease.

#### Brazil, Venezuela Share Achievements at IACO 2021

**KEY TAKEAWAY:** Despite COVID-19 challenges, most communities in the Yanomami area in the Amazon Rainforest received at least one treatment in 2021.

**Brazil and Venezuela** are using data and creativity to illuminate the shortest path to onchocerciasis (commonly known as river blindness) transmission elimination in the dense Amazon Rainforest, the last remaining area of active transmission in the Americas.

The countries reported progress at the 31st InterAmerican Conference on Onchocerciasis (IACO), held virtually Nov. 3-4, 2021, and included participants from current and formerly endemic country programs, The Carter Center and its Onchocerciasis Elimination Program for the Americas (OEPA), donors, and other partner institutions. Meeting participants discussed progress, challenges, and novel solutions to achieve transmission elimination in the Yanomami Focus Area. This transmission zone. which straddles the shared border of Venezuela and Brazil, is home to 35,518 Yanomami indigenous people at risk for onchocerciasis and is the last remaining transmission zone

in the Americas. Yanomami live in ring-shaped multifamily settlements that are sparsely scattered amid dense forest, requiring health workers to take several modes of transit—plane, boat, on foot—to reach the communities. Access and treatment coverage continue to be affected by prioritization of COVID-19 responses in Brazil and Venezuela, and by fuel shortages and economic hardship in Venezuela.

Still, both countries have reported that the majority of communities were treated for onchocerciasis at least once in 2021. Provisionally, Brazil reported 72% coverage of the eligible population in the year's first round of treatment and 32% through September of the second round, while Venezuela reported 47% and 32% coverage, respectively, and that primarily different communities were reached in the two rounds. Brazil completed laboratory analysis from recent serological surveys in 10 of its endemic subareas. Venezuela



The first aircraft to successfully land on the new Siapa Valley airstrip sit safely on the ground in southern Venezuela.

completed a multiyear analysis of satellite imagery that, along with the input of indigenous health agents, indicates the country likely has determined the full extent of its endemic communities. Both countries reported on efforts to increase inclusion of indigenous health agents, health workers who live in the endemic areas and assist the programs with their expert knowledge of the local geography and movements of community members.

In perhaps the most exciting achievement reported at IACO, Venezuela noted the completion and first successful use of a long-awaited landing strip in Siapa Valley that is expected to serve 12 communities and about 670 Yanomami people who need treatment.

The Brazil and Venezuela programs presented results of a community stratification scheme based on a novel "scorecard" system. Unique for each country, the components of a community score include numerous factors with different weights, such as baseline endemicity, impact assessment results, number of rounds of treatment exceeding 85% coverage, and more. With these systems, the national programs aim to direct resources to the communities that need them the most to achieve the goal of eliminating regional transmission in the Americas.

OEPA acknowledged with gratitude the continued support from the United States Agency for International Development (USAID), Merck & Co., Inc. (Kenilworth, N.J., USA) via its recent monetary contributions in addition to donation of Mectizan,<sup>®</sup> and the attendance of Lions Clubs International Foundation staff and Lions Clubs members of the endemic and formerly endemic countries.

#### Residents Discuss Strides Made in Their Northwest Uganda District

**Moyo district** in Uganda's Madi-Mid North focus has come a long way in its fight against onchocerciasis (river blindness).

Moyo district lies at Uganda's border with South Sudan, 280 miles (455 kilometers) from Uganda's capital, Kampala. The Albert Nile River flows north and east through Moyo before turning north again and joining the White Nile in South Sudan.

The rapidly flowing tributaries of the Nile make ideal breeding grounds for the black flies that transmit river blindness (onchocerciasis), as the people of Moyo, such as Matalocu Fred, know only too well. Matalocu, 65, is old enough to remember how river blindness once devastated his community. Because of the itching, vision loss, and skin damage caused by the infection, people had to avoid farming near the rivers and the many other small streams in the area. And it affected him directly.

"I have suffered from river blindness by scratching my body," he says. "Some people used rough objects as if their fingernails were insufficient."

The Carter Center and Uganda's Ministry of Health commenced activities in Moyo in 1993 in hopes of controlling the disease; elimination was not considered possible at that time. However, in 2007, Uganda boldly shifted its river blindness program from mere control to elimination, and significant progress has followed.

After 28 years of treatments with Mectizan<sup>®</sup> (donated by Merck & Co., Inc., Kenilworth, N.J., USA), the entire Madi-Mid North focus has reached the status of "transmission interruption suspected"—a major step toward eventual elimination. (Before elimination can be declared, transmission interruption must be confirmed,



Matalocu Fred, 65, remembers years past when he frequently scratched his body in response to the intense itching caused by river blindness.

followed by a halt in treatment and at least three years of post-treatment surveillance.)

Dradere Joyce Alaru, a mother of eight, is a community drug distributor combating river blindness in her village in Moyo district. Twice a year, Dradere visits 27 households in her village, measuring each person's height to determine their dose of Mectizan and keeping detailed records.

Dradere's eyes brighten as she talks about the future in her community: "The children will be healthy, free from onchocerciasis," she says.

The decline of river blindness has changed everything, Matalocu says. Crops can be planted near the fastflowing rivers and streams now; people are healthier and more productive; children can go to school instead of staying home to help blinded family members.

Matalocu appreciates what the program has meant for him, his family,



Dradere Joyce Alaru serves as a community drug distributor in her village.

and his community: "Because of the treatment, our grandchildren will have a better future," he says.

Note: The Carter Center–assisted River Blindness Elimination Program in Uganda is supported in part by USAID's Act to End NTDs | East program, led by RTI International.

## First States in Nigeria Reach 'Transmission Eliminated' Status

**KEY TAKEAWAY:** Nigeria's Plateau and Nasarawa states have eliminated the transmission of river blindness, according to the country's National Onchocerciasis Elimination Committee.

In May 2021, experts of Nigeria's National Onchocerciasis Elimination Committee (NOEC) determined that Plateau and Nasarawa states had met criteria to declare the elimination of transmission of onchocerciasis, also known as river blindness. The recommendation, subsequently endorsed by the Nigerian Federal Ministry of Health, was based on successful completion of three years of post-treatment surveillance following the halt in 2018 of mass treatments with Mectizan<sup>®</sup> (donated by Merck & Co. Inc., Kenilworth, N.J., USA). The two states, with a combined population of more than 5 million people, are the first in the country to have attained elimination status.

"It's taken 25 years of hard work by community volunteers to distribute the medicine, and particularly strong commitments from Nigeria's Federal Ministry of Health, Merck's ongoing donation of Mectizan, and many donors and partners," said Dr. Abel Eigege, a program director for The Carter Center in Nigeria. "But we are hoping this success can accelerate elimination efforts elsewhere in



Nigerian children who live in Plateau or Nasarawa state will not lose their vision to river blindness now that disease transmission has been eliminated there.

Nigeria and throughout Africa."

The Carter Center is committed to achieving and maintaining "transmission eliminated" status in all nine Carter Center–assisted states until the whole of Nigeria is verified free of onchocerciasis transmission by the World Health Organization.

#### Partners Key to Nigeria's Success in Fighting River Blindness

**Nigeria's** National Onchocerciasis Elimination Committee (NOEC) was convened for the first time in 2015, when it defined its terms of reference as an advisory body to the Federal Ministry of Health of Nigeria. The Carter Center has assisted with logistical support for the committee since its inception.

The NOEC created the national river blindness elimination plan, progressing through stages of transmission interruption and elimination state by state and using existing elements of the World Health Organization guidelines to help inform decisions. In its May 2021 meeting, committee recommendations resulted in status changes for river blindness transmission in 12 (one-third) of Nigeria's endemic states.

The article above highlights the success of Plateau and Nasarawa states in achieving "transmission eliminated" status. Additionally, Delta state satisfied the Nigeria committee's criteria for reclassification as river blindness "transmission interrupted," allowing mass drug administration to be stopped and three years of post-treatment surveillance to commence. Among these three Carter Center–supported states, Mectizan<sup>®</sup> (donated by Merck & Co., Inc., Kenilworth, N.J., USA) treatment will have been halted for about 4 million people. Program partners congratulated the country on its progress and reiterated their commitment to support the government of Nigeria until onchocerciasis is eliminated.

The Carter Center is proud to partner with the United States Agency for International Development (USAID) and RTI International through the Act to End NTDs | East program. Thanks to support and funding from the U.S. government, RTI International and The Carter Center have been partners in the fight against NTDs in nine states in Nigeria since 2013 and helped to make these river blindness achievements possible. The Center looks forward to celebrating important health milestones in Nigeria in the years to come.



<sup>photo:</sup> Ruth McDowal

#### 11 Uganda Foci Have Eliminated River Blindness to Date

**KEY TAKEAWAY:** The Wadelai, Nyamugasani, and West Nile foci have been reclassified as "transmission eliminated," according to the Uganda Onchocerciasis Elimination Expert Advisory Committee.

**The 14th** Uganda Onchocerciasis Elimination Expert Advisory Committee assessed progress against the disease at its annual meeting held virtually Aug. 3–5, 2021. The committee provides scientific and technical recommendations to the Ministry of Health to achieve the goal of eliminating transmission of onchocerciasis—also known as river blindness—in Uganda. The key highlights were that three additional foci (Wadelai, Nyamugasani, and West Nile) were reclassified as "transmission eliminated."

This recommendation was made after each focus successfully completed three years of post-treatment surveillance that included demonstration of the absence of infective black flies and Ov16 anti-parasite antibody prevalence significantly less than 0.1% in children less than 10 years of age in line with World Health Organization transmission elimination criteria. The total population saved from onchocerciasis in 2021 was 581,806 people, while 2,878,706 people are no longer at risk since the national elimination policy was launched in 2007.

Of the 17 original transmission foci in the country, 11 (65%) have now achieved transmission elimination status, four (24%) are under post-treatment surveillance, and two (12%) remain under mass drug administration with ivermectin (Mectizan<sup>®</sup>, donated by Merck & Co. Inc., Kenilworth, N.J., USA) (See Figure 1).



Ongoing commitment by Ugandan communities and government have helped the country make steady progress toward eliminating river blindness since 2007.



Figure 1. Onchocerciasis elimination status by number of foci in Uganda, 2007–2021.

#### USAID Support Leverages a Model Private-Public Partnership for Success in Latin America

The Carter Center's Onchocerciasis Elimination Program for the Americas (OEPA) leads a regional initiative that has attained significant milestones: Over half a million people once at risk are now free of the threat of onchocerciasis (commonly known as river blindness), 11 of 13 disease foci have eliminated transmission, and the World Health Organization has verified elimination of transmission in four of the region's six endemic countries.

Home to just 6% of the original at-risk population, the last remaining transmission zone in the Americas is the Yanomami Focus Area, comprising the Brazilian Amazonas Focus and the Venezuelan South Focus. While the program continues its work in the Yanomami area, OEPA believes that onchocerciasis transmission is likely interrupted in nearly two-thirds of endemic communities and is using novel tools like satellite mapping and data-driven community scorecards to focus efforts.

The United States Agency for International Development (USAID) has been a principal OEPA partner since 2012, contributing to the elimination of transmission from Colombia (2013), Ecuador (2014), Mexico (2015), and Guatemala (2016). This critical funding from USAID has supported teams to treat endemic communities, provided technical assistance, delivered comprehensive training, developed practical tools and methods to scale innovations, and influenced global policy.

USAID's OEPA and Achieve Onchocerciasis Elimination in the Americas projects have leveraged resources from local governments, which have contributed 40% of the overall resources needed to date, together with other complementary donor contributions to the initiative. OEPA is a model public-private partnership, demonstrating that local leadership and support for disease elimination efforts is key to success.



#### **River Blindness Elimination Veteran Receives Hemingway Award**

**The Carter Center** congratulates Maria Eugenia Grillet, a longtime ally in the fight against river blindness, on her



Maria Eugenia Grillet addresses the 2019 InterAmerican Conference on Onchocerciasis.

receipt of the 2021 Hemingway Award. Grillet, professor at Instituto de Zoología y Ecología Tropical at Universidad

> Central de Venezuela, has served as an independent at-large member on the Program Coordinating Committee of the Onchocerciasis Elimination Program for the Americas since 2009 and is currently on the Executive Committee of the Program Coordinating Committee. Her expertise in black fly entomology and guiding insights have contributed to river blindness transmission elimination in two foci in Venezuela and successful World Health Organization verification of elimination from four countries—Colombia, Ecuador, Mexico, and Guatemala.

> The Hemingway Award is jointly given by the Royal Society of Tropical Medicine and Hygiene and the Liverpool School of Tropical Medicine and named for the former director of the Liverpool School, professor Janet Hemingway. It recognizes exceptional work in translational research. Grillet's work extends to other tropical vector-borne diseases, including dengue, chikungunya, malaria, and Zika.

### Ethiopia Halts MDA in Jimma Zone; Kaffa Poised for Similar Success

**KEY TAKEAWAY:** Half a million people in Ethiopia's Jimma zone no longer need MDA after transmission of river blindness is interrupted.

**The eighth** Ethiopian Onchocerciasis Elimination Expert Advisory Committee (EOEEAC) meeting, held virtually Oct. 26–28, 2021, celebrated continued progress in interrupting onchocerciasis transmission in Ethiopia despite limitations imposed by the COVID-19 pandemic.

The committee agreed that three districts of Jimma zone in Oromia region have interrupted transmission, recommending the halt of mass drug administration (MDA) with ivermectin (Mectizan,<sup>®</sup> donated by Merck & Co., Inc., Kenilworth, N.J., USA) for more than 500,000 inhabitants. Impact assessments of blood samples from at least 3,000 children demonstrated Ov16 anti-parasite antibody prevalence was significantly less than 0.1%. The districts will now proceed to a three-to-five-year post-treatment surveillance period.

Similar results were obtained from four districts of Kaffa zone in Southern Nations, Nationalities, and Peoples region, meaning an additional 300,000 people no longer need MDA, pending final analysis. Twenty-five other districts have qualified to conduct stop-MDA assessments in 2022.

The committee also reviewed analysis of mapping studies, entomological data, and coverage surveys. See Figure 2 for a map of districts according to rounds of MDA. Seven new districts were found to be endemic and could begin MDA if resources become available; currently, 245 districts are receiving MDA and 20 await treatment. Entomological collections from the Metema subfocus contained black flies of unknown identity, sparking the interest of the meeting's participants, with follow-up investigations planned to determine the flies' identity and ability to transmit human onchocerciasis.

Staff also presented the results of several years of coverage surveys and program evaluations, demonstrating lessons learned and recommendations for the program to strengthen the volunteer drug distributor network. Finally, the committee reviewed revised standard operating procedures and how they can be applied to the program's existing data, such as treatment coverage, baseline prevalence, and interim evaluation results.



Note: The Carter Center's river blindness elimination efforts in Ethiopia are made possible thanks to funding from the Lions Clubs International Foundation and the Reaching the Last Mile Fund, a multidonor fund initiated and led by His Highness Sheikh Mohamed bin Zayed Al Nahyan, the Crown Prince of Abu Dhabi, and housed within The END Fund.

Figure 2. Ethiopia districts by number of rounds of mass drug administration with ivermectin for onchocerciasis.

#### Graders at Gondar Center Use Photos to Diagnose Trachoma

While trachoma is most commonly found in rural communities, the fight against the disease also takes place in a small, dark room on the campus of the University of Gondar in Ethiopia. Researchers at the Gondar Grading Center (GGC), viewing photographic images of the inner eyelid, are helping the Trachoma Control Program in Amhara and international academic institutions better understand the symptoms and characteristics of trachoma in the region, the country, and across Africa.

The GGC, established in 2019, is a collaboration between the University of Gondar's Department of Ophthalmology, the Francis I. Proctor Foundation at the University of California San Francisco, and the Carter Center's Trachoma Control Program. The principal investigator at the GGC is Dr. Fisseha Admassu, an ophthalmologist and longtime collaborator with The Carter Center. The GGC consists of three computer stations where images of eyelids can be assessed for trachoma signs and symptoms.

The original trachoma graders at

the GGC were six first- and secondvear resident ophthalmologists. They were trained in 2019 to identify trachoma clinical signs and grade facial cleanliness. The trainees learned the World Health Organization's simplified trachoma grading system, which includes three stages. These stages range from trachomatous



Dr. Fisseha Admassu conducts trachoma impact survey training in West Amhara, Ethiopia.

inflammation-follicular (TF), characterized as five or more inflammatory follicles on the eyelid, to trachomatous scarring, which includes moderate to severe scarring of the eyelid. Once trained, the graders at the GGC began working on several trachoma research projects conducted in Ethiopia. In its first year, the GGC graded nearly 42,000 eyelid photos and almost

> 21,000 facial images. The GGC is on course for a similar output this year.

Work from the GGC can help the program and researchers answer many trachomarelated questions. Photographic data can help the program understand the severity of active trachoma among children and the extent to which the scarring process has affected the adult population.

Another research goal is to determine how photographic graders may differ from graders working live with communities and whether programs can rely on photographic grading. In 2017, a trained photographer accompanied survey teams as they went from community to community to diagnose trachoma signs. After each participant received a grade from the grader in the community, an eyelid photograph was taken. As part of this study, 10 communities were visited and nearly 5,000 eyelid photographs were taken. The GGC graded these photographs over five days in 2019 and found a 97% agreement between photographic and in-person grading for TF.

The GGC is an excellent example of international collaboration and in-country capacity building within the Trachoma Control Program in Amhara. Work at the GGC may also provide a way forward for programs needing to diagnose trachoma as they near the elimination of trachoma as a public health problem.



Andrew Nute of The Carter Center (standing, left) and Jeremy Keenan of the Proctor Foundation (standing, right) facilitate photographic trachoma grading training at the Gondar Grading Center in Ethiopia.

# Joint Effort Provides Surgeries in South Sudan

#### The South Sudan Trachoma Control Program is

putting into practice a quote by Helen Keller: "Alone we can do so little; together we can do so much."

Through funding from the Bill & Melinda Gates Foundation and a focused partnership among the South Sudan Ministry of Health, the Ophthalmological Association of South Sudan (OASS), Amref Health Africa, Christian Blind Mission (CBM), and The Carter Center, the South Sudan Trachoma Control Program is working to tackle some of the highest levels of trachoma in the world. The partners are collaborating on trachoma prevalence surveys, mass drug administration, and eye care surgical campaigns, embarking on an ambitious plan to survey 25% of the country, treat millions of people with Zithromax<sup>®</sup> (donated by Pfizer Inc) and provide sight-saving surgery to thousands of people over an 18-month period. Given that South Sudan is the size of France, with fewer than 200 miles of paved road, this is no easy task, but partnership makes it possible.

An example of this partnership strength is a unique approach of engaging eye care workers in surgical outreach. One of the biggest challenges for the South Sudan Trachoma Control Program is the lack of trachoma surgeons and the fact that they often are not located where the need for their specific skills is greatest. In February 2021, an agreement was signed between the Ministry of Health, The Carter Center, and OASS. Through this agreement, trachoma surgeons



Surgeons operate on a patient at night in South Sudan.

based in the capital, Juba, are provided the opportunity to travel to remote locations in South Sudan to conduct two-week surgical campaigns. This arrangement enables surgical camps to be conducted in areas that lack access to eye care services and provides an opportunity for surgeons to maintain their skills and help their fellow citizens. It also strengthens the role of professional institutions such as OASS within South Sudan.

Two surgical campaigns were conducted under this agreement in Eastern Equatoria state's Kapoeta North County in May 2021 and Kapoeta East County in July 2021. Surgery was provided to 141 people, 90% of whom were women. Given the remote location, many patients walked for hours to reach the surgery sites, with some arriving as night approached. Patients received surgery, food, and a place to sleep for the night as they waited for their bandages to be removed the next day. The numbers may seem little in terms of the overall need, but they matter to those 141 people who will not go blind from trachoma.

# CDC Fellow Helps Amhara Laboratory Manage Data

Being a data-driven organization means being good stewards of the data we collect. The Carter Center's Trachoma Control Program recently started developing a laboratory information management system for its partner laboratory, the Amhara Public Health Institute in Ethiopia, to enable high-quality data manage-

ment and long-term biospecimen



Juliet Adeola

archiving. The Carter Center launched this project after requesting an Informatics Aid (Info-Aid) from the Centers for Disease Control and Prevention's (CDC's) Public Health Informatics Fellowship Program.

Info-Aid is a mechanism for these CDC fellows to provide short-term assistance to public health organizations.

The fellow assigned to the Center's project was Juliet Adeola. Prior to becoming a fellow, Adeola helped scale up the Nigerian Medical Records System at over 600 facilities across Nigeria.

Adeola conducted in-depth interviews with the Carter Center's data manager, epidemiologist, and information technology specialist in Atlanta and laboratory technicians and information technology managers in Ethiopia. She then completed analyses detailing the existing data systems' strengths, weaknesses, opportunities, and threats.

"My favorite part of the project was the assessment of existing systems through interactions with the Carter Center's diverse team," Adeola said. After just six weeks, Adeola recommended library information management system software options and provided an exciting pathway forward for the Trachoma Control Program in Ethiopia.

#### Students, Graduates, Volunteers Contribute While Learning

**Since 1984,** The Carter Center has provided more than 3,500 students and recent graduates with unparalleled professional experience. Interns, graduate assistants, and volunteers come from around the world and provide their diverse insight and make vital contributions to the Center's work. In turn, the Center provides a substantive learning experience that serves as a basis for the students to explore their career options and attain valuable professional skills.

Several of the Center's health and peace programs, including the Trachoma Control Program, work with students every semester. Over the years, students have worked with the Trachoma Control Program team as interns, graduate assistants, and volunteers, as well as work-study through the Emory University Rollins School of Public Health program called Rollins Earn and Learn (REAL).

The Trachoma Control Program has endeavored to provide an innovative space in which students and recent graduates learn through applied public health experiences in real-world settings. Students are mentored by public health professionals and participate in operational research, assist in implementing programmatic activities, and even author peer-reviewed publications. Since 2019, a total of 22 students have worked with the Trachoma Control Program for at least one program session; each internship session lasts approximately three months, and graduate assistantships and REAL positions last 12 months. Despite the challenges associated with the COVID-19 pandemic, students



A recent class of Carter Center interns visits Plains, Georgia, hometown of former U.S. President Jimmy Carter and Rosalynn Carter, co-founders of The Carter Center.

Trachoma Control Program Student Achievements, 2019–202

- Creation of Trachoma Monitoring Dashboard Phong Le, graduate assistant, 2020–2021
- Photographic diagnosis as part of trachoma monitoring Cassidy Whitson, graduate assistant, 2019–2020
- Geographic visualization of trachoma infection in Amhara, Ethiopia Sarah Mueller, Rollins student, 2021–2022
- Serological monitoring in Darfur, Sudan Courtney Simmons, Rollins student, 2020–2021
- Developing tools for assessing community mobilization, South Sudan *Caroline Smerdon, intern, 2021–2022*
- Antibiotic distribution logbook audit Daniel Thomas, intern, 2020–2021

effectively contributed to the program's work in a virtual setting. Thirteen students chose to extend their initial sessions and stayed with the Trachoma Control Program for six to 18 months.

The trachoma team supports students in conducting presentations at the Carter Center's annual program reviews, at scientific conferences such as the American Society of Tropical Medicine and Hygiene annual meeting, and in writing peer-reviewed articles. Students also participate every month in a journal club, in which they present a recent and pertinent academic article to all members of the trachoma staff and discuss how the article might help or otherwise affect the program's work. Furthermore, as part of the wider educational programs of The Carter Center, all students and recent graduates benefit from events such as a weekend excursion to President and Mrs. Carter's hometown of Plains, Georgia, and speaker events featuring Carter Center staff and prominent guests.

Although the day-to-day responsibilities of students may vary from session to session, the Trachoma Control Program endeavors to nurture relationships with each student. Young professionals who have worked with the trachoma team have gone on to join governmental organizations, academia, nonprofits, and the business world. As they move forward in their careers, many remain lifelong collaborators with the Center.

#### Center's Dawd Handles Finances, Procurement with Patience

**Yohannes Dawd** possesses seemingly infinite patience. In the face of challenges in his job, he is not easily frustrated. He has never been known to raise his voice.

Dawd is supervisor for field finance operations and procurement at The Carter Center, responsible for overseeing the finances of field operations, managing grants, and procurement of goods and services for health programs in several African countries, the Americas, and Hispaniola.

"The most challenging part of my job is related to the frequently changing export/import rules and regulations of the countries that we work with," he said in his characteristic near-whisper. "These changes usually result in delays in the delivery of the necessary materials for program activity implementation in the field."

There isn't a hint of frustration in his voice. That's because he has a secret weapon: He knows how to plan ahead, often solving problems before they occur.

"There are a lot of challenges that we face every day related to vendors, shipping companies, and customs offices, and these challenges are sometimes beyond our control," Dawd said. "However, since I understand the importance of getting the necessary



Yohannes Dawd

"In addition, a few years ago I also initiated and implemented an annual procurement planning process and the purchase of goods that programs need for the year at the beginning of every fiscal period."

Before he took his current supervisory position, Dawd served as a financial analyst for more than five years, supporting field finance managers, finance officers, and accountants. Before joining The Carter Center, he was an organizational capacity assessment consultant for nonprofit organizations such as Pathfinder International and Save the Children Norway. He's also taught accounting courses at St. Mary's University College in his native Ethiopia.

Dawd earned a Master of Public Health degree in applied public health informatics from Emory University's Rollins School of Public Health, as well as a master's degree in business administration and a bachelor's in accounting

materials in a timely manner, I encourage programs to submit their requests well ahead of their planned activities. "In addifrom Addis Ababa University.

Dawd's work pulls him in different directions.

"I think most Carter Center staff don't know that I work for both Health Programs Finance overseeing field finance operations and the Overseas Operations office overseeing the procurement of goods and services as well as supply chain management," he said.

'There are a lot of challenges that we face every day related to vendors, shipping companies, and customs offices, and these challenges are sometimes beyond our control.'

In addition to his day-to-day responsibilities, Dawd has served as a project lead in implementing operational systems such as the eProcurement System, Asset Management System, and, currently, implementation of the Incident Reporting and Tracking systems.

"These technologies are very crucial to improve the operational efficiency of the Overseas Operations office, which in turn helps programs implement their planned activities and achieve their objectives," he said.

### Guinea Worm Disease Update



#### Staff Present on NTDs at Research Conferences

**KEY TAKEAWAY:** Presentations by Carter Center staff at recent conferences focused on assessment of serological responses to trachoma antigens in Sudan, mapping river blindness in Ethiopia, and the mental health of lymphatic filariasis patients in Haiti.

As a recognized leader in the global fight against neglected tropical diseases (NTDs), The Carter Center designs its successful intervention strategies around ongoing research findings and analysis. Annual meetings of the American Society for Tropical Medicine and Hygiene (ASTMH) and the Coalition for Operational Research on Neglected Tropical Diseases (COR-NTD) provide beneficial opportunities for Carter Center representatives to discuss insights and challenges alike with fellow researchers, implementers, and other partners.

The Carter Center has been an active participant at the ASTMH conference since 1982 and an active member organization of COR-NTD since its launch in 2014. Each year, the Center's health programs are well-showcased, as representatives share research findings and engage with their global health peers. At the 2021 conferences, Carter Center experts discussed the Center's NTD research efforts in the Dominican Republic, Ethiopia, Haiti, Nigeria, and Sudan.

Carter Center presentation topics, many presented by country program staff, included the assessment of serological responses to trachoma antigens prior to the start of mass drug administration in Sudan, the progress made in nationwide mapping of onchocerciasis endemicity in Ethiopia, and innovative research in Haiti to evaluate the impact of a mental health chronic disease self-management program on lymphatic filariasis patients' well-being.

Two presentations at the 2021 ASTMH conference highlighted the Center's support of progress made toward eliminating onchocerciasis transmission in Nigeria and received attention from the conference press team. The first presentation announced that Plateau and Nasarawa are the first two states in Nigeria to achieve transmission



A school-age child in Nigeria provides a blood sample for testing to determine whether lymphatic filariasis has been eliminated. Presentations by Carter Center staff at two recent conferences focused on the Center's NTD research.

elimination status, while the other reported that Delta state is following closely behind by meeting criteria to stop mass drug administration of ivermectin (Mectizan,<sup>®</sup> donated by Merck & Co., Inc., Kenilworth, N.J., USA). The Carter Center assists onchocerciasis and lymphatic filariasis treatments in seven southern states in Nigeria; Plateau and Nasarawa states stopped mass drug administration for lymphatic filariasis in 2013 and onchocerciasis in 2018.

#### THE CARTER CENTER



This issue is made possible in part thanks to the Michael G. DeGroote Health Program Publications Fund.

The Carter Center One Copenhill 453 John Lewis Freedom Parkway NE Atlanta, GA 30307

For more information about The Carter Center and its health and peace programs, visit our website at www.cartercenter.org. To receive this newsletter via email, contact healthprograms@cartercenter.org.