NATIONAL STAKEHOLDER CONSULTATION WORKSHOP FOR TUBERCULOSIS NATIONAL STRATEGIC PLAN

28-30 July 2025

Government of Nepal
Ministry of Health and Population
National Tuberculosis Control Center

Executive Summary:

The national stakeholder consultation workshop for the development of Nepal's new National Strategic Plan (NSP) for Tuberculosis (2026/27–2030/31) was held from 28–30 July 2025 in Kathmandu. Organized by the National Tuberculosis Control Center (NTCC), in collaboration with the World Health Organization (WHO), three-day stakeholder consultation workshop brought together participants from federal, provincial, and local governments, development partners, civil society, and technical experts. This diverse and inclusive gathering fostered meaningful discussions to shape a strategic priority for TB control and elimination in Nepal.

The primary objective of the workshop was to establish the foundations for the development of a NSP for TB prevention, care and control in Nepal through participatory and evidence-based planning process.

The workshop featured expert presentations on TB epidemiology, health system organization in Nepal, laboratory and surveillance systems, monitoring and evaluation and guidance on the strategic planning process. Participants engaged in structured group work to conduct the SWOT and gap analysis across the seven thematic areas. In collaboration the participants also formulated the strategic goals and SMART objectives, developed preliminary projections for the next five years and prioritized key interventions and activities to meet the agreed objective.

The NSP goal was defined as reducing TB mortality by 45% by 2031 compared to 2015, supported by six strategic objectives addressing case detection, treatment success, MDR-TB, TB/HIV, prevention, and governance. The key strategic directions identified during the workshop were sustaining strong political commitment, increasing domestic investment, enhancing case detection, strengthening the primary health care system with meaningful community and multisectoral involvement.

The workshop concluded with outlining the next steps including the finalization of the plan, costing and endorsement of the NSP document. The event was honored by the presence of the Honorable Minister of Health and Population, Mr. Pradip Poudel, reaffirming the government's commitment to ending TB and need of having a national strategic plan contextualized to the need of Nepal.

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1. Introduction

Tuberculosis (TB) remains a major public health problem in Nepal. In 2023, WHO estimated 68000 incident TB cases with an estimated incidence rate at 229/100,000 population. The number of TB deaths was estimated at 16000 and mortality rate at 54 TB deaths per 100,000 population on the same year. Additionally, Nepal is among the top 30 high-burden countries globally for Drug-Resistant TB (DR TB)–3,000 estimated cases every year.

Progress has been made to maintain the treatment success above 90% for many years. The MoHP with support from WHO, Global Fund against TB, HIV and Malaria and other partners is implementing the current national strategic plan (2021/22 – 2025/26) to achieve the WHO End TB Strategy goals and targets. Nepal has expanded the TB laboratory network using WHO-recommended diagnostics and continued its effort to decentralize diagnosis and treatment services in the country. To improve case detection and close gap in missing cases, Nepal has introduced innovative approaches, such as digital X-rays with AI for TB screening and expanded active case finding among high-risk populations—including those in flood-affected areas and prisons, and migrant communities at border checkpoints. The rollout of all-oral shorter regimens for drug-resistant TB marks another milestone, improving treatment outcomes and saving lives through a patient-centered approach. The National TB control Center with WHO support updated the DR TB Management Guidelines, Clinical Handbook of TB Management, capacity Building including TB Trainings to health workers, DST and Liquid Culture, and quality control for the supranational laboratory. Similarly, the introduction of the WHO recommended shorter regimens for TB prevention is another effort made to increase access to TB preventive treatment in Nepal.

To advance research on TB; the NTCC with WHO support conducted the National Drug-Resistant TB Survey and TB Patient Cost Survey, in 2024. The support provided to expand the TB Free Initiative at Palikas' level from 25 local level in 2021 to 99 in 2023 and additional 25 in 2024 thus reaching a total of 149 local levels. This is considered as a pivotal approach to engage the local government and make them accountable.

Despite the implementation of key interventions under the current National Strategic Plan (NSP 2021/22–2025/26), some gaps and challenges remain— only 54% of estimated TB cases and 28% of DR TB were diagnosed in 2023, leaving 46% of TB and 72% of DR TB undiagnosed or unreported to the National programme. Moreover, delayed diagnosis, pretreatment lost to follow up (LTFU), and treatment interruptions fuel the ongoing transmission and hinder the efforts to end TB. While TB incidence and deaths fell by 15% and 11% respectively between 2015-2023, progress lags WHO's 2025 targets (75% reduction in incidence, 50% in deaths). Additionally, 51% of TB households face catastrophic costs due to the disease.

As Nepal prepares to develop the next NSP (2026/27–2030/31), it was critical to take stock of current efforts, identify gaps and challenges, and collaboratively define strategic priorities for a more effective and country context TB response. This stakeholder consultation workshop, organized as part of the PRIME TB Roadmap (Annex 1), served as a critical platform to engage stakeholders and partners in shaping the future direction of the national TB program towards ending TB in Nepal.

2. Objectives of the workshop

The objectives of the workshop were to:

- Discuss the current population health situation, policy and challenges in Nepal.
- Review the current TB epidemiology, prevention, care and control situation in Nepal
- Discuss the stepwise process to develop a national strategic plan (NSP) for TB prevention, care and control in Nepal
- Establish the foundations for the development of a NSP for TB prevention, care and control in Nepal
  - ✓ Conduct a comprehensive SWOT and gap analysis of the TB program
  - ✓ Formulate strategic goals and SMART objectives for the NSP
  - ✓ Identify and prioritize key strategic interventions and activities for the NSP

3. Workshop Methodology

The workshop adopted a participatory and structured methodology to ensure evidence-based and inclusive planning for the development of Nepal's new National Strategic Plan (NSP) for Tuberculosis. It included:

a. Technical Presentations

The workshop began with a series of expert-led presentations to provide a comprehensive overview of the current TB program landscape. These sessions established a shared understanding of the program's strengths, challenges, and strategic direction.

b. Group Works and Plenary Discussions

Participants were divided into thematic groups to conduct in-depth SWOT analysis and gap analysis of the program and define key interventions to address the objectives for the NSP.

Outputs from the group work were presented in plenary sessions for validation and refinement.

Day-I: Setting the Stage & SWOT Analysis

1.1 Opening Session:

Mr. Ravi Kanta Mishra, Senior Public Health Officer at the Ministry of Health and Population presented an overview of Nepal's health system. He highlighted the major guiding documents including the Constitution, Public Health Act, Health Service Act, and National Health Policy 2019, along with strategic frameworks such as the Nepal Health Sector Strategy (2023–2030) and the National Health Financing Strategy (2023–2033). He also mentioned about the different international commitments Nepal has made including abiding to the Primary Health Care, Sustainable Development Goals, Universal commitments along with other sectoral commitments such as for tuberculosis, HIV, NCD and other health programs. Mr. Mishra emphasized the structured journey from policy to implementation and how the constitution health writing and health policy is translated into the annual work plan and budget, through cascade of different steps. He elaborated on the roles of federal, provincial, and local governments, and outlined the organizational structure of the Federal health system, including departments, divisions, and regulatory bodies. He also presented key health indicators such as maternal mortality, childhood mortality, fertility rates, and stunting, showing progress toward SDG targets. Key challenges highlighted in his presentation were low public health financing including high out of pocket expenditure, unequal health workforce distribution, governance capacity gaps along with weak information systems and emerging threats such as pandemics and climate threats.

Dr. Shree Ram Tiwari, Director of the National Tuberculosis Control Center (NTCC), provided a comprehensive overview of NTP progress, challenges and strategic directions for the National Tuberculosis Program (NTP). He outlined the vision of a TB-Free Nepal and strategic goals to reduce incidence and mortality rates, eliminate catastrophic costs, and ultimately eliminate TB by 2050. Dr. Tiwari discussed the three core strategies of the current National Strategic Plan (NSP) 2021/22–2025/26: improving service quality and surveillance, strengthening laboratory services, and enhancing prevention and treatment. He highlighted achievements such as a 92% treatment success rate for drug-susceptible TB and 78% for drug-resistant TB, alongside challenges like notification gaps, limited community engagement, and high catastrophic costs. He also presented data on diagnostic infrastructure, including GeneXpert sites and sample transportation networks. The way forward emphasized on scaling up TB-free initiatives to all 753 municipalities, expanding preventive treatment, integrating data systems, and strengthening partnerships with private and community sectors.

Remarks by dignitaries in the opening session:

In his opening remarks, Dr Rajesh Sambhajirao Pandav, WHO Representative to Nepal, congratulated the Ministry of Health and Population and the National TB Control Center for

their leadership and highlighted Nepal's notable progress, including a 47% increase in TB case notifications between 2019/20 and 2023/24, high treatment success rates, expanded WHO recommended molecular diagnostics, AI-enabled digital X-rays, targeted active case finding, rollout of all-oral shorter regimens for drug-resistant TB, introduction of shorter preventive treatment regimens, and the expansion of the TB Free Nepal Initiative to 149 local levels. He emphasized that these achievements provide a strong foundation for the new NSP, which should build on successes, address persistent gaps, and integrate innovative approaches. Reaffirming WHO's full technical support, he called for the development of an evidence-based, ambitious, sustainable, and community-owned plan aligned with the End TB Strategy and SDG targets to accelerate progress towards a TB-Free Nepal.

Dr Rajendra Pant, former Director General and current SEAR regional technical advisory group for tuberculosis, stressed the need to highlight strategies to find the missing TB cases in the new NSP. He also mentioned that the federalization offers an opportunity to involve all 753 municipalities, and local leaders must be explicitly made accountable in the NSP as without them Nepal cannot reach anywhere close to ending TB. Drawing on his past experience with the TB Free Initiative, he highlighted that many local leaders are not yet sensitized. He called for prioritizing PMDT and PPM, with strong focus on active case finding given the current case detection rate is below 50%.

Dr Sarbesh Sharma, Director NCASC emphasized that the strategy must be context-specific matching the country's need and people-centered. He mentioned that HIV also needs an NSP and congratulated NTCC for starting the TB process. He cautioned that the "TB-free municipalities" goal may be overly ambitious and called for realistic target setting.

Dr. Bhim Sapkota, Health Coordination Division, observed that many strategic documents are overly ambitious and recommended that the NSP remain simple, context-specific, and resource-based. He stressed the importance of not neglecting the TB program and ensuring it reaches the local level with the support of development partners.

The Director General (DG) highlighted the alarming MDR-TB situation in Nepal and called for urgent focus in this area. He also emphasized addressing cross-border TB challenges and increasing private sector engagement. He reaffirmed that TB is a Priority 1 program and pledged full cooperation from his side.

Dr Shree Ram finally closed the opening session thanking all the distinguished guests for their valuable remarks and mentioned that their feedback will be addressed in the new NSPs.

1.2 Technical Presentations

Followed by the opening sessions there were technical presentations from NTCC and WHO. The first presentation was from Dr Vineet Bhatia, SEAR Regional Advisor for TB. He began with the video on translating global and regional commitments into action towards ending

tuberculosis in the WHO Southeast Asia Region. The video highlighted that the South-East Asia Region bears the highest global TB burden, accounting for over 45% of cases and 50% of deaths globally. It also mentioned how despite being a preventable and curable disease the disease continues to be a public health challenge with individuals, families and communities affected by the disease. The video also summarized the country efforts in ending TB within the region. After the video Mr. Bhatia shared progress in reducing missed cases and mortality and emphasized the importance of addressing social determinants like undernutrition and poverty. He discussed the Gandhinagar Declaration and UNHLM 2023 commitments, which call for multisectoral coordination, increased funding, and universal access to TB services.

Dr. Kenza Bennani, Team Lead for Communicable Diseases and Surveillance at WHO Nepal, provided guidance on strategic planning for TB. She emphasized the importance of aligning the NSP with broader health sector goals and international commitments. Dr. Bennani outlined the six-phase process for NSP development, including situation analysis, goal setting, activity planning, costing, monitoring, and resource mobilization. She stressed the need for stakeholder engagement, evidence-based decision-making, and integration with UHC and PHC agendas.

Dr. Salah-Eddine Ottmani, an independent consultant, elaborated on the key elements to develop a national strategic plan. He discussed the essential components of the NSP—core plan, operational plan, budget plan, monitoring and evaluation plan and technical assistance plan. Dr. Ottmani emphasized the importance of gap analysis, SMART objectives, and consistent numbering systems across plan components. He also provided examples of indicators and budgeting methods, reinforcing the need for rational planning.

Ms. Meera Hada, Medical Lab Technologist at NTCC, focused on the TB laboratory system. She presented the distribution and functionality of diagnostic centers, including 785 microscopy centers and 118 mWRD sites. Ms. Hada emphasized the expansion of GeneXpert machines and the need for improved utilization and maintenance. She discussed the challenges in laboratory operations, such as equipment calibration, supply chain issues, and human resource shortages. Her presentation also covered training programs, quality assurance mechanisms, and the role of provincial labs in supporting diagnostics.

Mr. Bir Bahadur Rawal, Chief of the Planning, Monitoring, Evaluation, Surveillance, and Research (PMESR) section at NTCC, presented the monitoring and evaluation framework of the NTP. He highlighted the use of digital platforms like DHIS2 and eTB Register for data collection and reporting. Mr. Rawal explained the categorization of indicators into impact, outcome, output, and process, and stressed the importance of data validation and quality assurance through PME workshops and supportive supervision. He also discussed the integration of TB data into national health information systems and its use in planning, budgeting, and logistics.

1.3 Introduction to Group work: SWOT analysis of the TB program

To facilitate a comprehensive and participatory assessment of Nepal's National Tuberculosis Program (NTP), a group work on SWOT analysis engaging approximately 60 participants was conducted. The group were divided into the five thematic groups. Each group comprised around 12 members and was tasked with conducting a SWOT analysis—identifying strengths, weaknesses, opportunities, and threats—based on their expertise and field experience.

- Group A and Group B focused on identifying the strengths of the TB program.
- Group C and Group D analyzed the weaknesses across various components of service delivery, diagnostics, governance, and community engagement.
- Group E explored the opportunities and threats, considering both internal and external factors influencing TB control efforts.

Each group was facilitated by a team from NTCC and WHO.

- Dr. Shree Ram Tiwari and Dr. Kenza Bennani facilitated Group A
- Dr Rabin Gautam supported the group B.
- Dr. Naveen Prakash Shah guided Group C.
- Mr. Bir Bahadur Rawal and Dr. Karma Gurung facilitated Group D.
- Dr. Vineet Bhatia, and Ms. Basundhara Sharma led discussions in Group E.

The team was allowed to discuss on their respective areas of work for 1.5 hours. The facilitation was supported with the help of guiding notes (Annex 2). The participants for the workshop are mentioned in Annex 3. These participants depending on their expertise were divided into different groups.

Day-II: Gap Analysis & Formulation of Strategic Goal & Objective

2.1 Findings from SWOT Analysis

The Day 2 began with the presentations by groups on SWOT analysis. Below is the summarization of the group work.

Group 1 and Group 2 presented the strengths of Nepal's National Tuberculosis Program (NTP), emphasizing robust leadership and governance. They highlighted strong political commitment across all tiers of government, the existence of a dedicated national structure (NTCC), and focal points at provincial and local levels. The program benefits from an enabling policy environment, updated guidelines (NSP, DS-TB, DR-TB), and institutionalized training systems. Human resources are well-distributed and supported by capacity-building initiatives. The logistics system ensures uninterrupted supply of TB drugs and diagnostics, including community-level distribution through DOTS centers. Information systems such as NTPMIS, HMIS/DHIS2 are interoperable and support effective recording, reporting, and surveillance. Financing is increasingly supported by domestic allocations and external partners. Service delivery is integrated into the broader health system, with targeted interventions like ACF, FAST, and TPT accessible nationwide. Public-private partnerships and community engagement are active, especially among high-risk groups. The use of modern diagnostic tools (mWRD, CAD X-ray/AI) and structured lab networks further strengthens the program.

Group 3 and Group 4 identified several weaknesses in the NTP. They noted gaps in human resources, including mismatches and frequent turnover, and the absence of dedicated units within NTCC for areas like childhood TB, research, and quality management. Coordination with stakeholders is often poor, and political commitment is not always reflected in budget allocations or program implementation. The NSP is not consistently followed, and there are funding gaps. Operational challenges include lack of adherence to treatment protocols in cross-border migration, insufficient socio-economic support, and unclear expansion and evaluation mechanisms for the TB-Free initiative. Preventive programs and implementation of comorbidity guidelines (TB-HIV, TB-DM) are inadequate. Procurement and supply management face issues with logistics and buffer stocks. Diagnostic services suffer from weak sample transportation networks and lack of guidelines for EP TB. Treatment delivery is hindered by unclear referral mechanisms and lack of expert consultation panels. Drug-resistant TB management is affected by high operating costs, low staff motivation, and poor ownership by health facilities. Monitoring and evaluation are weak, with data inconsistencies and limited analytical capacity. Patient support is lacking in nutrition, psychosocial care, and health insurance. Additional concerns include low advocacy at the local level, non-functional technical working groups, poor infection control, and insufficient budget allocations from provincial and local governments.

Group 5 presented on the opportunities and threats for the program. Key oppurtunities includes strong political commitment and alignment with national and international frameworks. There is also potential for multisectoral collaboration across ministries and government tiers, supported by development partners. The expansion of digital technologies, including AI, and prioritization of research and innovation in communicable diseases offer promising avenues. Integration of TB with other programs (HIV, nutrition, diabetes, senior citizens, prison health) and the federal structure's planning flexibility were seen as strengths. Linking DR TB patients to health insurance schemes was also noted as a positive development.

Threats include donor dependency, stigma and discrimination, political instability, and frequent leadership changes. Natural disasters and climate change pose risks to program continuity. Socioeconomic challenges such as poverty, migration, and cross-border movement complicate TB control efforts. The rising burden of antimicrobial resistance (AMR) and inconsistent prioritization by different levels of government were also flagged. Limited enrollment of private sector providers in health insurance schemes further threatens comprehensive TB care.

2.2 Group work on Gap Analysis

As part of the NSP development, the second activity on gap analysis was conducted on Day 2 to identify critical gaps in TB prevention, diagnosis, treatment and care. Before the group work Dr Salah Ottmani set the stage by outlining the foundational role of gap identification in the planning process. Key mentions in his presentation were gap analysis helping to understand existing barriers to overcome, identify strategic interventions that has not been considered in the NTP strategy and help identify priority action areas.

In order to carry out the activity seven thematic groups were formed, each addressing a specific domain of the TB response. The aim of the group work was to identify key gaps within these domains. To streamline the group, work a set of guiding questionnaires were developed for each thematic groups with participants free to add any missing components within it.

The seven thematic groups identified were:

Group 1: Programmatic Management
Group 2: Detection, Diagnosis and Treatment of TB
Group 3: Involving All Care Providers in NTP Services
Group 4: PMDT/MDR-TB
Group 5: TB/HIV and Comorbidities
Group 6: Contact Investigation, Other High-Risk Groups, and PMTPT

Group 7: Monitoring and Evaluation System and Operational Research

Each group was led and facilitated by:

Group 1: Team Leader – Dr. Kenza Bennani; Facilitator – Dr. Rajendra Pant

Group 2: Team Leader – Dr. Sunil Raj Gautam; Facilitator – Ms. Meera Hada

Group 3: Team Leader – Mr. Gyan Bahadur Basnet; Facilitator – Dr. Jhabindra Bhandari

Group 4: Team Leader – Dr. Naveen Prakash Shah; Facilitator – Dr. Karma Gurung

Group 5: Team Leader – Dr. Suresh Mehata; Facilitator – Mr Dinesh Rupakheti

Group 6: Team Leader – Dr. Ashish Shrestha; Facilitator – Ms. Basundhara Sharma

Group 7: Team Leader – Mr. Bir Bahadur Rawal; Facilitator – Mr. Ratna Bahadur Bhattarai

After the group work each group presented on the gaps identified in their respective thematic areas:

2.2.1 Findings from Gap Analysis

Group 1 identified gaps in programmatic management of TB prevention, care, and control. While a national strategy exists, clarity and structure are lacking at provincial and local levels. Human resources are insufficient and poorly defined. Advocacy and dissemination of guidelines are limited, and capacity-building efforts are inadequate. Monitoring and supervision mechanisms are weak, and coordination with partners is insufficient. Funding is largely federal with minimal local level contributions. Procurement and delivery mechanisms face logistical challenges.

Group 2 found gaps in detection, diagnosis, and treatment. Referral mechanisms are unstructured, and presumptive TB case identification is poor. IEC materials are outdated, and community-level integration is weak. Treatment is facility-bound with limited trust in community care. Diagnostic services face geographical and biosafety challenges, and private sector engagement is minimal.

Group 3 highlighted insufficient multisectoral engagement and poor integration with social protection schemes. Collaboration with academia and professional associations is weak, and compliance with treatment protocols is inconsistent.

Group 4 addressed gaps in PMDT. Screening with mWRD is limited, DR centers are poorly linked, and trained personnel are lacking. Stigma persists, and PMDT services are unavailable locally. DST services face HR and logistical challenges. Care and treatment gaps include lack of DR TB wards, buffer stocks, and psychosocial support. Infrastructure is inadequate, and staff motivation is low.

Group 5 examined gaps in TB/HIV and comorbidities. Collaboration guidelines are poorly implemented, TPT drugs are insufficient, and joint supervision is lacking. Reporting systems are fragmented, and integration with NCD and mental health programs is absent.

Group 6 found gaps in contact investigation and high-risk group interventions. TPT is limited, contact tracing policies are inconsistently followed, and DR TB tracing is weak. Coordination issues persist, and systematic screening in prisons is lacking. ACF algorithms are not uniformly applied, and infection control standards are not enforced.

Group 7 identified gaps in monitoring, evaluation, and research. Burden estimation is absent at sub-national levels, case definitions are inconsistent, and data tools are poor. Budget allocations for M&E and research are insufficient, and collaboration with research institutions is undefined. Data protection policies are absent, and server capacity is inadequate.

2.3 Goal and objectives for the NSP

Followed by the group work, Dr Salah-Eddine Ottmani presented on the key observations on TB Situation in Nepal and what should be the goal for Nepal for the NSP. He highlighted on the WHO estimates on incidence, mortality in 2024 along with the 66% funding gap the country was facing in 2024 for TB program. Despite this, he acknowledged that the TB programs remain a health priority in Nepal, with strong visibility and a well-structured National Tuberculosis Control Program covering all the municipalities along with the robust laboratory network. He also mentioned that Nepal has adopted all the WHO-recommended strategies (DOTS, Stop TB, End TB) and has built significant capacity in the country.

The presentation emphasized the importance of selecting appropriate indicators to measure impact—mortality being the most relevant for public health outcomes as decline in mortality can be shown easily while for other indicators it takes a long time. While the treatment success rate for drug-sensitive TB has consistently remained high (90–92% from 2012 to 2024), only 54% of estimated TB cases were notified in 2024. Thus, with the current treatment coverage it unlikely to see any decrease in the mortality. He however showed that increasing tb case notification and maintaining current high success rate can contribute to decrease in the mortality. He mentioned that if 80% of the estimated TB cases in Nepal are diagnosed and 90% of those receive successful treatment, then approximately 72% of all incident TB cases in the population would be effectively managed and unlikely to die from TB. This level of coverage and treatment success could lead to a significant reduction in TB mortality, demonstrating the potential impact of improved case detection and sustained treatment outcomes. Other factors that support mortality as the goal were: expansion of TPT services in high-risk groups, and good TB/HIV program within the country. He emphasized that inorder to implement these actions, significant number of interventions, activities and sub-activities need to be rolled out. For this, appropriate coordination and programmatic management are crucial. Therefore, the technical and managerial capacities need to be reinforced and sustained within the NTP network.

Thus, at the end of his presentation following goals and objectives were proposed.

Proposed Goal: To reduce TB mortality rate by 45% in 2031 compared to 2015

Proposed Objectives:

Objective 1: To increase the number of notified new TB episodes to at least 53,000 by 2031 and to maintain TB treatment success rate at more than 90% as it is presently.

Objective 2: To increase the number of detected and treated MDR/RR-TB cases from 633 cases in 2024 to at least 1,530 by 2031 and their treatment success rate to at least 80% from 2024 onwards.

Objective 3: To maintain the annual proportion of notified TB cases with known HIV status at more than 90% and to treat every year 100% of identified TB/HIV on ART during the period covered by the NSP.

Objective 4: To improve and enhance TB prevention through i) tuberculosis preventive therapy of, at least, 80% of household contacts (108,000 individuals) and 400 PLHIV with no active by 3031 and ii) strengthening infection control.

Objective 5: To improve and strengthen the governance and the programmatic management capacities for TB services in NTP and municipalities.

Objective 6: To preserve the key TB prevention, care and control services in the areas in acute phase of complex emergency.

Suggestions after the presentation

- Participants suggested whether the incidence of TB should also be reflected within the overall goal, in addition to the mortality.

- Questions were raised on the necessity of having a separate objective on TB/HIV, considering that HIV is not among the major burdens in the country.

- There was a recommendation to consider the inclusion of social determinants of health explicitly within the objectives to better address upstream factors influencing TB.

- Participants highlighted the need to reflect other comorbidities beyond HIV in the objectives, given their increasing relevance in TB care.

- It was recommended that the targets be made more ambitious, aligning them more closely with global commitments.

Day-III: Defining Strategic Interventions & Activities

3.1 Discussion on the projection basis and the preliminary projections of the new NSP

This is the first session on day 3rd of the workshop. Dr. Salah Ottmani shared the projection basis and the preliminary projections for the new NSP. Discussions were made in each of the indicators among the participants for a common understanding and consensus on the calculated projections for new NSP. Dr. Salah explained the importance of each indicator for the program and, how the numbers were derived taking into consideration the estimates from WHO and the programmatic data. Few reported data needs revision while most of the projections were well described among the participants. It was decided that the projections will again be reviewed in the NTCC in a small team and a final projection sheet will be prepared and shared by Dr. Salah for the new NSP.

Key Queries and Responses discussed were:

- Increase in case notifications resulting in the decline of Incidence Rate: It was discussed and clarified to the participants that an increase in notifications does not always results to the decline in incidence rate because at the same time, population might be increasing. The decline in incidence rate should be modeled. However, a threshold for the increase in case notification can be targeted and after the threshold is met, a sharp decline in incidence can be predicted. With which projections are being formulated.
- Dr. Salah highlighted that the treatment coverage and progress in rates for the past 3 years are important in making projections. Also, the proportion of relapse among new episode of cases, proportion of all retreatment cases among all notified cases and the proportion of relapse among all retreatment cases are also important indicators because, the change in these three indicators is reflected in the case detection. In Nepal, the proportion of relapse among new episode of cases is around 7% and proportion of all retreatment cases among all notified is around 8 or 9% each year which is a good progress.
- There was a query from a participant that a new NSP should aim for achieving 100% rapid testing of all people with TB. It was discussed and clarified from Dr. Salah and Dr. Kenza that; 100% rapid testing does not mean that those tested are the confirmed cases. What is important is the bacteriological confirmation of all pulmonary TB with rapid tests. So, the target for this indicator was kept maintaining at 80% in the projections considering the program progress of reaching more than 75% for many years. Also, Dr. Salah stressed that an increased proportion of Extra-pulmonary (EP) TB should also be taken into consideration for discussion while making projections

as there is no clearly established guideline for diagnosis of EP. Most of the diagnosis are based on histopathology which is not a confirmation instead a probable case.

- There was also a discussion on MDR TB incidence rate, prevalence of MDR among new and previously treated cases. The query was about the high estimation for MDR TB in Nepal by WHO. Proportion of MDR among new cases (4%) as estimated by WHO was discussed as high from the participants compared to the results of the DR TB survey in 2024 which showed 2.2%. Dr. Kenza shared that the new estimations for MDR TB had been decreased in the updated WHO global TB profile of Nepal taking into considerations the results from DRS.
- Further discussions included pretreatment loss to follow up and high proportion of Pre-XDR and XDR among MDR in Nepal. Dr Salah emphasized that the calculations for the target on treating patients out of estimated MDR TB incident cases by the end of new NSP comes around 54% that also needed further revision.
- It was also discussed that the calculation of the number of required TB microscopy laboratories should not be based on the population only, instead, it should also consider other factors such as geographical terrains in the context of Nepal that might result in different numbers. And the national guidelines should be considered for determining index cases. The national guidelines consider contact investigation of bacteriologically confirmed pulmonary TB, PLHIV and children below 15 years. Also, for the TB preventive treatment for all household contacts as per the national TPT protocol.

3.2 Discussion on strategic interventions and activities

Group 1 focused on Objective 1: increasing notified TB episodes to 53,000 by 2031 and maintaining treatment success above 90%. They emphasized health system strengthening (once center of excellence per province, TB hospital), intensified facility-based case finding, and active case finding strategies in the communities along with the involvement of private/non-GoN and community engagement as key interventions to meet the objective 1. Strategies included establishing centers of excellence, expanding diagnostics, integrating TB with other health programs, and mobilizing communities for SBCC. Activities proposed to strengthen diagnostic services were expansion of mWRD sites, QA/QC of ACF samples, strengthening of DMC centers.

Group 2, led by Dr. Sunil Raj Gautam and team, addressed Objective 2: increasing MDR/RR TB detection and treatment to 1,530 cases by 2031 with 80% success. The group proposed universal DST access, genotypic DST expansion, reducing initial loss to follow up of MDR TB patients, genotypic DST to second line drugs including newer and repurposed drugs and expansion of DR centers along with strengthening aDSM and patient support program to MDR-TB patients as key interventions to meet the objective.

Group 3, presented by Mr. Ratna Bahadur Bhattarai, focused on Objective 3: the annual proportion of notified TB cases with known HIV status at more than 90% and to treat every year 100% of identified TB/HIV on ART during the period covered by the NSP. The group suggested strengthening the collaboration between TB and HIV programs, improving the screening and testing of TB patients for HIV, ensuring the ART enrollment for all TB-HIV coinfected patients. emphasized TB-HIV program collaboration, improved screening, ART enrollment, TPT enhancement, and social support. Data management and community-led monitoring were also emphasized as intervention during the presentation.

Group 4, led by Dr. Shree Ram Tiwari and presented by Mr. Laxman Basaula, addressed Objective 4: enhancing TB prevention through TPT and infection control. Key strategic interventions suggested included advocacy, political commitment by three tiers of government, contact tracing of all TB contacts, service expansion, capacity building, and infrastructure development. Surveillance and research were also suggested to be strengthened through digital tools and evidence-based practices.

Group 5, including Dr. Naveen Prakash Shah and Dr. Rajendra Pant, focused on Objective 5: improving governance and programmatic management. Recommendations included clear

job descriptions, stable leadership, adequate resources, provincial and local level focal persons, municipal partnerships, school health nurse involvement, buffer stock management, advocacy, community monitoring, academic collaboration, and multisectoral coordination.

3.3 Closing Ceremony

Followed by the presentations by the group, closing session was done in the presence of Mr. Pradip Paudel, Honorable Minister of Health and Population as chief guest of the event. The closing was chaired by Dr Shree Ram Tiwari with guest as Director, Management Division and WHO representative. Mr Bir Rawal, chief of PMESR section facilitated the closing session.

Dr. Shree Ram Tiwari, Director of the National Tuberculosis Control Center (NTCC), provided a comprehensive summary of the three-day stakeholder consultation workshop held from 28–30 July 2025 in Kathmandu. He highlighted the structured process followed during the workshop, which included expert presentations, group work on SWOT and gap analysis, formulation of strategic goals and SMART objectives, and identification of key interventions for the upcoming National Strategic Plan (NSP) for TB (2026/27–2030/31). He highlighted that there was active participation of 86 stakeholders from three tiers of government, development partners and media personnel and outlined the next steps including finalization, costing and endorsement of the NSP.

After this there was handing over of 8 Truenat machines from Dr Pawan Jung Rayamajhi, Director Management Division to the NTCC Director with the aim to strengthen NTP diagnosis capacity in the country.

From the participants, Mr. Gyan Bahadur Basnet provided his remarks for the three days program from the overall participants. He mentioned that the program was overall successful and highlighted that there are lot of helping hands for the program at the federal level and emphasized the need of coordination and collaboration between all the stakeholders to address the challenges within the program. He also mentioned the need of having provincial consultations for the development of NSP. Further to this he outlined the persistent challenges within the health system and need of addressing it collectively, particularly the issues of motivation among the health care workers.

In his remarks as chief guest, Mr. Pradip Paudel, Hon Minister of Health and Population acknowledged Nepal's achievements in TB control while emphasizing the persistent challenges in service delivery, particularly difficult working conditions for frontline health workers. He highlighted the need for dignified working conditions and job security for health staff, stronger coordination among federal, provincial, and local levels, effective health insurance coverage for all citizens, and a forward-looking five-year strategic plan based on

lessons learned and cost-effective interventions. He stressed that health is a fundamental right and called for collective political commitment and leadership to ensure that strategies translate into real improvements in people's lives.

The program was formally closed by the NTCC Director thanking all the participants for their contribution and emphasized that inputs gathered during the meeting will be addressed in the NSP.

Annexes

Annex 1: PRIME-TB Roadmap for Nepal

S.N	Activities	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
1	Planning and Preparation											
2	Situational Analysis											
2.1	**TB Free Assessment including PMDT assessment**											
2.1.1	Development of the concept note											
2.1.2	Preparatory meetings with NTCC team											
2.1.3	Desk review of TB Free Initiative- implementation guideline/SOPs, monitoring and supervision reports											
2.1.4	Development of Tools (Questionnaire and checklist) for collecting data and information for this review.											
2.1.5	Previsit meeting at NTCC (tools orientation)											
2.1.6	Field Assessment											
2.1.7	Debriefing meeting											
2.1.8	Submission of the final report											
3	Evidence Consolidation											
3.1	Annual Review Workshop (3 days)											
4	Stakeholder Consultation Workshop											
4.1	TB Situation analysis and SWOT analysis											
4.2	Formulation of goals, objective and interventions											
4.3	Strategic Intervention Identification & Prioritization											
4.4	Formulation of activities/sub activities											
5	Development of NSP/ M&E plan/ operational plan/ technical TA plan											
6	Costing plan											
6.1	IHT Training											
6.2	Total Cost estimation for NSP											
7	Submission of final NSP draft to MoHP											

Annex 2: Suggested areas for discussion on the SWOT analysis (guiding framework)

1. Political commitment
2. Programmatic management capacities
3. Training system, including initial training
4. Presumed TB case identification and management, including referral system
5. Diagnosis capacities and services, including for EPTB
6. TB treatment services' provision
7. TB drugs' management
8. Childhood TB
9. MDR-TB
10. TB/HIV
11. PPM
12. Prisoners
13. Co-morbidities
14. Contact investigation
15. Refugees, IDPs or migrants
16. Organization of TB screening in other identified high-risk groups
17. Provision of TB prevention, care and control services for specific vulnerable populations
18. LTBI and TPT
19. Infection control
20. Community involvement
21. Ethics and stigmatization
22. Monitoring and evaluation
23. Data analysis procedures and capacities

Annex 3: Participants list from the event

S.N	Name	Designation	Institution
1	Dr. Tanka Prasad Barakoti	Director General	DoHS
2	Dr. Bhim Prasad Sapkota	Division Chief HCD	MoHP
3	Dr. Shree Ram Tiwari	Director	NTCC
4	Dr. Sarbesh Sharma	Director	NCASC
5	Dr. Rajesh Pandev	WHO Representative	WHO
6	Dr. Rajendra Pant	Consultant	Freelance
7	Dr. Naveen Prakash Shah	Chief Consultant	NTCC
8	Dr. Kenza Bennani	TL, CDS	WHO
9	Dr. Sallah Ottmani	Consultant	WHO
10	Dr. Khagendra Bahadur Bam	Acting Director	HD
11	Bir Bahadur Rawal	Chief PMESR	NTCC
12	Dr. Sushil Koirala	CR Noora	Noora Health
13	Dr. Karma Gurung	TB Analyst	UNDP
14	Dr. Mahesh Karmacharya	Orthosurgeon	NTCC
15	Saroj Kalyan Shrestha	Freelancer	PPM expert
16	Dinesh Rupakheti	PHA	PHO Chitwan
17	Ramsharan Gopali	ED	Jantra
18	Sujan Govind Amatya	Communication officer	WHO
19	Nahli Bajracharya	Sr. PHO Division Chief	KMC Health Department
20	Sarita Maharjan	Chief Public Health Section	Lalitpur Metropolitan
21	Ishwori Prasad Bhusal	LTI	NTCC
22	Sreska Shrestha	Deputy Chief MLT	NPHL
23	Lilee Shrestha	Chief Medical Lan Technologist	NPHL
24	Saroj Neupane	Director	PHD Madesh
25	Santosh Sharma	PHI	NTCC
26	Om Baral	PSM Analyst	UNDP
27	Nirmal Ghimire	PHA	PHD Bagmati
28	Dr. Suresh Mehata	Director	PHLMC Koshi
29	Dr. Man Bahadur KC	Me.SU	NCASC
30	Jitendra Kumar Karn	PTLO	PHD Bagmati
31	Ratna Bhattari	Expert	Freelancer
32	Ravi Kant Mishra	S. PHO	MoHP
33	Dr. Sunil Raj Gautam	Acting Director	PTCC
34	Rajesh Kumar Gupta	Director	PPHL Lumbini
35	Gajendra Yadhav	TB Leprosy Supervisor	H.O Dang

S.N	Name	Designation	Institution
36	Gyan Bahadur Basnet	Director	PHD Koshi
37	Bhabana Bhandari	Community Nursing	Sudurpaschim Province
38	Shyam Kumar Olee	HA	NTCC
39	Daulat Bikram Tuladhar	PHI	NTCC
40	Nilaramba Adhikari	PHA	MoHP Madesh
41	Bhakta Bahadur Khadka	S. Officer	NTCC
42	Budhi Katel	Editor	Media Partner
43	Meera Hada	Medical Technologist	NTCC
44	Tulsi Prasad Guragai	TLO	PHD Dhamkuta
45	Shashank Kalauni	Team Leader	MPDS
46	Dr. Ashish Shrestha	Expert	Freelancer
47	Dr. Achyut Sharma Neupane	Health Administrator	PHD Lumbini
48	Kamal Dhakal	Clinic Incharge	TB Nepal
49	Netra Neupane	PHI	NTCC
50	Vineet Bhatia	Regional Advisor TB	WHO SEARO
51	Lok Raj Joshi	M and E Coordinator	SCI
52	Shivashankar Mahatto	PHO	NTCC
53	Susmita Gyawali	PHO	NTCC
54	Sanjaya Shrestha	PM	NATA
55	Dr. Bhagawan Maharjan	TB Expert	Freelancer
56	Dr. Gokul Mishra	TB Expert	Freelancer
57	Ganesh Tamang	Under Secretary	NTCC
58	Khem Chapagain	L.D.	DoHS
59	Sushil Prasad Nepal	Computer officer	MoHP
60	Manoj Prasad Ojha	TLO	HD Doti
61	Laxman Basaula	TLO	PHO Kaski
62	Gyanendra Shrestha	NPC	BNMT
11	Dr. Jhabendra BHandari	Consultant	UN
64	Thuma Pun	Nursing Officer	NTCC
65	Basundhara Sharma	S.PHO	NTCC
66	Shikha Basnet	PHO	NTCC
67	Mukesh Kumar Micklum	RI	NTCC
68	Padam Bahadur KC	TB/Leprosy Officer	PHSD Karnali
69	Om Raj Acharya	Med. Tech	HD Karnali
70	Barsha Thapa	TA for TB	WHO
71	Dr. Rabin Gautam	NPO for TB	WHO
72	Prasant V. Shahi	TA for data and research	WHO

Annex 4: Pictures from the event


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२०८३/८४-२०८७/८८
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