



photo credit: Joney Woldegebreel

Geeta Pasi (right), US Ambassador to Ethiopia, hands over a GeneXpert machine to Dr. Lia Tadesse (left), Ethiopia's Minister of Health

USAID ELIMINATE TB PROJECT

QUARTERLY NEWSLETTER

DECEMBER 2021

The five-year USAID Eliminate TB Project builds on MSH's contributions to Ethiopia's TB control efforts for the past 15 years. Collaborating with longtime partner KNCV Tuberculosis Foundation and three local partners, Amhara Development Association (ADA), Oromia Development Association (ODA), and REACH Ethiopia, MSH will continue to work to reduce TB incidence and mortality by engaging public- and private-sector players to improve the quality and sustainability of TB services in Ethiopia.

Representing the Project at the 52nd Union World Conference on Lung Health



At the 52nd Union World Conference on Lung Health, October 19–22, 2021, the USAID Eliminate TB Project presented on Ethiopia's consistent TB decline as the foundation of TB elimination at the symposium *"Is TB elimination feasible in high TB burden countries in the foreseeable future?"*. One TB elimination approach that involves pivoting to find hard-to-reach cases, especially in vulnerable and marginalized populations such as adolescents and in prison settings, was a focal point. The project also compared case finding strategies in Ethiopia's prison settings to identify which

was most successful during the oral presentation *"The yield of different tuberculosis case finding strategies in the prison setting of Ethiopia"*. Eight poster presentations (see below) included the impact of COVID-19, contact screening, and diagnostic technology.

- The seasonality pattern of tuberculosis reversed during initial COVID-19 report in Ethiopia
- About one-fourth of tuberculosis cases in Ethiopia are among the adolescent population
- The value of tracing contacts of clinically diagnosed tuberculosis cases in high-TB-burden countries
- The yield of drug-resistant tuberculosis contact screening in three regions of Ethiopia
- Impact of COVID-19 on detection of drug-resistant tuberculosis in Ethiopia
- GeneXpert testing and utilization rates declined by one-fourth after the COVID-19 pandemic in Ethiopia
- Variations in yield of TB among different health service units of health facilities
- Improved tuberculosis preventive therapy for contacts during COVID-19 in Ethiopia

USAID Administrator Samantha Power Visits Implementing Partners in Ethiopia

During USAID Administrator Samantha Power's trip to Ethiopia, August 3–4, 2021, she accompanied Ethiopian Minister of Health Dr. Lia Tadesse to speak with USAID implementing partners. Seven partners, including Management Sciences for Health (MSH), which implements the bilateral USAID Eliminate TB Project, were asked to present on specific USAID investments in global health initiatives.

At a booth at the Millennium Hall in Addis Ababa, MSH displayed project materials, including the project factsheet, most recent newsletter, and two success stories on integrated TB/HIV/Covid screening for internally displaced people in the Tigray region and how gardening can promote TB treatment adherence. A large banner detailing the project's vision and mission was erected behind the booth, which exhibited a GeneXpert machine and its cartridges.

During his conversation with Administrator Power, Dr. Daniel Gemechu, Project Director of the USAID Eliminate TB Project, shared Ethiopia's current TB situation and the need for quality

rapid diagnostics. During her press briefing, Administrator Power extended recognition to the USAID Ethiopia staff as well as local USAID partners for their tireless work on the humanitarian and development needs of the Ethiopian people.



USAID Administrator Power (center) with Dr. Tadesse (left) at the USAID Eliminate TB Project's booth discussing the project with Dr. Gemechu (right) (photo credit: MSH Staff)

ELEVATING TB SURVIVORS' VOICES AND STORIES

As part of MSH's booth for Administrator Power's visit, the USAID Eliminate TB Project invited a married couple, Kitaw and Sara Tekilemariam, both TB survivors, to share their story. Kitaw had to undergo treatment for three years because he contracted a multidrug-resistant strain of TB, while Sara was left unable to walk due to her TB and its treatment. Kitaw expressed his appreciation for USAID's support of the TB program, as Sara can now walk with the support of a cane and he is now working as CEO of a local nonprofit established by a local TB survivors association called Organic Health, which works to eliminate TB.

I KNEW THE TB PAIN,
AND I WORK HARD
TO PROTECT OTHERS

Kitaw Tekilemariam



Kitaw Tekilemariam (left) shares his story with Dr. Tadesse (center) and USAID Administrator Power (right) (photo credit: Joney Woldegebreal)



Kitaw and Sara Tekilemariam (center and right) share their story as TB survivors with USAID Administrator Power (left) (photo credit: Joney Woldegebreal)

US Donates 46 GeneXpert Machines to Ethiopia to Support TB Diagnostics

A handover ceremony was organized on September 8, 2021, at which the US Government donated 46 GeneXpert machines, worth USD 1 million, through USAID to the Ethiopian Ministry of Health. Geeta Pasi, US Ambassador to Ethiopia, handed over the machines to Dr. Tadesse.



Ambassador Pasi speaks at the GeneXpert donation handover ceremony on September 8, 2021 (photo credit: Joney Woldegebreal)

GeneXpert machines are critical because they decrease the amount of time it takes to process a diagnosis. What normally takes two days by microscope takes only two hours with digital technology, meaning that people start treatment sooner. These machines are also more sensitive than routine microscopic-based methods, meaning there are fewer false negatives, and they can determine whether the TB strain is drug resistant.

During the handover ceremony, Ambassador Pasi stated that “as a long standing partner of the Ethiopian people, the American people are proud of this enormous step towards TB elimination in the country. Through USAID, the US Government focuses on communicable diseases such as TB globally.” She added, “As it is important to America, it is important to Ethiopia, and it is important to the world too”.

Ambassador Pasi thanked the Ministry for its close support of the USAID Eliminate TB Project. Dr. Tadesse extended her gratitude to the US Government and American people, and particularly to USAID, for their support and donation of the GeneXpert machines.

During the handover ceremony, Dr. Tadesse spoke about the five-year National TB Strategy launched in March 2021, which includes strengthening digital technology for diagnostics. The Minister thanked USAID for playing a key role in the development of the strategy and for the donation of 46 GeneXpert machines that will “assist in closing the gap of access to rapid, digital TB diagnostic tests”.

One of the ambitious goals of the five-year strategy is to strategically distribute GeneXpert technology to ensure that all woredas have access to rapid tests. There are currently 1,000 woredas, or districts, throughout Ethiopia, and to achieve this goal, Dr. Tadesse said that an additional 700 machines are needed.

In closing, Dr. Tadesse highlighted the partnership between the Ministry of Health and USAID, which signed an agreement to work together to address existing key gaps and ultimately build a self-resilient TB program, especially during the COVID-19 pandemic.



Dr. Tadesse speaks at the GeneXpert handover ceremony on September 8, 2021 (photo credit: Joney Woldegebreal)

Implementing Comprehensive Community TB Services

To improve community-based TB care and build local capacity, the project continues to partner with local organizations such as ODA, ADA, and REACH Ethiopia. All three partners have already completed start-up activities and begun implementation. Startup included conducting an intensive baseline assessment of all 60 woredas in the 6 supported zones. This assessment included 1,522 health providers; 3,100 health extension workers; and 8,313 members of the Women Health Development Army, all of whom work with the local organizations.

The local organizations have worked to establish 46 TB patient clubs; carried out active community contact investigation identifying 99% of known contacts; and referred 8,373 presumptive TB cases, of which 792 (9%) tested positive. The local organizations have also been able to identify 3,361 children under the age of 15 who are eligible for TB preventative treatment (TPT), 3,042 (90.5%) of whom started TPT.

SNNP Regional Government Honors USAID Eliminate TB Project

The USAID Eliminate TB Project provides direct implementation in the SNNP region, working closely with the Guraghe zonal administration and Guraghe health department to prevent, respond to, and ultimately eliminate TB in the region.

Along with the SNNP regional government, the Guraghe zonal administration and health department awarded MSH a certificate of appreciation for the work being done through the USAID Eliminate TB Project. Tefera Girma, Regional Manager of the USAID Eliminate TB



Certificate of appreciation presented to MSH by the SNNP regional government for the work being done under the USAID Eliminate TB Project

Project within the SNNP region, accepted the certificate on behalf of MSH and the project.

The zonal administration expressed its gratitude for USAID's technical training assistance for government health professionals, mentioning the promising achievements in TB screening at the health center level. According to the health department, the local community's health seeking trends have increased, and a significant number of residents are willing to be screened for TB and access TPT services thanks to the project's effort.

Training at Hawasa Millennium Health Center Leads to Successful TB Community Screenings

After conducting technical TB trainings in the SNNP and Sidama regions, the USAID Eliminate TB Project saw significant improvement in identifying TB cases in the community. The Director of the Hawassa Millennium Health Center, Yosef Yowe, whose center underwent the training, said the project has provided all the necessary training for the health center staff to succeed.

According to Yosef, the health center has started to conduct TB screenings in its surrounding communities, particularly in slum areas where people living in close proximity are vulnerable to the spread of TB. During a two-week TB screening, the center identified 52 people who could be susceptible to TB. Of those, 38 were tested and 4 were confirmed to have TB.

Along with community-level TB screenings, the health center conducts TB screenings of all staff twice a year. According to Yosef, in the most recent TB staff screening, eight staff

were identified as presumptive TB and one was confirmed as TB positive. Everyone who tested positive for TB from the community and staff have been initiated on treatment.



Yosef Yowe, Director of the Hawassa Millennium Health Center (photo credit: Joney Woldegebreel)

SPOTLIGHTING COMMUNITY TB HEROES

Tadelech Tefera, a TB clinical nurse at the Hawassa Millennium Health Center, participated in the training by the USAID Eliminate TB Project in the SNNP region.



Tadelech Tefera, a TB clinical nurse at the Hawassa Millennium Health Center who started TB educational classes for the community (Photo credit: Joney Woldegebreal)

The training prompted her to increase outreach to people in the surrounding community with proper TB education, especially targeting mothers who live with family members or in neighborhoods with confirmed TB. Tadelech has provided education to more than 100 mothers but says she focuses on not only the household level but also the community level. Ethiopian culture has a large emphasis on close knit communities that is not limited to the household level. Many neighbors dine together, take part in traditional coffee ceremonial activities, and children often spend much time after school at neighbors' homes. There is little knowledge of TB and how it spreads, making one of the major focuses of Tadelech's outreach teaching families and communities about preventative measures. Due to her educational classes, some mothers started their children on TPT.

PEOPLE WHO HAVE CLOSE CONTACT WITH TB PATIENTS SHOULD GO TO HEALTH FACILITIES FOR TPT SERVICE

Tadelech Tefera

Roza Alemayehu is one of the mothers who went to Tadelech's educational classes on TB. Her child is often seen playing or dining at the home of a neighbor who is receiving TB treatment at the Hawassa Millennium Health Center. While Roza knew that the neighbor was receiving treatment, she didn't realize her child would be exposed to TB. After attending Tadelech's educational class, she decided to start her child on TPT to keep them safe.



Roza Alemayehu, mother of a TPT beneficiary (Photo credit: Joney Woldegebreal)

USAID Eliminate TB Project Achieved Key Indicators

On September 30, 2021, the USAID Eliminate TB Project completed its first year of implementation despite many unexpected challenges. The COVID-19 pandemic has continued to impact implementation, as have ongoing and expanding conflicts in the Tigray, Amhara, and Oromia regions. Despite bottlenecks from the pandemic and conflict, including limited infrastructure and insufficient numbers of trained workers, the project has achieved key milestones.

The project is well on its way to reaching its target of almost half a million TB patients by the end of its five years.

PREVENTION

Almost 50,000 people living with HIV (PLHIV) and children under the age of 15 have started on TPT in the first year of the project.

USAID Ethiopia played a key role by providing the necessary training to local TB prevention organizations and private and government health clinicians. In the last quarter, the project has conducted quarterly site level visits to provide supportive supervision and check TPT progress in 21 project implementation zones.

Table 1. Project Year One Prevention Targets and Achievements

Indicator	Baseline	FY 2021 Target	FY 2021 Actual/Achievement	Achieved
Capacity building: training	N/A	7,835	8,058	102
Coverage of contact investigation	62%	70%	75%	107
Number of individuals put on TPT (PLHIV and <15 years)	20,155	61,292	49,137	80.20
DR-TB notification and enrollment	658	700	560	80.0

DIAGNOSIS

The project has improved rapid diagnosis by supporting the procurement and delivery of 46 GeneXpert machines throughout the country, which has increased the total number of diagnostic machines to 372.

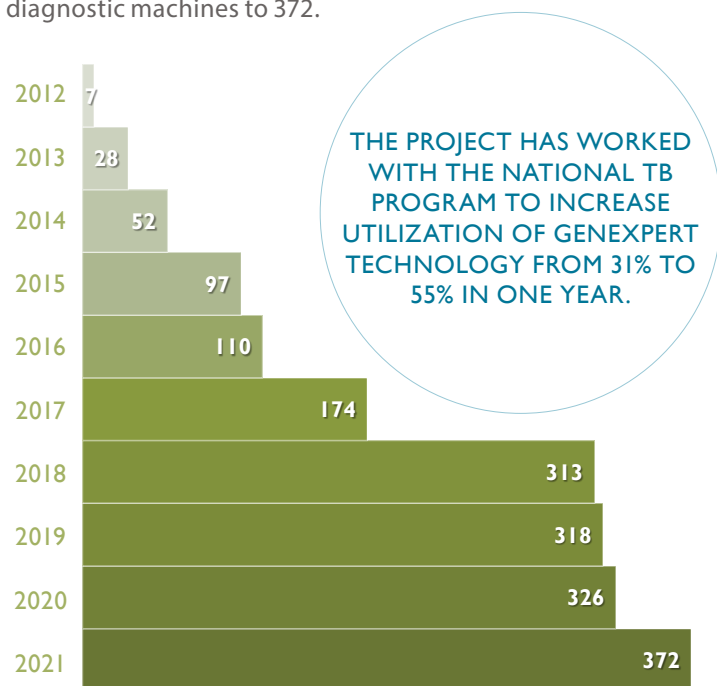


Figure 1. GeneXpert expansion in Ethiopia, December 2012–August 2021

The project is actively involved in building capacity for GeneXpert maintenance, including replacing broken modules and training lab technologists on preventive maintenance. This has allowed 31,345 GeneXpert tests to be conducted, increasing the ability to test.

Within the first project year, a total of 104,584 DS-TB and 560 DT-TB cases were identified using rapid-diagnostic technology, resulting in a treatment rate of 73% and 56.1% respectively.

TREATMENT

In year one of the project, implementation has allowed the diagnosis and treatment of more than 100,000 people, exceeding many set targets.

Table 2. Project Year One Treatment Targets and Achievements

Indicator	Baseline	FY 2021 Target	FY 2021 Actual/Achievement	% Achieved
Treatment coverage	69% (110,782)	70% (91,771)	73% (104,584)	115%
TSR for DR-TB	72%	75%	78.7%	105%
TSR for DS-TB	96%	96%	95.4%	99.40%