



1. Project Data

Project ID
P167523

Program Name
Program Towards Elimination of TB

Country
India

Practice Area(Lead)
Health, Nutrition & Population

L/C/TF Number(s)
IBRD-89260,WBTF-B4445

Closing Date (Original)
30-Jun-2024

Total Program Cost (USD)
412,451,215.77

Bank Approval Date
29-Mar-2019

Closing Date (Actual)
31-Mar-2025

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	400,000,000.00	40,600,000.00
Revised Commitment	400,000,000.00	33,772,129.01
Actual	378,679,086.76	33,772,129.01

Prepared by
Joy Antoinette De Beyer

Reviewed by
Salim J. Habayeb

ICR Review Coordinator
Susan Ann Caceres

Group
IEGHC (Unit 2)

2. Program Context and Development Objectives

a. Objectives

The Program Development Objectives (PDOs) were “To improve the coverage and quality of TB control interventions in the private and public sectors in targeted states in India” as stated in the Project Appraisal Document (PAD) page iv, and Loan Agreement (LA) p7. The Program for Results (PforR) operation would support selected geographic and results areas within the National Strategic Plan (NSP) for TB Control. The nine targeted states -- Assam, Bihar, Karnataka, Madhya Pradesh, Maharashtra, Rajasthan, Tamil Nadu, Uttar Pradesh, and West Bengal – included an estimated 63 percent of public-sector TB notifications, 62 percent of the gap in private sector TB notifications (the difference between estimated TB prevalence and



total notifications in the public and private sectors), and 69 percent of all private TB treatments in India. The PDO is considered in two parts: improved coverage, and improved quality of TB interventions.

b. Were the program objectives/key associated outcome targets revised during implementation?

Yes

Did the Board approve the revised objectives/key associated outcome targets?

Yes

Date of Board Approval

17-Jul-2020

c. Will a split evaluation be undertaken?

No

d. Components

Results Area 1: Scaling-up Private Provider Engagement (appraised US\$176 million, disbursed US\$154,679,092)

The aim was to scale up private sector engagement to increase early diagnosis and notification and effective management of TB in line with Standards of care in India. Depending on the type of private providers, the engagement approach could differ, for example, staff of the Revised National TB Control Program (RNTCP) might directly engage providers and support patients, or contracted Non-Government Organizations (NGOs) could undertake patient support or both roles. Use of the Nikshay case-based information system was expected to enable large scale monitoring, strategic purchasing, direct electronic payments to patients and providers, and new adherence support technologies. Given the RNTCP's limited experience in engaging private providers, Technical Support Units (TSUs) would be set up in the Central TB Division (CTD) and the nine states, to support strategic purchasing, private sector engagement, and direct benefit transfer (DBT) management under the Program. Four Distribution-Linked Indicators (DLIs) would incentivize this results area:

- Revision and approval of revised National Guidelines for Partnerships under RNTCP (allocation US\$16 million, disbursed US\$16 million) (denoted as a "Prior Result" that was expected to be achieved by program effectiveness, or at latest, during the first year of implementation)
- Number of private notifications net of any decrease in public notifications (allocation US\$70 million, disbursed US\$48,679,092)
- Treatment success rate of private sector notified TB patients (allocation US\$70 million, disbursed US\$70 million)
- Establishment of TSUs to support activities related to private sector engagement, DBT and Public Financial Management Systems (PFMs) (allocation US\$20 million, disbursed US\$20 million).

Results Area 2: Rolling out TB Patient Management and Support Interventions (appraised US\$61 million, disbursed US\$61 million)



TB control outcomes depend on whether TB patients seek care early and adhere to treatment. Financial incentives and nutritional support can increase treatment adherence and success rates. The program would support roll-out of the Nikshay Poshan Yojana (NPY), GOI's Direct Benefit Transfer (DBT) scheme providing financial incentives to TB patients, incentives for private providers to notify TB cases, to treatment supporters, and to tribal TB patients. It would also strengthen the NPY system to facilitate electronic payments and integration with the Public Financial Management System (PFMS). Five DLIs were chosen:

Strengthening the Nikshay system to facilitate monitoring, purchasing and payments:

- Prior Result 2: Development of modules in Nikshay 2.0 for all four DBT schemes (allocation US\$11 million, disbursed US\$11 million)

Incentivizing roll-out of TB patient financial support to encourage early care seeking, treatment adherence and completion (allocation US\$45 million, disbursed US\$45 million):

- Proportion of TB patients receiving financial support through DBT
- Proportion of TB patients notified by public providers receiving first NPY payment in targeted states
- Proportion of TB patients notified by private providers receiving first NPY payment in targeted states

To incentivize integration of the Nikshay with the PFMS:

- Proportion of Districts implementing digital signature certificate-based approval process for DBT payment (allocation US\$5 million, disbursed US\$5 million).

Results Area 3: Strengthening Detection, Treatment and Monitoring of Drug-Resistant TB (appraised US\$70 million, disbursed US\$70 million)

India has a large burden of drug-resistant TB (DR-TB); at appraisal, a recent national survey had found that 6 percent of all TB cases were multi-DR and about 25 percent of pulmonary TB patients in Indian public facilities had some form of TB drug resistance. DR-TB is 30-60 times more expensive to treat than the standard TB drugs cost of about US\$50 for a 6-month regimen.

The proposed Program would support universal Drug Susceptibility Testing (DST), the gateway to additional testing for drug-resistance and appropriate treatment. DST had been prioritized for patients seeking care in the public sector only; to rectify this, the program would incentivize testing of privately notified TB patients. Three key actions were expected to help the effort: (1) Ensuring robust sputum transportation to the growing number of public laboratories with molecular diagnostics capability for at least rifampicin susceptibility testing; (2) Tracking progress in detection of additional drug resistance and completion of treatment, because poor treatment outcomes in DR-TB are associated with fluoroquinolone resistance and poor adherence; (3) Better prevention by improving airborne infection control in high-risk settings, including through advocacy, and facility infection control assessments and plans. One DLI was chosen:

- Proportion of privately notified TB patients that have microbiological confirmation (allocation US\$70 million, disbursed US\$70 million).

Results Area 4: Strengthening RNTCP Institutional Capacity and Information Systems (appraised US\$93 million, disbursed US\$93 million)



The program would support improved RNTCP staffing levels and skill-mix, and strengthening of the Nikshay information system (IS) to help enable achievement of the ambitious RNTCP goals. Staffing levels and skills mix were insufficient to achieve the ambitious NSP goals, especially in the nine states supported by the Program. The program would support development of an RNTCP Human Resource Plan, which would include ambitious levels of additional hiring. There were two DLIs:

- Development and approval of a multi-year RNTCP Human Resource Plan at CTD and state levels covering the Program States (allocation US\$10 million, disbursed US\$10 million)
- Reduction of the staffing gap (allocation US\$40 million, disbursed US\$40 million)

The Nikshay 2.0 (activated in September 2018) tracks each patient through their TB episode, supporting TB patient management and adherence monitoring. It is also used for TB drug inventory management, DBT for providers and patients, and public finance management. At appraisal, Nikshay 2.0 was being stabilized and rolled-out, but there were concerns about data quality (including authenticity and duplication of notified cases); use of data for decision making at all levels; the private sector interface; and supply chain management features (including forecasting). The Program would support Nikshay 2.0 strengthening and data integrity, including development of modules for DBT schemes and private sector notification. Additionally, the program would support development and roll-out of a mechanism to incentivize states to improve performance towards TB elimination. The related DLIs were:

- Nikshay system enhanced and supporting DBT schemes (prior result) (allocation US\$14 million, disbursed US\$14 million)
- Performance-based management between CTD and States implemented. (allocation US\$29 million, disbursed US\$29 million)

e. Comments on Program Cost, Financing, Borrower Contribution, and Dates

The Program Towards Elimination of TB (PTETB, or “the Program”) supported defined parts of India’s NSP 2017-2025, the total budget for which was US\$8.3 billion, to enable “transformative changes required for service delivery to meet the ambitions and targets of the NSP” (PAD, p7). The Program estimated cost was US\$1.334 billion, 16 percent of the total NSP budget, and 74 percent of estimated government expenditures on TB in the nine targeted states (including state-level expenditures and CTD expenditures relevant for activities in the nine states).

The Program was financed by an IBRD loan of US\$400 million, which covered thirty percent of the appraised total Program cost. The remaining 70 percent (US\$934 million) was expected to be financed by the GOI. The GOI had requested \$US500, and the remaining US\$100 million was to be considered by the World Bank by March 2022 (PAD, p8). However, the GOI decided not to pursue the request for the additional US\$100.

The ICR reported that the program disbursed US\$378,679,087, 94.7 percent of the loan amount. The estimated Borrower actual contribution was US\$516.47 million equivalent, 55.3 percent of the expected amount. In addition, US\$33.772 million (83.2 percent) of a US\$40.6 million loan Buy-Down grant from the Global Fund to Fight Aids, TB and Malaria (GFATM) was disbursed.

The project was approved on March 29, 2019. It became effective on May 13, 2019. The Mid-Term Review was held in September 2022 (three-and-a-half years into implementation). The project closed on March 31,



2025, after one nine month extension to the original closing date of June 30, 2024, to allow more time for some DLIs to be achieved.

There were six restructurings. The **first restructuring** on June 26, 2019 amended the LA to reflect the GFATM grant of \$40.6 million to “buy-down” the principal loan, reducing the cost to the Borrower. The **second restructuring** on July 17, 2020 updated five DLI baselines, targets and unit price/allocations in the light of newly-available data; extended the deadlines for achieving year 1 or year 2 targets for three DLIs; and updated the Results Framework (RF) with the new baseline data and targets. The **third restructuring** on November 26, 2020 and the **fourth restructuring** on May 24, 2021 extended the timelines for achieving one and two DLIs respectively, because the COVID-19 pandemic had slowed implementation. The **fifth restructuring** on December 20, 2021 extended the deadline for establishing STUs in four states to accommodate contracting delays, and revised the baseline and decreased the targets for reducing the staffing gap because the original targets had proved unachievable. The **sixth restructuring** on July 1, 2024 extended the closing date by nine months to allow additional time to reach end targets for the engagement with the private sector, and also aligned the Program end with the end of the NSP plan period.

3. Relevance

a. Relevance of Objectives

Rationale

The PDO addressed an important health issue. India accounts for 25 percent of global TB cases, the highest country burden (Global TB Report 2025). TB remains the country's leading infectious disease in incidence and mortality, despite gains that have cut TB incidence by 21 percent since 2015. India has about a quarter of the world's multidrug-resistant TB cases, with up to ten percent of patients exhibiting resistance to first-line treatments.

The Program goals align fully with India's current priorities and policies, and built on more than five decades of WB involvement in India's health sector and over twenty years of support for India's TB prevention and control efforts. The Program aimed to help implement the NSP for Tuberculosis Elimination by focusing on detection, treatment, prevention, and capacity building to achieve End TB goals by 2025. It aligned with the National Health Policy 2017, the WHO's End TB Strategy, and the UN's Sustainable Development Goals (SDGs).

The PDO and Program approach aligned fully with the latest WB Country Partnership Framework (CPF) for India (FY18-22, extended through FY25) and with current partnership approaches. The Program supported CPF Focus Area 3: Investing in Human Capital, by engaging private TB control providers, strengthening public institutions, collaborating with CTD and states, and sharing TB elimination innovations through the "Lighthouse India" initiative. Its emphasis on engaging the private sector is consistent with the approach of the new CPF which is under preparation, which will "...introduce a forward-looking and outcome-oriented, joint public and private sector-led approach to investing in skills, health and education of people..." (WB India website updated 11/10/2025).



The choice of the PforR instrument was well-justified in the PAD, and the WB team evaluated NTEP's readiness for PforR during preparation. The PAD explained that PforR was the most suitable instrument because (1) it allowed the operation to be firmly anchored in the GOI's NSP for TB elimination; (2) the focus on results rather than inputs would allow flexibility to innovate and learn from different pathways for achieving the results, especially in increasing private sector engagement; (3) the use of country systems would direct attention to system strengthening, and enhance development impact and sustainability; and (4) India already had significant experience with PforR at both national and state levels (PAD, pp5-6).

Rating

High

b. Relevance of DLIs

DLI 1

DLI

DLI1.1: Number of private notifications, net of any decrease in public notifications in targeted states.

Rationale

This DLI captured the contribution of enhanced private sector engagement in TB efforts to any overall increase in notifications. This measured one of the two aspects of the PDO.

Rating

High

DLI 2

DLI

DLI 1.2: Treatment success rate of TB patients notified by private providers in targeted states.

Rationale

This was a direct measure of a key aspect of the quality of TB care in the private sector, quality being the second aspect of the PDO.

Rating

High

DLI 3

DLI



DLI1.3: Establishment of TSUs in CTD and targeted states to support activities related to private sector, DBT, PFMS, and multi-sectoral engagement as per agreed TOR.

Rationale

Setting up functioning TSUs at central level and in all 9 project states was seen as crucial to enhancing state capacity to engage the private sector. A payment of US\$5 million was triggered by MOHFW contract approval and US\$1.5 million allocated for each established TSU. This incentivized an important action early in the results chain.

Rating

High

DLI 4

DLI

DLI2.1: Proportion of districts implementing Digital Signature Certificate (DSC) based approval process for DBT payment in targeted states.

Rationale

Efficient timely payments to TB patients to support their nutritional needs and incentivize care-seeking, are important to encouraging TB screening and treatment compliance, and helpful to support good treatment outcomes. This DLI encouraged use of more efficient approval of payments, which would reduce the long delay (200 days on average at the start of the program) before patients began receiving payments.

Rating

High

DLI 5

DLI

DLI2.2.1 and 2.22: Proportion of TB patients notified by public / private providers receiving financial support via Ni-kshay Poshan Yojana in targeted states.

Rationale

Ni-kshay Poshan Yojana (NPY) is a small payment (500 rupees per month before November 2024, and 1,000 rupees per month since then) given by the GOI to TB patients, intended to help them buy food, and incentivize completion of treatment. It contributes both to expanding the number of people who come forward to be tested, and to improving treatment outcomes.

Rating

High

DLI 6



DLI

DLI3.1: Proportion of notified TB patients tested for Rifampicin susceptibility in targeted states.

Rationale

With the high prevalence of drug-resistant TB in India, this testing is an important aspect of quality care.

Rating

High

DLI 7

DLI

DLI 4.1.1: Development and approval of a multi- year RNTCP Human Resource Plan at CTD and state levels covering Program states.

Rationale

Staff and skill shortages were identified as a constraint on being able to achieve the ambitious targets of the Program, which made developing a clear HR plan an essential part of rational resource planning and advocacy by TB state actors for filling vacant positions. However, the central program had no way of ensuring the HR Plans were carried.

Rating

Substantial

DLI 8

DLI

DLI 4.1.2: Reduction of the staffing gap identified by the RNTCP Human Resource Plan for CTD and the Program States.

Rationale

This DLI added an incentive to hire and retain staff. Although an important action, the ICR noted several shortcomings. It did not address staff quality. The targets were set in an unclear way (“increase the reduction in the staff gap by x percent”), and were not achievable as originally set. The central level has limited control over state staffing, and its influence on this DLI was limited to advocacy.

Rating

Substantial

DLI 9

DLI

DLI4.2: Development and implementation of a performance-based management mechanism between the center and the targeted states.



Rationale

This DLI was thoughtfully chosen to give scope to states and the central level to devise mechanisms that would elicit strong performance. Rewarding performance was intended to spur states to think about new ways to improve their TB programs, and would also require and incentivize increased data use. This was a good non-directive way to incentivize progress toward the PDOs, while allowing for differences across the nine states.

Rating

High

OVERALL RELEVANCE RATING

Rationale

The relevance of the Objectives is HIGH: they addressed an important health issue, align with India's current development goals and the WBG's CPF (FY18-22, extended to FY25) and the current emphasis on joint private and public-sector efforts, and built on long-standing WB support for India's TB prevention and control efforts. There was full alignment between the PDO and the DLIs, and only minor quality issues with one DLI. The Program's design remained appropriate throughout, and minor adjustments in DLI baselines and deadlines were made as needed. Key innovations of the Program were later implemented in other states, attesting to their relevance.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

PDO 1: To improve the coverage of TB control interventions in the private and public sectors in targeted states in India.

Rationale

The theory of change for improving the coverage of TB services in the private and public sectors included actions to expand the supply of services through engaging the private sector, and to expand uptake of services by offering incentives and support to patients, especially in nine selected states which accounted for two-thirds of India's population and more than 60 percent of estimated undetected TB cases. National Guidelines for Partnerships in TB would be revised and approved, to better facilitate private sector



engagement. The systems for making payments to TB patients and private providers would be streamlined. An HR plan would be developed and implemented so that the central level and state TB programs would be appropriately staffed. A central level TSU and nine state TSUs would be set up to advise on and support private sector engagement to compensate for limited state experience and expertise in engaging and contracting with the private sector. States would be encouraged to enhance the performance of their TB programs through performance agreements with the central TB program. The expectation was that these actions would increase the number of patients diagnosed, treated and notified by private sector providers, and encourage people to seek TB services. A Technical Assistance (TA) program, funded by the Gates Foundation and the Global Fund to Fight AIDS, TB and Malaria (GFATM) and managed through Bank Executed Trust Funds (BETFs), supported activities agreed upon with the client to enhance the implementation of these activities.

There were two PDO Indicators for improved TB service coverage. **DLI 1.1, private sector notifications net of public sector decreases in notifications**, reached 83 percent of its target (661,825 out of 800,000), still a substantial increase in overall notifications. The ICR explained that results fell short of the target because of delays due to COVID-19, unfamiliarity with performance-based contracts, slow procurement of private agencies, and the ambition of the target.

DLI 2.2, the proportion of notified TB patients receiving a first Ni-kshay Poshan Yojana payment in targeted states, exceeded the target for both public and private providers. DLI 2.2.1, the proportion of TB patients notified by public providers receiving their first Ni-kshay Poshan Yojana payment increased from the baseline of 60 percent to 81 percent, exceeding the target of 77 percent. DLI 2.2.2, the proportion of TB patients notified by private providers receiving their first Ni-kshay Poshan Yojana payment rose from 16 percent to 75 percent, also above the end target of 60. Delays in provider benefit payments remained high, as did direct patient benefit payments for treatment adherence, despite some improvement.

The PDO Indicators in the Results Framework (RF) were the same as the DLIs. Four IRIs related to coverage, and all were achieved or exceeded. IRI 2: **TSUs were set up in the CTD and all 9 targeted states** to support activities related to private sector, DBT, PFMS, and multisectoral engagement as per agreed TOR. IRI 3: The proportion of **Blocks with molecular diagnostic services operational in targeted states** reached 84 percent, well above the target of 30 percent. IRI4: **GOI annual expenditure on strategic purchasing under NGO/Private Provider budget head in targeted states** reached INR 837 lakh in year five, exceeding the target of INR 700 lakh. IRI 15: **Performance-based management mechanisms between the center and the targeted States** were developed for all states by the second year, with states left to devise their own mechanisms. In 2024, a new approach was implemented through the "TB Free Panchayat" initiative, where performance at the sub-district level is assessed and recognized based on set criteria.

Counterfactual and attribution. The ICR noted that it was challenging to establish a counterfactual for the PTETB because it was implemented nationwide as part of a national TB elimination program. However, comparing the nine PTETB states with the rest of the country provides a measure of its impact. The ICR cited data from the national real-time Ni-Kshay database. The project states had larger populations, greater TB burdens, and lower initial coverage than the rest of India, but were able to make significantly greater increases in TB notifications between the start and end of the project. This was particularly so for the private sector, and the ICR commented that the project's focus on public-private partnership schemes like the Patient Provider Support Agency (PPSA), and the TSUs, created by contracted-in private agencies, significantly contributed to these achievements. Between 2018 and 2023, TB notifications by public sector providers in the project states rose by 10 percent compared to a one percent fall in the rest of India. Notifications by private sector providers rose 64 percent in the project states, and 36 percent in the rest of India. The annual share of



notified TB patients receiving at least one DBT payment under Ni-kshay Poshan Yojana has increased, with higher improvement in PTETB states compared to the rest of India. Improvements in the percent of all notified TB patients who were paid at least one NPY DBT benefit also rose considerably more in the nine project states: from 61 to 76 percent, compared to a rise from 64 to 71 percent in the rest of India.

Rating

Substantial

OBJECTIVE 2

Objective

PDO 2: To improve the quality of TB control interventions in the private and public sectors in targeted states in India

Rationale

The theory of change for improving the quality of TB services in the private and public sectors included actions to improve patient adherence to and completion of treatment, helping improve the success rate of treatment, and to expand the proportion of TB patients tested for drug resistance. The activities to help achieve these quality goals were to improve the speed of paying TB patients their government cash grants intended as an incentive to seek care and way to help enable adherence, mainly by improving the TB patient information systems and linking them to state government payment and approval mechanisms; and expand drug susceptibility testing and monitoring, strengthening diagnostic services for drug-resistance testing, and improved transportation of samples.

The crucial quality-related indicator, **DLI 1.2, treatment success rate of TB patients notified by private providers in targeted states**, exceeded its target. The end target of 80 percent was met in 2021, and continued improving, reaching 88.2 percent in 2024. In non-Program states, treatment success rates were high and remained so, while in Program states, the treatment success rate started low (some only 55 percent) and increased to the same level as in non-Program states. This ICR called this “a significant accomplishment for the national TB control program”, because the “treatment success rate is crucial for TB outcomes” (ICR, p8).

The other quality-related indicator, **DLI 3.1, Proportion of notified TB patients tested for Rifampicin susceptibility in targeted states**, improved from a baseline of 30.4 percent to 56 percent in year one, and 72 percent in year two, exceeding the 64 percent end target and triggering full disbursement in early 2021. However, testing fell to 60 percent in year three, rebounded to 74 percent in year four, and then dropped in years five and six to 39 and 41 percent respectively, when challenges in central procurement resulted in a nationwide shortage of test cartridges. Furthermore, only 37 percent of notified rifampicin-resistant TB cases received second-line drug-susceptibility testing results within three months of starting DR-TB treatment, falling short of the 65 percent target for IRI 11. Screening a high proportion of notified TB patients for drug resistance is important for effective TB treatment and control. However, the ICR noted that “since only 1–3 percent of new TB cases are resistant, improvements in DLI 3.1 would boost treatment results by just 1–2 percent” (ICR, p8).

The PDO Indicators in the RF were the same as the DLIs. Of the 15 IRIs relevant to quality, 13 were fully or substantially achieved (two at 95–96 percent target achievement), one was partially achieved, and one not



achieved. Five IRIs measured progress in improving diagnosis, and drug-resistance testing and treatment success. The proportion of **privately notified Pulmonary TB patients that have microbiological confirmation** in targeted States reached 37 percent, partially achieving the 45 percent target. IRI 11, which tracked the proportion of **notified Rifampicin-resistant TB cases with second-line drug-susceptibility testing results documented within 3 months of DR-TB treatment initiation**, reached 37 percent, failing to achieve the target of 65 percent. The ICR noted that there was an increase in the absolute number of tests, although testing proportions declined in later years of implementation because there were increases in the proportion of extra pulmonary TB patients for whom testing is difficult, and cartridge procurement issues and supply shortages were barriers to testing. IRI 12 tracked the **treatment success rate among MDR/RR-TB patients**, and achieved 72 percent, well above the target of 65 percent. IRI 9 measured **the treatment success rate of female TB patients** notified in targeted states in the private sector, and achieved 91 percent success, well above the 60 percent target. The related IRI 6, that required that a Gender responsive framework for RNTCP be developed by CTD and approved by MOH&FW, was achieved.

Three IRIs measured progress in making incentive/support payments. **IRI 5**: the percentage of **notified TB Patients that were in the Ni-kshay system within 3 months of notification** had separate targets for those with a verified bank account (70 percent) which was exceeded at 91 percent, and enrolled using their unique government identifier (known as “Aadhaar”, issued by the Unique Identification Authority of India (UIDAI) reached 73 percent, substantially achieving the target of 85 percent. IRI 8: The proportion of **beneficiaries receiving financial support (2nd payments of Ni-kshay Poshan Yojana) through DBT** in targeted states reached 54 percent, close to the target of 56 percent. IRI 7 tracked the Proportion of TB patients notified by private providers for whom **at least one DBT incentive payment was made to their private providers**; this reached 57 percent, close to the 60 percent target.

It was noted above that **the targets for reducing the staffing gap** were reduced during the fifth restructuring at the end of 2021. The revised targets for IRI 18 and 19 were achieved, with the staffing gaps identified by the RNTCP Human Resource Plan for the CTD and Program States reduced to 19 percent, against the target of 20 percent or less for both service delivery staff and administrative staff.

One IRI related to better prevention; IRI 10 required that at least 70 percent of drug-resistant TB centers in the nine states formulate **action plans for airborne infection control**, this was exceeded with 83 percent doing so. IRI 17 counted the number of **Annual TB Fora at state and national level** that were conducted to: (i) promote citizen engagement; (ii) foster learning across states; and (iii) provide a multisectoral platform for TB control; the 41 for a held exceeded the target of 40.

Three IRIs related to improved data management. IRI 13 required that **Annual surveillance system analyses be published**; including data quality by district, annual state/CTD surveillance system evaluation, and estimates for potential under-notification and duplication. This was substantially achieved by the end of the project, and fully achieved soon after. The CTD releases annual national and state-level TB reports. The India TB reports for 2019–2023 were published during implementation, and the 2024 report, originally scheduled for release on 24 March 2025, was delayed by administrative issues but released in August 2025. The two IRIs relating to **switching from paper-based to digital systems** were achieved. IRI 14 required all 9 targeted states to replace paper TB registers with e-TB Ni-kshay to enable real-time monitoring of notification and quality of care in at least 50% of districts; IRI 16 required all 9 targeted states to adopt and transition from paper-based to electronic Statements of Expenditures generated from their Public Financial Management Systems.



Counterfactual and Project Attribution

Similar to the comparison for coverage measures, the nine project states had greater gains in quality indicators than the rest of India. TB treatment success rates for TB patients notified in the private sector increased by 21.4% points in the project states (from 68.3 to 89.7 percent), compared to 12.7% points in the rest of India (from 76.3 to 89.0 percent). Comparing treatment outcomes for TB notifications by public sector providers, success rates in 2018 and 2019 were 2 percent higher in the rest of India than in the project states, in 2022 the project states had improved their success rate by a full 3 percent from the baseline to 86.7 percent, narrowing the gap with the rest of India to less than one percent (treatment success in the rest of India improved from 85.9 percent at baseline to 87.4 percent in 2022, and 1.5 percent gain).

Rating

Substantial

OVERALL EFFICACY

Rationale

Overall, efficacy is rated SUBSTANTIAL: most coverage targets were met or exceeded, and the increase in notifications by the private sector was substantial. Regarding quality, the rating was based on the marked improvements in treatment outcomes (overall, and for women specifically, as well as for people with drug-resistant TB), as well as gains in testing for drug resistance, and improved efficiency in data management and information sharing across states.

In addition to these strong PDO results, the program also supported improved institutional capacity. The Program included 33 system-strengthening measures (19 of which were included in the PAP) (The ICR provided information on achievement of all 19 PAP items (pp25-30); these included annual capacity building plans; improvements in central, state and district TB for a; improved case-finding, diagnosis and monitoring of TB among Tribal Populations and an updated Tribal Action Plan; health and safety guidelines for people involved in sputum transport; standard operating procedures for lab equipment for which there are health and safety risks; doubling the size of the RNTCP call center; updated supervision and monitoring guidelines to include integration of routine assessment and improvement of data completeness and quality; and improvements in the supply chain, procurement, drug stock management and quality testing.) The improved information management, staffing, beneficiary and provider payment mechanisms, digitization of records and benefit approval systems, and implementation of results-based strategies that promote data collection and utilization, all helped enhance the quality of TB patient care and support better treatment adherence. The ICR considered it likely that all 33 actions would continue under GOI systems. It noted that the Program had fostered a performance-oriented culture in addition to enhanced private sector engagement, and that implementing digitized benefit transfers had positively influenced the broader National Health Mission.

Rating

Substantial



5. Outcome

The Program objectives were highly relevant. The efficacy was rated Substantial, as there were only minor shortcomings in achievement of the Program's major relevant objectives, with strong results, despite the interruption of COVID-19.

Outcome Rating
Satisfactory

6. Risk to Development Outcome

The ICR considered the likelihood of adverse impacts on development outcomes as minimal (ICR, p15). It noted that institutional capacity at all levels was expected to be sustained, and all 33 actions under the program were likely to continue through GOI systems. Two important notable achievements were expected to persist: enhanced private sector engagement and digitized benefit transfers. Although the TB TSUs in the nine program states were to be disbanded and their functions absorbed within NTEP, given their impact, the GOI decided to set up TSUs in 22 non-Program states with GFATM funding, to boost private sector engagement in the rest of India. This makes it likely that private sector engagement and improved access to TB case detection and treatment will continue to expand.

The ICR noted that the GOI decided not to request the additional \$100 million which would have been needed to fully achieve the program targets “due to competing financing priorities” (ICR, p11). If these competing priorities mean that there is inadequate funding for continuing to at least maintain staffing for TB programs or to expand resistance testing, then there may be a greater than “minimal” risk that India will not be able to maintain progress on TB, especially given the extent of DR TB in India. However, Government commitment to the goals of the National TB Program appears robust.

7. Assessment of Bank Performance

a. Quality-at-Entry

The PTETB was part of long-term WB engagement and support for India's TB Program. The Program supported a selected part of the National TB program, which ensured full consistency with GOI priorities and plans. The ICR noted that preparation had included thorough technical, fiduciary, and environmental and social assessments that identified essential actions required for Program progress, which were detailed in a comprehensive Program Action Plan (PAP), clearly described in the PAD Annex 3 (PAD pp50-54). Considerations related to poverty, gender, and environmental and social factors were systematically evaluated and incorporated into the Program design, including DLIs, IRIs, and specific PAP actions. In addition to working with the central TB Division (CTD), the WB team collaborated with key partners, notably the Gates Foundation, GFATM, and WHO, to co-design Program details. A US\$40.6 million buy-down trust fund was created by the GFATM and the WB to lower the GOI's



borrowing costs, and a joint TA program was launched to support the Program. This collaborative approach helped ensure coherent and consistent Program support.

The team made a well-justified decision to use PforR, as noted under the section on Relevance of Objectives. The Theory of Change was compelling, actions were logically selected and sequenced, and the DLIs and RF were consistent. M&E arrangements were clearly explained and included careful arrangements for independent verification of achievements. The assessment of risks was accompanied by useful risk mitigation measures, in particular, setting up TSUs to help overcome the lack of State and GOI experience in contracting with private sector providers for TB prevention, testing and treatment.

The level of ambition of the Program was appropriate to the needs, GOI TB program goals, and capacity. Lessons in relevant prior programs were carefully considered and taken into account in the Program design. One shortcoming was a lack of flexibility regarding the timing of some of the DLI targets – in order to try and ensure that the overall program kept on track, results that were seen as important prerequisites to achieving subsequent targets were time-bound. This meant that when delays occurred (as they so often do), the Program had to be formally restructured to shift the deadlines and enable disbursements to be made.

Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

The ICR noted that the WB team conducted regular supervision to facilitate Program implementation. Implementation status and results reports (ISRs) were timely, thorough, and practical in problem identification, proposed solutions, and ratings. The reports maintained high quality and highlighted challenges and mitigation strategies. The WB team restructured the Program six times to achieve PDOs more effectively. The WB team secured extra trust fund resources and offered significant technical assistance for Program implementation and operational research, as noted in the M&E section.

In 2023, the CTD followed up on a possible US\$100 million additional financing as planned at Program preparation. A preliminary project report (PPR) was submitted by the CTD to the Department of Economic Affairs to address COVID-19 losses and meet private patient notification and treatment success targets. However, changes in government priorities and the 2024 elections delayed a decision, ultimately leading to no additional financing. In 2024, the CTD was tasked with meeting the original targets within nine months without additional funding, which was considered unfeasible.

Quality of Supervision Rating

Satisfactory

Overall Bank Performance Rating

Satisfactory



8. M&E Design, Implementation, & Utilization

a. M&E Design

The Program's M&E design was well structured with a clear theory of change, clearly specified objectives, measurable indicators for coverage and quality, and a comprehensive results framework. The 13 DLIs included three "prior results", critical reforms and outputs to form the foundation for Program implementation and success that were expected to be completed by or soon after effectiveness, 44 disbursement linked results (DLR), 19 IRIs, and 19 PAP actions. The theory of change informed the phasing and deadlines for results. The PAD explained that selection of the DLIs was guided by five principles: maximizing the use of existing indicators in the government's NSP; corresponding to NSP priority areas, especially major bottlenecks along the results chain and providing incentives for removing them; Incentivizing performance at different levels of the RNTCP; making full use of and strengthening the GOI's routine information system, Nikshay; and balancing ambition and feasibility. Gender considerations and institutional strengthening were incorporated, including to ensure data quality. DLIs were specific and clearly defined, measurable, ambitious without being unrealistic, highly relevant, and had clear timelines, meeting all five "SMART" criteria. Verification protocols were established and clearly described in the PAD (PAD, p17). The CTD would review and verify state-level results by the end of June each year, and then Independent Verification Agencies (IVAs) would verify results: WHO for programmatic DLIs, and Ernst and Young for DLIs related to IT systems development and functionality.

To enhance evaluation and planned use of data during implementation to improve performance, the WB team secured a US\$3.35 million Gates Foundation trust fund and US\$1 million from the GFATM buy-down to support CTD's TB research and evidence generation. This TA focused on evaluating key initiatives like private sector engagement and DBT to inform better policy and program delivery. The TA trust fund supported targeted data collection and research to strengthen evidence-based TB programs. Key activities included evaluating staffing gaps, TSU effectiveness, guidelines for contracting non-state actors, analyzing Ni-kshay data on DBT impact, designing e-Rupe pilot use cases for private sector chest X-rays, reviewing Sub-National Certification, and facilitating national and international workshops and conferences.

There were two minor shortcomings in M&E design. Some DLI baselines and targets had to be revised early in the Program when improved or missing data became available. These DLIs related to scaling private sector engagement, treatment success in the private sector, and payment of providers under Ni-Kshay. The ICR drew the lesson that it would have been useful to specify the degree of uncertainty involved, as well as strategies and timelines for potential future adjustments. Second, as noted above and in the ICR, the target for reducing the staffing gap (DLI 4.1.2) was specified in a confusing way ("increase the reduction in the staff gap by x percent"), and was over-ambitious, especially given the lack of control of the central level over state staffing. This indicator was revised during the 2021 restructuring.

b. M&E Implementation

M&E performance was consistently satisfactory. Missing baseline data were collected and improved baseline data incorporated early. The RF was revised to match updated indicators and timelines. National and state TSUs coordinated M&E, and the CTD led regular data analysis and biannual reviews with the WB. DLI results were independently verified as planned. The WHO independently verified the claimed DLRs annually, extracting data from the online database and contracting fieldwork to an implementing entity under WHO supervision. The World Bank team and Gates Foundation offered technical support,



reviewed data sets, and assessed field results and draft reports. Independent verification faced minor delays in 2021 and 2022 due to COVID-19.

c. M&E Utilization

M&E findings were shared with stakeholders to inform and guide improvements in implementation. Regular reviews helped address state TB program issues. The CTD coordinated meetings and digital initiatives, while state teams oversaw public private partnership efforts through quarterly reviews. Annual workshops promoted knowledge sharing, with insights presented at conferences and published for wider use. The ICR listed the assessments, studies and papers completed and disseminated (ICR, pp 55-57). These included studies of the enhanced engagement of the private sector, the impact of the beneficiary cash transfers, the impact of COVID19 on the workload of the staff of the TB Program, assessments of the TSUs and of the performance-based incentives.

The project helped the NTEP to move towards integrated information reporting and management using the Ni-kshay IT system, and to develop a data-driven performance management mechanism at the central and provincial government levels. The Ni-kshay system was significantly improved to digitize TB registers (IR 14), incorporate a module for DBT transfers (DLI 2), deduplicate Ni-kshay records from the private providers, and set up digital linkages with PFMS to approve DBT-related Statements of Expenditure (SOE) (IR 16). Based on key TB data from Ni-kshay, CTD also developed a performance-based budget transfer mechanism between the center and states to incentivize better TB program implementation (DLI 4.2/IR 15).

M&E Quality Rating

Substantial

9. Other Issues

a. Safeguards

The ICR noted that supervision missions confirmed that all environmental safeguards were consistently met, and that the Program complied with environmental and social systems assessment requirements, such as updating guidelines for equipment replacement and sputum transport, and strengthened institutional capacity through ongoing training and enhanced procedures. All recommendations in the PAP to enhance social systems were satisfactorily implemented. Key initiatives included: (i) establishing TB forums at the national, state, and district levels to promote learning and accountability; (ii) developing and adopting a National Framework for a Gender-Responsive Approach to TB, along with monitoring gender-specific TB data; (iii) improving data collection and oversight for tribal population transportation reimbursements; and (iv) enhancing grievance monitoring and reporting mechanisms. Other actions to improve TB management among Tribal populations included vulnerability mapping and periodic active case finding in 174 tribal districts across 18 states, training workshops, Isoniazid Preventive Therapy for vulnerable groups, direct community support and incentives for patient and sample transport, with additional aid through the Ni-Kshay Saathi program for family caregivers. These efforts reached 16.7 million people and screened more than 10 million, and 94 percent of identified TB cases began treatment.



The ways in which the Program strengthened federal and state systems and built capacity, especially for private sector engagement, more efficient administration of grants, and improved TB data systems, have already been noted. The ICR also described capacity strengthening of the Central Medical Services Society (CMSS) (ICR, p14). CMSS expanded its post-destination quality assurance capabilities by increasing the number of laboratories to 16, to reduce testing times and enhance overall efficiency. The CMSS enhanced its supplier interface, integrating the Ni-kshay software with the CMSS e-Aushadhi system, which facilitates real-time tracking of supplies, improving procurement transparency and responsiveness. Data management processes also improved, with decentralized data entry for TB drug stock at the TB unit level implemented in the Ni-kshay Aushadhi software.

b. Fiduciary Compliance

The FM risk rating was Moderate, and FM performance was Satisfactory or Moderately Satisfactory during implementation, with the lower rating generally in response to delays in submission of audit reports. When the ICR was finalized, three state audit reports for FY 23-24 were overdue (due date: December 31, 2024); and the final year audit report (FY24-25) was due to be submitted to the WB by December 31, 2025. Delays resulted from reliance on consolidated NHM audit reports, which were slow to be completed, given the expansive scope of NHM, necessary coordination by CTD with central and state NHM finance teams across the nine states, and having to ensure consistent formats with granular information on the TB program.

c. Unintended impacts (Positive or Negative)

The ICR noted that procurement and supply disruptions caused by COVID-19 – specifically, in acquiring Test cartridges needed for MDR-TB – spurred the CMSS to adopt an innovative contracting method—a multi-year fixed price contract from 2024—which allows faster order placement and delivery.

d. Other

10. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	
Bank Performance	Satisfactory	Satisfactory	
Quality of M&E	Substantial	Substantial	
Quality of ICR	---	High	



11. Lessons

These lessons were taken from the ICR (ICR p16-17), with minimal edits.

Expanding public health initiatives to involve the private sector can increase service access for patients. By integrating private providers into the NTEP, more TB patients received care across both public and private sectors. TSUs from the private sector played a key role in strengthening central and state capacity for private sector engagement. TSUs, operating under output-based contracts aligned with private sector program targets, facilitated procurement for public-private initiatives such as Private Provider Support Agencies. These agencies aided the GOI in expanding quality TB diagnostics and care through private providers.

Implementing system reforms through a central authority, such as the CTD within the national TB elimination program, enables nationwide adoption and impact of those reforms. System reforms led to digitization of client registrations across the country, scaling public private mix across the country (not just in the Program states), and boosting the Ni-kshay Poshan Yojana efficacy and effectiveness. The technical assistance program contributed to knowledge on the Direct Benefit Transfer, and this knowledge led to reducing the time to make the first pay-out, doubling of the DBT benefits, and bundling monthly payments into just two disbursements.

India's experience reinforces global evidence—such as Brazil's Bolsa Família program—that **social protection improves TB outcomes.** Analysis of program data showed that DBT payments were strongly associated with treatment success (Navneet Manchanda, Lung Vu et al, "Direct Benefit Transfers for TB patients and its effects on TB treatment outcomes: findings from the analysis of routine TB surveillance data (Ni-Kshay) in India", December 2024, WBG working paper series). Patient-centered approaches that include food and cash support for patients and their households with timely disbursement, could accelerate TB elimination.

Design of DLIs needs to consider early target achievement and the need for sustained indicator performance. DLI 3.1 (proportion of notified TB patients tested for Rifampicin susceptibility in targeted states) was achieved and fully disbursed within the first two years into the Program, but later in year five and six performance declined due to central procurement issues, resulting in failure to meet the end target. The related IRI 11 (Proportion of notified rifampicin-resistant TB cases with second-line drug susceptibility testing within three months of DR-TB treatment initiation) was the only one of 19 indicators to significantly miss its target. It is uncertain whether improved incentives would have addressed the procurement bottlenecks. Disbursements for each year in which the target was achieved would have provided a stronger incentive to maintain performance.

"Loan buy-downs", through which a partner (in this case the GFATM) provides a results-based grant disbursed in tandem with the annual principal loan results payment, can be an effective result-multiplier and public financing booster. Specifically, the "buy-down mechanism" (i) strengthens incentives related to identified disbursement-linked indicators and (ii) promotes alignment and coordination among partners, and facilitates structured discussions on results among the partners and the national program.

Results-based approaches can be a useful strategy for successful health system reforms aimed at enhancing tuberculosis (or other program) outcomes. The Program for Results



emphasized critical indicators within the results chain and mandated the adoption of results-based methods in participating states. This directive fostered innovations such as sub-national certification for TB elimination and the 'TB free village initiative', both of which were implemented during the Program period.

12. Assessment Recommended?

No

13. Comments on Quality of ICR

This is a clear and thorough ICR that closely follows the WB Guidelines. The independent evaluation of results data assures the credibility of the evidence offered to support the achievements reported. Annexes are used to provide crucial details which the page limit imposed on the main text preclude. Clear explanations are provided for project design decisions, factors that affected implementation, and the linkages across the results chain are clear. The lessons are well linked to the project narratives and ratings, and provide useful guidance beyond the project. The ICR offers a thoughtful assessment of the project's contribution and the extent to which results might be attributable to the project, comparing states that were included in the project, with the rest of India, with a very detailed analysis presented in an Annex.

The shortcomings in the ICR are minor. The components description was incomplete, consisting only of Result area names and lists of the DLIs, and was missing a description of the component activities and rationales. In the Annexes, some material had been copied from the PAD without edits to update the descriptions from plans to actuals, for example by changing future tense to past tense. Details and data missing from the (uneditable) RF in Annex 1 were provided was incomplete, and although the missing data were provided in Annex 5, but the RF could have been edited in the project system.

a. Quality of ICR Rating

High