

# BANGLADESH TUBERCULOSIS ROADMAP OVERVIEW, FISCAL YEAR 2022

This is an overview of the USAID/Bangladesh FY 2022 Tuberculosis (TB) Roadmap, implemented with FY 2021 budget. It was developed in consultation with the National TB Program (NTP) and with the participation of national and international partners involved in TB prevention and care in the country.

Among the 30 high TB burden countries, Bangladesh is ranked seventh; and among the high multidrug-resistant TB (MDR-TB) burden countries, Bangladesh is ranked 14th.<sup>1</sup> Some of the country's TB indicators have shown a positive trend over time: TB treatment coverage decreased to 64 percent in 2020; and a high treatment success rate (TSR) of more than 90 percent for drug-susceptible TB (DS-TB) cases has been maintained.<sup>2</sup> An estimated 70,000 people with TB remain undiagnosed each year.<sup>3</sup> Further, TB is the most common cause of death from a single infectious disease in Bangladesh.<sup>4</sup> Additionally, only 1,113 drug-resistant TB (DR-TB) cases were detected, and 92 percent were enrolled on proper treatment regimens in 2020.<sup>5</sup>

The NTP has a National Strategic Plan (NSP) covering the period between 2021 and 2025. This NSP focuses on: integrated, person-centered care and prevention; bold policies and supportive systems; and intensified research and innovation.<sup>6</sup> In order to achieve the key milestones of reducing TB deaths by 75 percent and TB incidence rate by 50 percent by 2025, the NSP outlines a set of key interventions for implementation: introduction of innovative active case finding (ACF) approaches (with special attention to people with DR-TB and comorbidities and pediatric TB); expansion of the diagnostic network; integration of TB services into the health service delivery system by using the existing health structure; and improvement of clinical management systems for DS-TB and MDR-TB.<sup>7</sup>

The COVID-19 pandemic has had far-reaching effects on the global TB response, threatening to erase years of progress. As a result of COVID-19 and associated measures to control it, one million fewer people in the 23 countries where USAID focuses TB programming had access to TB diagnosis and treatment in 2020, compared to 2019—representing a more than 20 percent decline.

- <sup>3</sup> Ibid.
- <sup>4</sup> Ibid. <sup>5</sup> Ibid.

<sup>&</sup>lt;sup>1</sup> World Health Organization. Global Tuberculosis Report, 2020.

<sup>&</sup>lt;sup>2</sup> Ibid.

<sup>&</sup>lt;sup>6</sup> National TB Program. National Strategic Plan, 2021-2025.

<sup>&</sup>lt;sup>7</sup> Ibid.

In Bangladesh, there was a 21 percent decline<sup>8</sup> in TB case notifications and a 19 percent decline<sup>9</sup> in DR-TB case notifications in 2020, compared to 2019. To address these declines, USAID, in collaboration with partner governments and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), developed urgent TB program recovery plans in seven of the hardest hit, high-burden TB countries, including Bangladesh. The Bangladesh TB Recovery Plan supports the NTP's larger efforts to mitigate the impacts of COVID-19 on countries' TB responses. USAID continues to work with in-country partners and stakeholders to monitor and mitigate the impact of subsequent waves of COVID-19 resurgences on TB programming in real time.

The proposed FY21 USAID TB budget for Bangladesh is \$18 million. With this level of funding, USAID will support the following technical areas:

## REACH

#### TB diagnosis

While Bangladesh has an extensive TB diagnostic network which includes one national TB reference laboratory, five regional TB reference laboratories, 459 Xpert<sup>®</sup> MTB/RIF (GeneXpert) sites and close to 850 microscopy centers, underutilization of GeneXpert and access to secondline drug-susceptibility testing remains a challenge. Further, challenges associated with specimen transport and referral systems are contributing to increased turnaround times. The underutilization of diagnostic networks is associated with limited operating hours and human resources, and poor maintenance of existing instruments. To address these barriers, USAID worked with the NTP to embed 50 medical technologists in underutilized sites and build the capacity of more than 200 recruited medical technologists. Further, USAID supported the introduction of the automated BD BACTEC<sup>™</sup> MGIT<sup>™</sup> system (liquid culture testing) and established a DR-TB treatment center, increasing the country's ability to conduct second-line drug-susceptibility testing. Additionally, USAID piloted preventive maintenance protocols and trained more than 100 laboratory employees in preventive maintenance.

In FY 2022, USAID will complete a diagnostic network assessment to identify and address persisting challenges and improve the efficiencies of the TB diagnostic network while also supporting the scale up of new rapid molecular diagnostics such as TrueNat and the implementation of diagnostic connectivity solutions (e.g., GX Alert) in collaboration with the Global Fund projects. USAID will build laboratory capacity by developing and launching training courses on laboratory biosafety, diagnostic techniques, and preventative maintenance and introducing TB laboratory information and external quality control systems. Scale up of new and

 <sup>&</sup>lt;sup>8</sup> Based on data collected by the World Health Organization.
<sup>9</sup> Based on data collected by the World Health Organization and National TB Program.

innovative tools will also be key in promoting diagnostic network efficiencies; through the New Tools Project, USAID will pilot the feasibility, use, and efficacy of the next-generation sequencing platform (tNGS) for the detection and surveillance of first-line and second-line drug resistance.

#### Engaging all care providers

To accelerate TB efforts, multilateral collaboration across the government and private sector will be required. Furthermore, to sustain and capitalize on programmatic gains, the public sector needs to recognize the important role of the large private sector and its contributions to TB care in the country. As such, the NTP, as part of the TB efforts, plans to prioritize private provider engagement and optimize TB care by developing standard operating procedures for the TB service delivery referral system between public, private, and non-governmental organization health facilities. More specifically, USAID will establish automated notification systems, provide systematic training, and involve private providers in community actions, to overcome the barriers in working with private providers.

#### Community TB care delivery

The NTP's ACF efforts heavily rely on community engagement. USAID will continue to expand the provision of basic training to private pharmacy owners and blue star providers; continue to work on ensuring the engagement of communities in hard-to-reach and priority areas; and continue to improve the readiness at primary health facilities to ensure access to high-quality TB service delivery.

## CURE

#### Drug-susceptible TB (DS-TB) treatment

Through thoughtful engagement of both public and private healthcare providers in urban, rural, and hard-to-reach populations, USAID supported increased access to high-quality TB treatment management by ensuring the implementation of standardized treatment guidelines. Moving forward, USAID will:

- Continue to build the capacity of the NTP and private and public healthcare providers to diagnose people with TB and link them to immediate treatment; and
- Introduce digital solutions to improve surveillance, supervision, and monitoring of TB treatment and the welfare of those with TB during the treatment.

#### Multidrug-resistant TB (MDR-TB) treatment

Bangladesh pioneered the shorter treatment regimens currently approved for use in people with MDR-TB, and due to these efforts, the country continues to report good treatment outcomes.

To capitalize on the positive results already seen in MDR-TB and support the programmatic management of DR-TB (PDMT), USAID will support the NTP by:

- Helping to decentralize MDR-TB treatment, including access to the shortened treatment regimens for peripheral health centers;
- Systematically scaling up full outpatient treatment for suitable individuals, and increased PDMT capacity building for healthcare providers at all levels;
- Minimizing referral delays through strengthening coordination between laboratories and clinicians;
- Aiding the scale-up of all-oral MDR-TB treatment regimens while taking into account programmatic environments and patients' preferences;
- Implementing an aDSM system for all DR-TB patients and standardizing the reporting mechanism;
- Ensuring that drug and buffer stocks at the facility-levels are adequate and managed to ensure there are no stock-outs; and
- Improving MDR-TB recording and reporting and the routine use of the e-TB manager for making clinical decisions.

# PREVENT

#### Prevention

Given the high TB burden in Bangladesh, intensifying ACF and TB infection (TBI) interventions in the country remain challenging. However, progress is possible with careful evidence-guided national policy development, planning, and implementation. To effectively implement TB preventive treatment (TPT), there needs to be an increase in the number of trained healthcare providers and patients, as well as uninterrupted supply of diagnostic and drug resources (i.e., TB skin test, pyridoxine, isoniazid, rifapentine, rifampicin). USAID will support the development of easy-to-use algorithms for determining TPT eligibility, appropriate regimen and length of treatment based on individual risk, local epidemiology, and programmatic factors. USAID activities will focus on:

- Building the technical capacity of the NTP to develop and revise standard operating procedures and guidelines for contact investigation and TPT;
- Coordinating with TB stakeholders at all levels (i.e., the NTP, Global Fund, provincial health offices, private sector, and other non-government organizations) on ACF and TBI activities;
- Establishing training and mentorship systems for healthcare workers;

- Creating systems for screening under-five children who are close contacts of index cases, referring children who have TB signs and symptoms to health facilities for further evaluation, diagnosis and treatment, and referring those without signs and symptoms for TPT;
- Intensifying contact investigation and TPT coverage among adolescents and adult contacts; and
- Collaborating with specialized HIV services and private providers to ensure TB screening and TPT management for HIV-positive individuals.

# **SELF-RELIANCE**

#### Commitment and sustainability

Increasing local ownership and sustainability of TB interventions is one of the top priorities. USAID will implement a series of interventions to strengthen government commitment and capacity in TB. USAID will work closely with the Government of Bangladesh (GOB) to develop its capacity to produce first-line TB medicines locally, which will be a sustainable solution for the country. To expand the country's commitment to end TB, USAID will support the NTP to create a multisectoral accountability framework for TB by engaging high-level ministries, donors, and other development partners and affected communities. In addition, USAID will support the NTP to mobilize more resources from the private sector to strengthen the TB response in the country. USAID will also support efforts to improve the budget utilization of the NTP.

## Capacity and functioning systems

USAID supports the NTP's plan to strengthen the procurement and supply chain management (PSM) system. USAID will support the NTP in developing forecasting and budgeting exercises for SLD needs and will continue its efforts to support the NTP by strengthening PSM and other digital solutions.