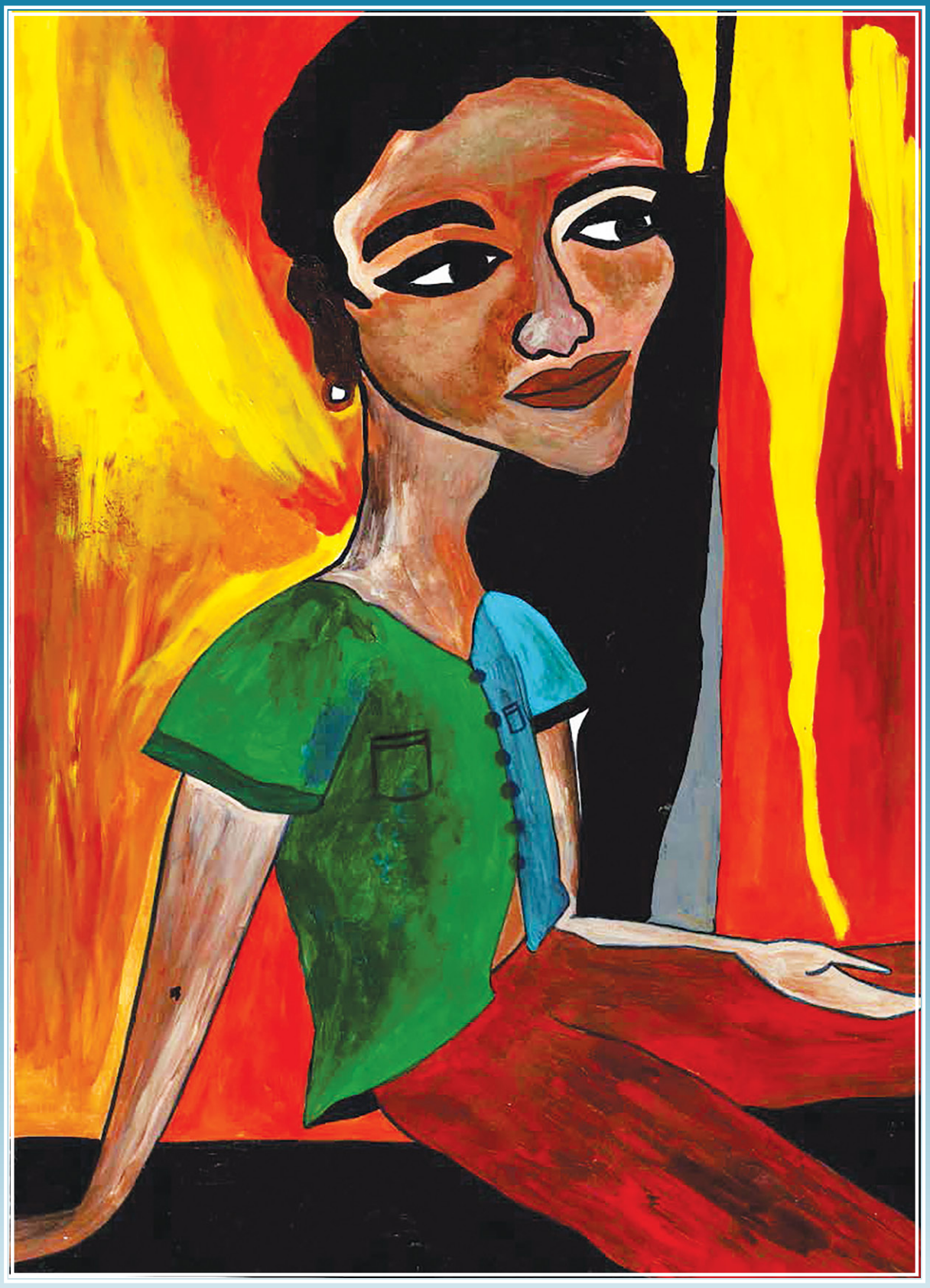


REFLECTIONS

Lessons Learnt from the Tuberculosis Projects in India (2015–2025)

HUMANA
PEOPLE TO PEOPLE INDIA

Summary

Between 2015 and 2025, Humana People to People India (HPPI) implemented multiple tuberculosis (TB) projects reaching over 4 million people, and focusing on high-risk and hard-to-reach communities such as homeless communities, migrants, slum dwellers, people living with HIV, and other vulnerable populations.

Early integration of TB screening into 20 community health and development projects (2015–2017) screened 55,994 individuals and detected 219 people with TB (PwTB). Project Axshya (2016–2017) screened 3 million slum dwellers in Delhi identifying TB cases at a positivity rate of 580 per 100,000 population. Targeted outreach to Delhi's homeless communities (2017–2021) screened 32,920 people and detected 323 PwTB, but faced high lost-to-follow-up (around 30%) and mortality (around 23%).

The flagship Project LEAD (2023–2025) in four metropolitan cities reached 609,102 people, detected 3,186 PwTB, and maintained treatment initiation rates above 96%. Community-led models such as TASA (TB Affected Street Activists), (2023–2024) trained 24 TB survivors to screen 7,994 homeless individuals, and SWEET (Street Women Empowered and Engaged to Stop TB), (2024–2025) mobilised 20 TASAs and 100 SAHELI members to reach 1,946 women from homeless communities, focusing on gender-responsive services.

CSR-supported projects, such as those in the slum areas of Malad district in Mumbai and in the chemical industrial hub of Navi Mumbai, and TB-HIV integrated interventions under the Link Worker Scheme and Targeted Intervention projects further expanded coverage. Key strategies included active case finding for mobile populations, sputum collection and transportation, accompanied referrals, socio-economic support (such as IDs, bank accounts, and welfare schemes), and multi-sectoral engagement.

We have learnt that the persistently high TB burden underscores the need for close follow-up to reduce high lost-to-follow-up rates. Dedicated field teams, community empowerment, and structural interventions are essential to ensure treatment adherence and completion among marginalised and vulnerable people with TB. HPPI recommends expanding saturated screening coverage, formalising NGO partnerships under NTEP, and mobilising CSR and other funds to ensure long-term progress towards TB elimination.

REFLECTIONS

Lessons Learnt from the Tuberculosis Projects in India

(2015–2025)

Contents

Abbreviations and Acronyms

ACF	Active Case Finding
AI	Artificial Intelligence
AIDS	Acquired Immune Deficiency Syndrome
APPI	Azim Premji Philanthropic Initiative
ART	Anti-retroviral Treatment
AWC	Anganwadi Centre
CBO	Community Based Organisation
CDP	Community Development Project
CFCS	Challenge Facility Civil Society
CFO	City Field Officer
CSO	Civil Society Organisation
CSR	Corporate Social Responsibility
CTD	Central TB Division
CTO	City Tuberculosis Officer
CXR	Chest X-Ray
DBT	Direct Bank Transfer
DRTB	Drug Resistant Tuberculosis
DTO	District TB Officer
DOT	Directly Observed Treatment
DUSIB	Delhi Urban Shelter Improvement Board
ESI	Employees State Insurance
FICCI	Federation of Indian Chambers of Commerce & Industry
FSW	Female Sex Workers
GFATM	Global Fund to fight AIDS TB Malaria
HF	Health Facility
HHC	Household Contact
HIV	Human Immuno-deficiency Virus
HPPI	Humana People to People India
HRC	Homeless Resource Centre
HRG	High Risk Groups
HRSC	Homeless Resource and Service Centre

JSI	John Snow Institute
KVP	Key and Vulnerable Population
LEAD	Levering Engaging Advocating to Disrupt TB transmission
LTFU	Lost To Follow Up
LWS	Link Workers Scheme
MCH	Mother and Child Health
MoHFW	Ministry of Health & Family Welfare
MoU	Memorandum of Understanding
MSM	Men who have sex with men
MTB	Mycobacterium Tuberculosis
NAAT	Nucleic Acid Amplification Test
NACP	National AIDS Control Programme
NATCON	National Conference on TB and Allied Diseases
NGO	Non Government Organisation
NHM	National Health Mission
NNS	Number Needed to Screen to detect one PwTB
NPY	Nikshay Poshan Yojona
NTEP	National TB Elimination Programme
PIP	Programme Implementation Plan
PLHIV	People Living with HIV
PMU	Project Management Unit
PP	Private Provider
PWID	People who inject drugs
PwTB	People with TB
SCT	Sputum Collection and Transportation
STO	State Tuberculosis Officer
SWEET	Street Women Engaged and Empowered to fight Tuberculosis
TASA	Tuberculosis Affected Street Activist
TB	Tuberculosis
TCE	Total Control of Epidemic
TI	Targeted Intervention
TPT	Tuberculosis Preventive Treatment
Union	International Union Against Tuberculosis and Lung Diseases
USAID	United States Agency for International Development
WHO	World Health Organization

CHAPTER 1

About Humana People to People India

Humana People to People India (HPPI) is a national-level development organisation in India, registered in 1998. It has a multi-state presence in the areas of health, education, environment, livelihood and community development aiming at creating development together with marginalised people in rural and urban India. Its current geographical locations include 121 districts across 15 states in India, namely Rajasthan, Haryana, Himachal Pradesh, Uttar Pradesh, Madhya Pradesh, Bihar, Maharashtra, Karnataka, Odisha, West Bengal, Jharkhand, Chhattisgarh, Telangana, Assam and Delhi. HPPI reached out around 3.4 million people between 2023–24.[1]

We work with public and private partners and with the people in affected communities at the center as important actors for creating sustainable solutions.

Health activities of HPPI

Health is one of the major programme areas of HPPI. The health-projects focus mostly on elimination of chronic communicable diseases like TB and HIV, prevention of and/or control of non-communicable diseases like diabetes, and providing basic Reproductive and Child Health (RCH) services, overall targeting the underprivileged, high-risk, hard-to-reach and marginalised communities.

HPPI's health projects stand on four primary operational pillars;

- Conducting active disease screening in high-risk communities
- Facilitating diagnostic and treatment services at local public health facilities
- Raising community awareness and promoting engagement with national health and disease control programmes as key stakeholders
- Advocating for a more responsive healthcare and patient-support system

Website: www.humana-india.org

[1]https://humana-india.org/about-us/

CHAPTER 2

The Situation of TB in India

Tuberculosis continues to be a major public health hazard of India. India's efforts to ensure early detection and treatment initiation, along with a host of community engagement efforts has resulted in a decline of 16% in TB incidence (new cases emerging each year) and a 18% reduction in mortality due to TB, since 2015. However, the country still notifies maximum number of TB patients in the world (2.5 million people detected with TB (PwTB) were notified in 2023; 26% of global burden), maximum number of people detected with Drug-Resistant TB (DRTB) in the world (63,929 patients were notified in 2023; 27% of the global burden)[2], and second highest number of TB/HIV co-infected patients in the world after South Africa (34,476 patients were notified in 2023; 5.2% of the global burden). 85,231 TB patients died in 2022[3].

The Central TB Division (CTD), Ministry of Health & Family Welfare (MoHFW) of India has identified key and vulnerable population (KVP) in the country, who have greater chance of having TB due to cultural, social and geographical factors. Providing high quality screening, diagnostic, and treatment services is a high-priority intervention for the CTD[4]. It is pertinent to mention here that CTD also recognised the critical roles of the civil society partners to reach, and serve the KVP, and bring them under the services of the National Tuberculosis Elimination Programme (NTEP).

[2]Global TB Report 2024, India TB Report 2024
[3]India TB Report 2024
[4]National Strategic Plan of TB elimination, National TB Elimination Program of India (2020 – 2025)

CHAPTER 3

Responses of Humana People to People India to Support India's Efforts towards TB Elimination

For the last several years, HPPI has established itself as one of the major civil society partners of the NTEP of India. It implemented several TB projects, mostly in Delhi, and in few other metropolitan cities of India. HPPI's contribution and expertise in tackling TB within the urban-based, high-risk, and hard-to-reach population such as homeless population, migratory population, and people living in the unauthorised slums has been appreciated and acclaimed by the Ministry of Health and other key stakeholders in country.

The key approaches of HPPI's overall TB interventions remained to be;

- Facilitate the reach and access of the KVP to the services of the NTEP of India
- Support their access to equity of service utilisation, promote restoration of human rights, advance establishing gender equity, and enhance civic entitlements
- Empower the TB survivors (TB champions) and other people affected by TB and capacitate them as community support persons
- Leverage on multi-sectoral engagement and collaboration to strengthen comprehensive support systems for the marginalised, and underprivileged people with TB

HPPI has navigated to the current stage after several phases of TB interventions which started in 2015, and each of those phases rendered the organisation critical lessons to move to the subsequent phases with exponential growth of the organisational learnings.

CHAPTER 4

Purpose of the Document

This document describes the lessons learnt in each of the TB projects implemented by HPPI between 2015 till 2025. It also contains project performance reports, project evaluation reports and past conference-abstracts written on the key project-findings as the important reference materials.

Purpose of the document:

1) To chronologically document and present the lessons learned from various TB projects, and share them with the National Tuberculosis Elimination Programme (NTEP) and other key stakeholders across the country
2) To systematically arrange and organise project-specific experiences that have evolved over the past decade (2015–2025)
3) To establish a TB knowledge hub within the organisation, serving as a resource for future project development, scientific writing, and abstract submissions.

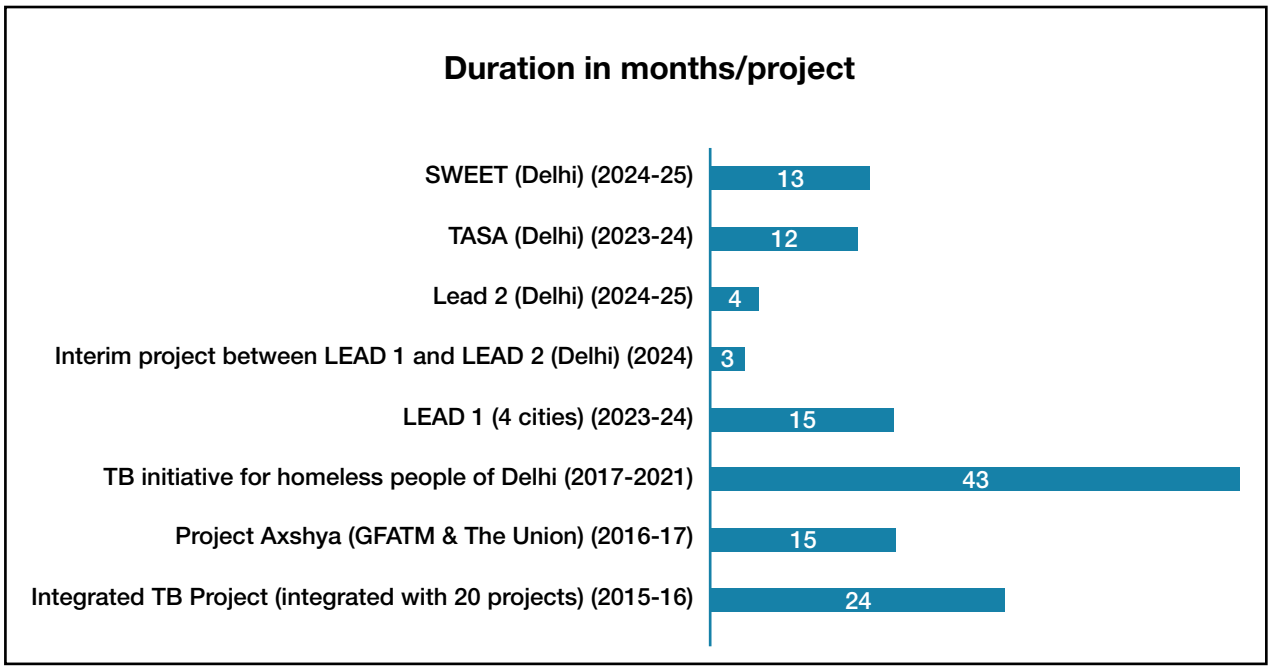
CHAPTER 5

Evolution of Humana People to People India's Interventions Against TB

Chronology of Events

HPPI started its tuberculosis (TB) interventions in 2014–15, integrating TB-related activities into its community development and education projects across both rural and urban settings. Since then, we have implemented several small- to medium-scale TB projects, primarily in Delhi and a few other metropolitan cities in India. These initiatives have focused on urban high-risk and hard-to-reach populations, including homeless individuals, migrant communities, and residents of unauthorised slums.

Graph 1: TB Projects of HPPI (2015 – 2025)



Additionally, HPPI,

1) Implemented TB projects in partnership with several Corporate Social Responsibility (CSR) partners between 2022–2025.

2) Provided TB screening and treatment support including TB preventive treatment to the People Living with HIV (PLHIV)) and HIV High Risk Groups (HRGs) who were detected and enrolled in its HIV projects across the country.

CHAPTER 6

Integrated TB Activities in the existing Health and Community Development Projects

(2015–2017)

In early 2015, HPPI adopted an operational research approach to test the TB integration strategies and interventions with its existing health (HIV and MCH), and Community Development Projects (CDPs). These projects reached and supported poor, underprivileged, and marginalised population whose profiles matched with the key population identified and described by the Stop TB Partnership (PLHIV, tribal groups, urban poor, homeless, people living in slums)[5]. Around 20 such projects were selected in the states of Delhi, Rajasthan, Madhya Pradesh and Haryana, where basic TB interventions like symptomatic screening in awareness session, identification of presumptive cases, and their referrals to the local Designated Microscopy Centres (DMCs) of Revised National TB Control Programme (RNTCP) were integrated. One existing field-staff of each of the projects was selected as the TB point-person of the project. The TB-point persons and the respective project managers received a 5-day TB training at the HPPI HQ.

Table 1: Key results of the projects

Project performances	Rural Projects	Urban Projects
Total people informed about TB	880,000	272,570
Total people screened for TB	27,021 (3%)	28,973 (11%)
Presumptive cases detected	1,327 (5%)	418 (1.4%)
Presumptive cases tested	433 (33%)	169 (40%)
PwTB detected	170 (40%)	49 (29%)
PwTB initiated on treatment	155 (91%)	42 (86%)

Detailed, project-wise data is available in **Annexure A**

[5]Stop TB Partnership (https://www.stoptb.org/our-approach).

Key findings

- Symptomatic TB screening was conducted within a small proportion of those who were provided TB information, rural 3%, urban 11%
- Presumptive case detection rate was higher in rural projects
- Presumptive testing rate was low both in rural and urban projects
- Positivity rate and treatment initiation rate was high in both rural and urban projects

LESSONS LEARNT

- Programmatic integration of TB with other health and development projects is feasible
- Referrals to Designated Microscopy Centres (DMCs) without adequate follow-up resulted in a low testing rate and high lost-to-follow-up. Sputum collection and transportation could have been a more effective strategy to improve the testing rate.
- Operational issues could have been better addressed with the addition of field officers exclusively dedicated to TB activities.
- A high positivity rate was observed in both rural and urban projects, highlighting the importance of targeted TB interventions in high-risk communities. This was the most significant learning from the integrated approach.

CHAPTER 7

Project Axshya

(2016–2017)

HPPI implemented Project Axshya in Delhi in collaboration and technical assistance from the International Union against Tuberculosis and Lung Diseases (The Union), funded by the Global Fund to fight AIDS TB Malaria (GFATM).

The Project aimed to enhance TB case detection in the people living in urban slums through symptomatic screening and Sputum Collection and Transportation (SCT), and accompanied referrals to the chest-clinics, along with ensuring treatment adherence and successful completion through flexible DOT and TB Kiosk programme at the chest-clinics. Axshya was implemented by a team of full-time mentors and part-time incentive paid community volunteers.

Key results[6]

- The outreach activities, led by the field-officers of HPPI, symptomatically screened around 3 million slum-dwellers of Delhi in less than one year's time. However, presumptive detection rate remained less than 1% due to poor quality symptomatic screening in the project
- Testing rate was around 66%, positivity rate was around 15% (580 per 100,000 population), the positivity rate in the slum dwellers was high.
- The treatment support and Kiosk programme in collaboration with the chest-clinics showed enhancement of treatment adherence and successful treatment completion

[6]Project Axshya Evaluation Document

LESSONS LEARNT

- The Project demonstrated that high screening coverage can be achieved with the motivated and dynamic field-officers.
- Presumptive case detection rate could maybe have been improved by quality symptomatic screening (this might have been compromised in the Project due to high screening targets and incentives based payment).
- Sputum collection and transportation and accompanied referrals played a key role to considerably increase the testing rate.
- Institutional and intensive treatment education support programme was key to ensure adherence and successful treatment completion among the key vulnerable population.

CHAPTER 8

TB Initiatives for the People from Homeless Community in Delhi

(2017–2021)

HPPI has been actively organising rescues and facilitating linkages with the Delhi Urban Shelter Improvement Board (DUSIB) to provide shelter homes for the homeless community for more than a decade. This initiative began in 2010-2011 as part of the Homeless Resource and Service Centre (HRSC) Project, in partnership with St. Stephen's Hospital, Delhi, and funded by the Delhi State Government. The night rescue activities were aimed at preventing premature death due to hypothermia, as the homeless population is often exposed to extreme cold during the winter months in the capital. Additionally, HPPI managed up to 10 shelter homes created by DUSIB between 2012 and 2017.

In 2017, HPPI partnered with the Azim Premji Philanthropic Initiative (APPI) to provide socio-economic support to the homeless community in Delhi through the Homeless Resource and Service Centre (HRSC) Project. The key objective of the project was to improve the overall lifestyle of the homeless population, including facilitating access to civic amenities such as identification documents, bank accounts, and health services.

HPPI had previously observed high tuberculosis (TB) prevalence within the urban homeless and slum-dwelling populations through its Integrated Urban TB Project and the Axshay Project. As a result, a dedicated component for TB detection and care was integrated into the health interventions of the HRSC Project. Drawing from lessons learned in earlier TB initiatives, HPPI deployed a separate team within the HRSC Project to focus exclusively on TB interventions among the homeless people.

Key results[7]

The two phases of the TB initiatives (2017–2019, and 2019–2021) showed the following results:

Table 2: Results of TB initiative for the homeless population of Delhi

Project name	Screened	Presumptive cases	Tested	PwTB	Initiated on treatment	Suc-cessful treatment	LTFU	Died	On treatment till project-end	Shifted to treatment for DRTB	Transferred out
HRSC, APPI (2017–19)	24,538	864 (3.5%)	585 (68%)	233 (40%)	193 (82%)	62 (32%)	29 (15%)	17 (9%)	69 (36%)	9 (5%)	7 (4%)
Interim project with internal funding support (2019–2021)	8,382	421 (5%)	261 (62%)	90 (34%)	90 (100%)	17 (19%)	10 (11%)	12 (13%)	38 (42%)	6 (7%)	7 (8%)

Key features of the project-results

- High positivity rate in the test-results
- Improvement of presumptive case detection rate and treatment initiation rate in comparison to the previous TB-integration and Axshya projects
- High Lost to Follow-Up (LTFU) rate and mortality rate

General observation

The NTEP (the then RNTCP) lacked a specific strategies to reach and serve the migratory, homeless, high-risk and hard-to-reach urban poor people; however, they were part of the critical KVP as identified in the National Strategic Plan of TB Elimination of India (2020–2025).

[7]Evaluation Report of the TB initiatives for the Homeless People of Delhi (available in www.humana-india.org) and Estimation of burden of Tuberculosis in the homeless people of Delhi (unpublished scientific paper of HPPI)

LESSONS LEARNT

- High-quality symptomatic screening, including evening and early morning outreach activities when the maximum number of homeless people were available at their refuges, led to a considerable increase in presumptive case detection.
- Sputum collection and transportation by field officers at the homeless shelters, rather than merely referring individuals to chest clinics, along with regular follow-up, significantly enhanced both the testing and positivity rates in the project.
- A high burden of TB was observed within the homeless population in Delhi, where at least one person with TB (PwTB) was detected by screening approximately 100 people in both project phases. This indicates that more meticulous and scaled-up detection efforts can identify a larger number of missing PwTB within the homeless community.
- High Lost to Follow-Up (LTFU) and mortality rates suggest that more intensified support is necessary to ensure treatment adherence and successful treatment completion, especially among mobile, homeless, and migratory PwTB.
- Local community networks were effective in tracking LTFU PwTB and bringing them back into treatment. These networks can be more frequently utilized to support PwTB in future initiatives.
- The support provided by the larger Homeless

Resource and Service Center project, in terms of improved access to identification documents and bank accounts, enabled PwTB to benefit from the financial schemes of the NTEP. Such support is crucial in ensuring treatment adherence and successful completion.

- Gross gender inequity, violations of human rights, poor risk perception, limited awareness of TB, and stigma, myths, and misconceptions were prevalent among the homeless and migratory populations. These barriers hindered health-seeking behaviors, and effective TB interventions cannot be established without addressing these challenges.
- As the homeless community faces multidimensional problems, only strong collaboration among various public, private, and non-profit sectors can help address their issues more effectively.
- Accompanying women with TB to chest clinics for follow-up visits and involving their male family members in care and support led to positive gender-responsive outcomes in the project. This approach can be leveraged in future projects to develop and implement appropriate gender-sensitive strategies.

CHAPTER 9

Project LEAD

(2023–2025)

Project Leveraging, Engaging, Advocating to Disrupt TB transmission (LEAD) was the flagship TB project of HPPI. It was designed based on the experiences and lessons learned from our previous TB projects to meet the growing needs of the NTEP. The project focuses on creating and demonstrating an urban TB model for high-risk and difficult-to-reach people in large metropolitan cities.

Phases of Project LEAD

LEAD 1: The Project was implemented in four metropolitan cities of India, from May 2023–July 2024, namely Delhi, Howrah, Hyderabad and peri-urban Mumbai during 2023–2024. It aimed to reach, screen, and serve around 600,000 unhoused, migratory and people living in the unauthorised slums (150,000 people per city), and link the PwTB to the services of the NTEP including facilitating their treatment and socio-economic support through a multi-sectoral collaborative approach.

LEAD 2: As a sequel project of LEAD 1, LEAD 2 was implemented only in Delhi, from October 2024 to January 2025 to further refine the urban TB model based on the lessons learnt in LEAD 1, along with meticulous documentation of the lessons learnt in the projects, as well as assisting the CTD to develop a standard Request for Proposal (RFP) document for ensuring quality urban-TB interventions by the local NGO partners as part of the NGO-PP schemes of the NTEP.

Objectives of LEAD Model

- Leverage existing public, private, and non-profit health facilities to generate standard and quality TB services for the high-risk and hard-to-reach urban-based marginalised and vulnerable people
- Engage health department, urban development, welfare schemes, civil society organisations, TB champions and other stakeholders (religious organisations, charitable trusts, job-contractors, business groups etc.) for stronger social support for PwTB
- Advocate to mitigate stigma and discrimination, promote right-based and gender-responsive services, and equity in TB services

Both the phases of LEAD were implemented by well-trained and highly-dedicated city-specific teams supported by a central Project Management Unit (PMU) of HPPI.

The Projects received the financial support of the United States Agency for International Development's TB Implementation Framework Agreement, in partnership with the JSI Research & Training Institute, Inc. and supported by NTEP.

Key results[8]

Presented on the next page.

[8]Final Report of Project LEAD, and oral and poster abstracts selected and presented in Union WLC' 24

Table 3: LEAD 1 (May'23 to Jul'24) – Delhi, Howrah, Hyderabad, Peri-urban Mumbai

City	# people screened	# presump-tive"	# tested (CXR, NAAT, microsco-py)	# PwTB detect-ed	# PwTB put on treatment	# PwTB successfully completed treatment	# PwTB continu-ing on treatment	# PwTB died	# LTFU	# Not Evaluated	# in the start of treatment as on 31st July'24	# HHCs screened	# HHCs found to be eligible for TPT after screening	# HHCs put on TPT	# HHCs who suc-cessfully completed TPT
Delhi	154,601	6,225	5,158	1,547	1,537	751	679	55	52	0	10	2,495	2,485	86	62
Howrah	150,702	4,953	4,615	408	402	46	326	17	18	1	0	1,299	967	489	75
Hyderabad	153,760	4,937	4,012	611	601	125	456	16	14	0	0	1,304	1,292	962	114
Peri-urban Mumbai	150,039	3,652	2,903	620	598	74	505	14	27	0	0	2,133	2,122	1,204	57
Total	**609,102**	**19,767**	**16,688**	**3,186**	**3,138**	**996**	**1,966**	**102**	**111**	**1**	**10**	**7,231**	**6,866**	**2,741**	**308**

Table 4: LEAD 2 (Oct'24 to Jan'25) – reported updated till 31st Dec'24 - Delhi

City	# people screened	# pre-sumptive	# tested (CXR, NAAT, microscopy)	# PwTB detected	# PwTB put on treatment	# PwTB successfully completed treatment	# PwTB continuing on treatment	# PwTB died	# LTFU	# Not Evaluated	# HHCs screened	# HHCs found to be eligible for TPT after screening	# HHCs put on TPT	# HHCs who successfully completed TPT
Delhi	14,298	965	811	97	94	0	94	0	0	0	237	234	99	0

Table 5: Interim project between LEAD 1 and LEAD 2 between Aug'24 to Oct'24 – supported internally by HPPI in Delhi

City	# people screened	# pre-sumptive	# tested (CXR, NAAT, microscopy)	# PwTB detected	# PwTB put on treatment	# PwTB successfully completed treatment	# PwTB continuing on treatment	# PwTB died	# LTFU	# Not Evaluated	# in the start of treatment as on 14th August'25	# HHCs screened	# HHCs found to be eligible for TPT after screening	# HHCs put on TPT	# HHCs who successfully completed TPT
Delhi	1,227	296	286	28	28	0	28	0	0	0	0	0	0	0	0
Total	1227	296	286	28	28	0	28	0	0	0	0	0	0	0	0

LESSONS LEARNT

The LEAD projects had many key lessons which were learnt in different geographical and thematic contexts, and also to respond to different situations evolved during the project implementation as felt needs.

We will focus on the lessons learnt of LEAD 1 here in the document.

We will describe the lessons learnt under three headings

1) Overall key lessons
2) Lessons learnt in different programmatic component in the line of continuum of care
3) Geographic or city-wise specific lessons

Overall key lessons of LEAD

Table 6: Overall lessons learnt in LEAD

- LEAD demonstrated that an urban TB intervention model for marginalized, and underprivileged populations (unhoused, migratory, and people living in unauthorised slums) can be scaled through:
    - highly motivated, dedicated, and well-trained field-teams
    - timely and adequate responses to the dire needs of the communities
    - engaging multi-sectoral players and stakeholders, leveraging on the existing services, and strengthening the advocacy voice for the urban marginalised and vulnerable
- LEAD also proved that Improving access for targeted communities to high-quality diagnostic and treatment services of the NTEP can increase case detection, reduce the number of missing people with TB, and improve positive treatment outcomes.
- LEAD equally established the fact that socio-structural interventions like improving accesses to the civic amenities (identification documents, bank accounts), social welfare schemes, benevolent stakeholders, and addressing the Community, Rights, Gender Stigma (CRGS) issues can accentuate the community responses to tackle TB which is needed for its elimination.

Lessons learnt in different programmatic component in the line of continuum of care

LEAD focused on several programmatic aspects of the TB program along the continuum of care, including outreach, screening, facilitating testing and treatment initiation, treatment support, public health action, TB Preventive Treatment (TPT) support, and socio-structural interventions. Each of these programmatic aspects provided valuable lessons, which are detailed in the table in Annexure A of this document.

Geographic or city-wise specific lessons:

- **Common to all cities:**
    - The city-level project teams maintained a very healthy and cordial collaboration with the STOs, DTOs, CTOs, WHO consultants, healthcare providers, and other NTEP officials throughout the project. They engaged them in project inauguration meetings, imparting training to the CFOs, attending project review meetings and field-level monitoring visits. The city teams shared project performance reports with the STOs and DTOs in regular intervals. Some project-innovations were introduced at the request of the local STOs and DTOs like Health Facility-level screening (Howrah and Hyderabad), and follow-up of the cured TB patients (Howrah, peri-urban Mumbai). HPPI also shifted the project geography from Kolkata to Howrah at the request of the STO of West Bengal. The city teams regularly participated in the review and planning meetings of the NTEP including PIP and 100-day campaigns in Delhi. The STOs of all the four LEAD-project states (Delhi, Maharashtra, Telangana, and West Bengal) asked for extension of LEAD. It is pertinent to say here that a healthy relationship with the NTEP officials is instrumental to successfully implement and achieve the targets of a project like LEAD.
    - All city teams updated their mapping data and identified the hot-spots for project-implementation in consultation with the DTOs and CTOs. This facilitated realistic and rational allocation of the hot-spots among the CFOs where optimal results were obtained.
    - All city teams adjusted their project implementation plans according to the local festivals, elections and events. This helped them to reach the project target in a planned fashion.
- **Stakeholder Engagement (specific to Howrah)**
    - Effective Stakeholder Engagement: Regular and constructive engagement with key stakeholders, from state officials to local health workers, proved instrumental in ensuring alignment and coordination. Regular meetings and open discussions facilitated clarity, cooperation, and an understanding of each stakeholder's role in achieving Project's objectives.

- Effective Communication with Government Entities: One significant learning has been the importance of effective communication with government personnel, particularly in critical situations. The Project team gained valuable insights into navigating the complexities of government bureaucracy and efficiently engaging with the officials at various levels. This skill is pivotal in overcoming challenges and ensuring Project's success.
- Adherence to Government Protocols: The obstacles encountered while interacting with the STO office have underscored the necessity of adhering to government protocols and procedures. Project LEAD recognises the importance of aligning its activities with established government guidelines and regulations to ensure smooth project execution. This adherence not only facilitated cooperation but also enhanced the sustainability.
- Flexibility and Adaptability: Project LEAD adapted to evolving circumstances and navigated challenges effectively. The Project team's capacity to adjust to strategies and operations in response to unforeseen obstacles was instrumental in maintaining momentum and achieving Project's objectives. A multi-partner collaboration and approach helped to achieve better results in the Project (for all cities).

- **Importance of contingency plan and risk reduction (peri-urban Mumbai):** The LEAD project of peri-urban Mumbai briefly faced an unprecedented event like strike of the health staff, which temporarily hampered the project activity. This was an important learning for us to adopt risk reduction and contingency plans for future projects.

CHAPTER 10

Project TASA

(2023–2024)

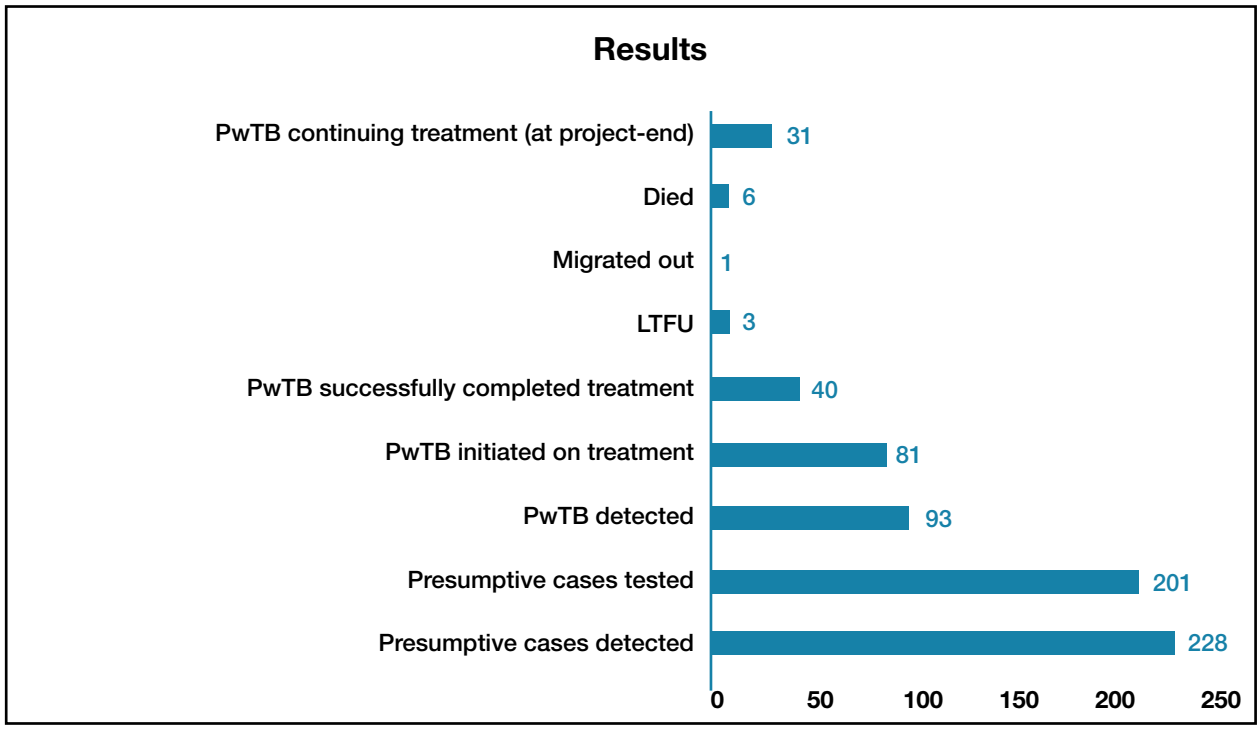
Project TB Affected Street Activist (TASA) was the first TB initiative of HPPI supported by the CFCS (Challenge Facility Civil Society) Grant 11 of the Stop TB Partnership. It was implemented between May 2023–April 2024 in two districts of Delhi (East Delhi and Shahdara).

The primary aim of project TASA was to capacitate the TB survivors and other TB affected people from the marginalized homeless communities of Delhi, establish them as role-models in their communities and mobilize them to demand high quality TB services for their communities. Out of 24 trained TASAs, 16 were mobilised to perform the field-activities with the help of 3 TASA mentors of the Project.

Project results[9]

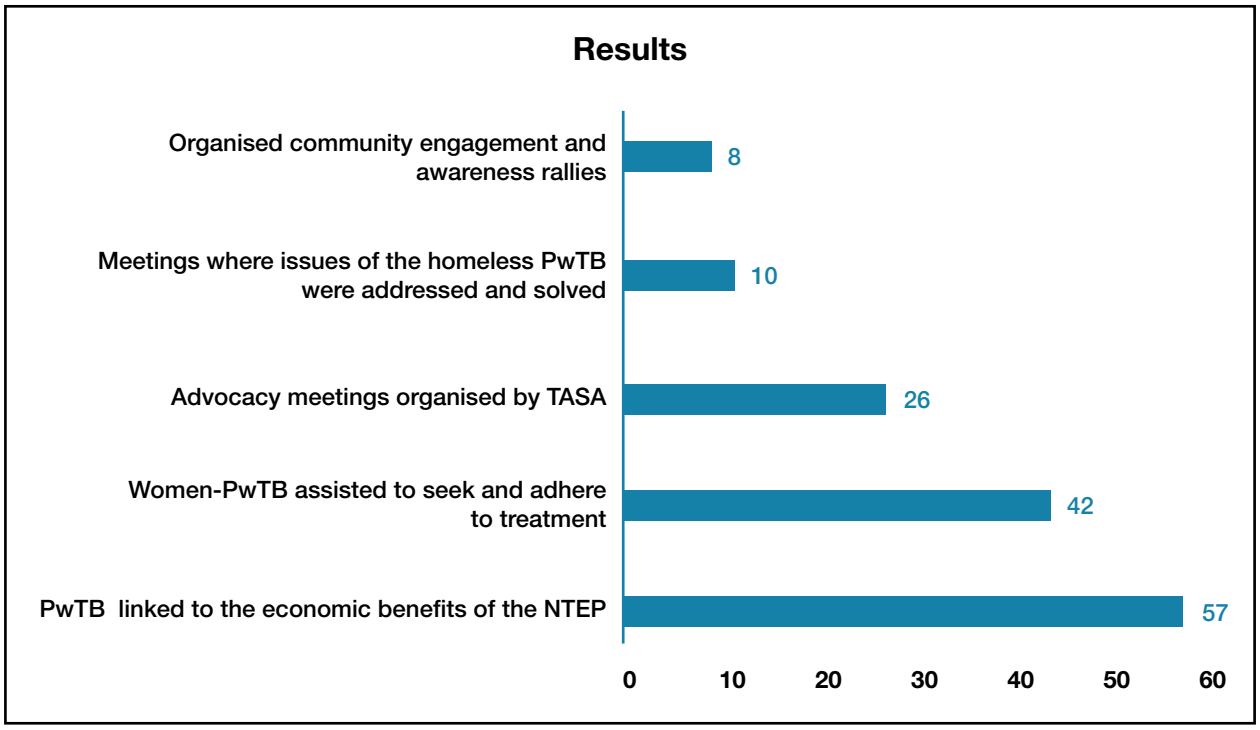
16 TASAs reached and screened 7,994 people from homeless community with the following results:

Graph 2: Performance of Project TASA



[9]TASA: End of Grant Report and oral abstract selected and presented in the World Union Lung Conference'24

Graph 3: Performance of Project TASA



Impact of TASA Project

- Empowerment of the TASA – TASA now have a collective voice to advocate for their needs, freely speak about their problems and demand solutions from the local health and other service- providers
- Community awareness – Reduction of stigma, myths and misconceptions on TB in the homeless communities as more people seek healthcare for TB with the support of TASAs, resulting in increase in uptake of treatment from the National TB Elimination Programme of India (NTEP)
- Stronger community partnership facilitated by TASAs to support the PwTB of the homeless and poor communities
    - Local women, school-children, youth
    - Informal healthcare providers
    - Street-vendors
    - Business communities
    - Religious bodies and charitable trusts
    - NGOs/CBOs

LESSONS LEARNT

- The Project showed that community empowerment is key to improve TB services in the high-risk and hard-to-reach urban-based communities like the homeless in Delhi.
- The role models like TASAs were found be highly effective to
    - function as the critical community-support persons for PwTB
    - bridge the gaps between the homeless population and local public health-services
- The success of a project like TASA also created new opportunities to address other pressing issues like gender inequity among the homeless community: After the completion of Project TASA, HPPI implemented Project SWEET or Street Women Engaged and Empowered to end Tuberculosis in Delhi. The purpose of the Project was to enhance gender-responsive services in the homeless people under the leadership of the TASAs, with the CFCS Project (Grant 12) of the Stop TB Partnership.
- The Project also gave advocacy platform to the TASAs. It enabled and empowered them to openly share their feelings, grievances and satisfaction level with the healthcare providers. These dialogues played a crucial role in identifying gaps and areas for improvement.
- Such initiatives can be further refined and strengthened in terms of larger empowerment of the homeless community members and PwTB by amplifying making their voices among the TB programme managers and policy-makers.

CHAPTER 11

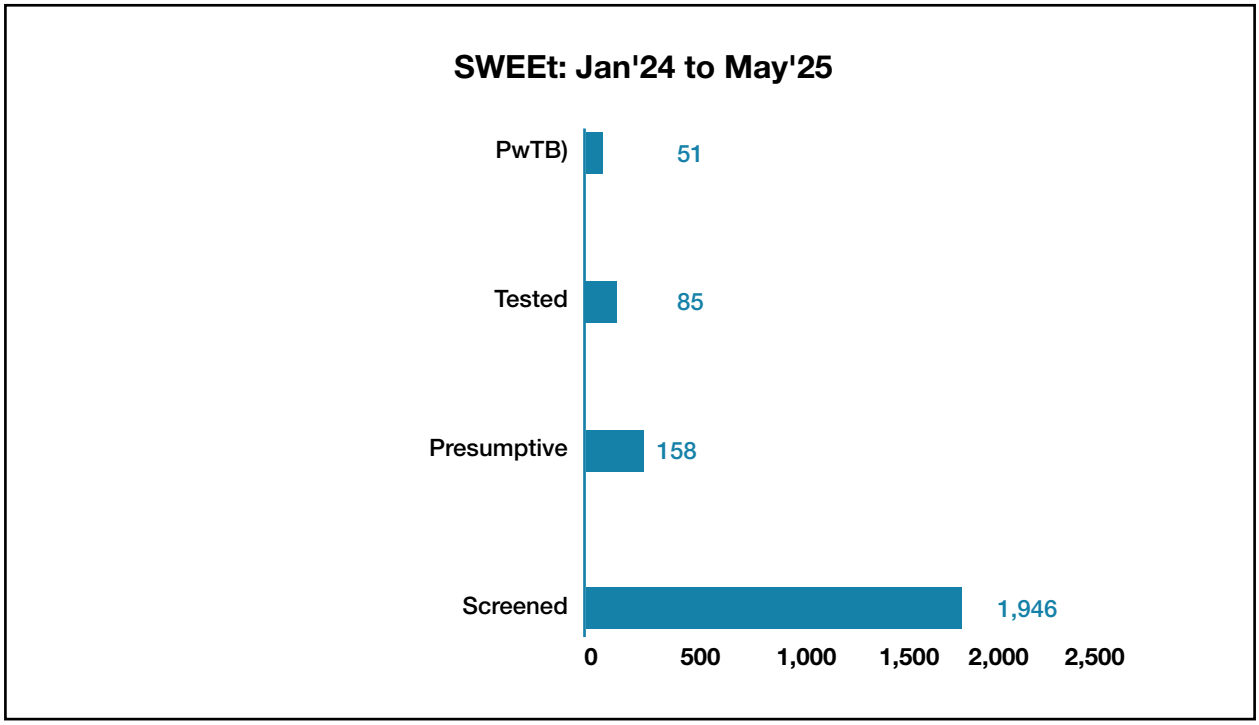
Project SWEET

(2024–2025)

Project Street Women Engaged and Empowered to end Tuberculosis (SWEET) was the sequential project of TASA supported by the CFCS (Challenge Facility Civil Society) Grant 12 of the Stop TB Partnership. It was implemented in five districts of Delhi (East Delhi, Shahdara, Central Delhi, New Delhi, and South East), between January 2024–May 2025.

Project SWEET aimed to strengthen gender-responsive TB services for the homeless women with the help of the already existing TASAs and local women-groups named SAHELI (SAHELI means friend). The Project targeted to reach around 5,000 women from homeless community with the community volunteers of TASA and SAHELI. The process included active community engagement and empowerment with gender and human rights literacy, reduction in TB-related stigma, in addition to facilitating linkages with the NTEP's diagnostic and treatment services.

Graph 4: Performance of Project SWEET



Mobilisation

With the help of Project SWEET HPPI built capacities of 20 TASAs and 100 SAHELI-members, and mobilized them to work with the the homeless communities of the targeted hot-spots of the project.

Eliciting the structural-level challenges

Project SWEET explored and documented many case-stories which clearly highlighting the specific challenges faced by women who are economically disadvantaged and belong to homeless community when diagnosed with TB, both in the households and in the community.[10]

Demonstration

The project demonstrated the practical ways to help the marginalised women in accessing the services of the NTEP, and overcome the stigma and discrimination.

Engagement and Empowerment

TASAs and SAHELI-members, being the community representatives and TB champions in the Project SWEET, strengthened women's linkages to the health and TB services. The project also facilitated accesses to the essential identification documents and bank accounts further enhancing women's empowerment and social inclusion. Women were also sensitised to resist and report the cases of gender-based violence to the local administrative authorities for the necessary actions.

[10]Case-story document of SWEET

LESSONS LEARNT

- The women living in compromised socio-economic situations like being unhoused, economically disadvantaged, migratory etc. are especially challenged by exclusion, stigma, expulsion, and sheer negligence, whenever detected with TB. They also lack information, confidence and capability of seeking health services. Many are completely dependent on the male-members of their households. Women hardly receive proper nutrition and care that a PwTB must receive in the household. Against this backdrop, Project SWEET highlighted the importance of designing TB interventionsthat are specifically tailored to the needs of KVP with a strong focus on gender-responsive services. Such targeted approaches are essential for the effective diagnosis and treamtnet of TB in the women.
- TASAs and SAHELI members were effectively enabled in Project SWEET demonstrating that such well-trained and motivated community- members can be equally the catalyst of changes of motivation, and epitomes of empowerment of the homeless women, and boost up their morale, self-esteem and confidence.
- We also learned that marginalised women are more confident in seeking healthcare at chest clinics when supported by initiatives like Project SWEET. By helping them obtain identification documents and open bank accounts, the project removed key barriers, enabling these women to access health services with greater ease and dignity.

CHAPTER 12

TB Projects Supported by Corporate Social Responsibilities (CSR)

The commitment of the corporate sectors to support the TB elimination efforts of India has seen a significant rise in the recent times. The growing collaboration of the NTEP of India and the corporate coalitions has led to several impactful initiatives like 'Corporate TB Pledge' initiative which focusses on resource mobilization from the corporates.

HPPI has been actively partnering with various corporate partners in its community development projects across India. These collaborations span multiple sectors, including healthcare, primary education, and women's empowerment. Several of these CSR-supported projects include components focused on TB case detection and care.

The TB initiatives of HPPI supported by the CSR are either 1) an exclusive TB project, (example Dow Chemical TB Project, peri-urban Mumbai), or 2) the TB initiative is one of the components of a larger project, (example community development projects supported by Bank of America and Sanny Foundation).

The detailed results of the TB projects of HPPI supported by the CSR partners are available in Annex C.

LESSONS LEARNT

From the CSR-Supported TB Projects of HPPI

- We have observed a growing interest among CSR partners in investing in TB initiatives. This interest can be further capitalised through focussed sensitisation and use of advocacy
- The key targeted groups of the CSR-TB initiatives are typically the high-risk and vulnerable, economical disadvantaged and migratory people working in the factories and living in the near-by unhygienic slums. We observed a high burden of TB in those populations, as they have poor accesses to the local public health facilities and schemes like Employees State Insurance. Targeted interventions in collaboration with the CSR-partners and local DTOs was found to be highly effective for TB detection and care.
- The success-stories of CSR-supported TB-initiatives can be leveraged to engage the NTEP officials, present critical finding in the conferences, and advocate with the decision makers to bring more CSR-partners on board to support India's TB elimination drives. HPPI have already made a presentation in NATCON 2024 based on the success story of its TB initiatives in partnership with the Dow Chemical in Navi Mumbai.[11]

[11]Abstract titled Corporate-Social Responsibility (CSR) and non-government organisation (NGO) partnership to enhance TB detection and care in the key and vulnerable population (KVP) in India

CHAPTER 13

TB interventions and observations in the HIV projects of HPPI

Background: Since its inception HPPI has been continuing its fight against HIV and AIDS in India. Currenrtly, HPPI has been implementing three targeted intervention (TI) projects and one link workers scheme (LWS) project in partnership with the State AIDS Control Societies of Delhi, Uttar Pradesh, and Telangana. Female sex workers, Men who have sex with Men (MSM), Transgender, migrant workers and truckers are the key people with whom HPPI works in its HIV projects. Promoting HIV prevention through 'informed choice', facilitating HIV testing and STI treatment, linkages to ART and allied services like TB are the key components of these interventions. The HIV projects already showcased substantial decrease in new infections and mortality in those key populations.

The TB interventions in the HIV projects: The TB interventions included symptomatic TB screening of (a) the general HIV high-risk groups (HRGs), and (b) the PLHIV (who were detected in the HIV-projects and enrolled for treatment with the local ART centres), facilitating TB testing of the presumptive cases, and subsequent linkages of the PwTB to the TB treatment under the NTEP.

Observations:

1. We observed that positivity rate (PwTB detected out of total presumptive cases tested) among the general HRGs was much higher in the LWS project (more than 12%) than the rest of the 3 TI projects (around 4%). may be attributed to attributed to the LWS project's broader and more diverse target population, which includes migrant workers, truckers, and other vulnerable groups who are at elevated risk of TB.
2. TB-related death was reported in PLHIV in the Unnao project (5 deaths among 46 PLHIV between 2020 - 2024)
3. Furthermore, the detection rate of TB-HIV co-infection across all projects remains generally low, likely due to the protective effects of ART.
4. TPT coverage was overall low among the close contacts of the PwTB in all the projects. However, TPT coverage among PLHIV was better off with state-wise variations. Scarcity of TPT medications is still an issue.

LESSONS LEARNT

- The Link Worker Scheme projects under the National AIDS Control Programme (NACP) cater to a larger and more diverse high-risk population across broader geographic areas. Introducing intensified TB screening strategies using AI-supported ultra-portable chest X-rays (CXR) and cough-detection tools can enhance the identification of presumptive TB cases and improve overall detection rates.
- Educating and equipping the target audience of the TI-projects with simple and user-friendly self-risk assessment tools of TB, especially the PLHIV, can be effective strategy to improve TB awareness, detection, and care among those population.
- The community networks of FSWs, MSM, Transgender, PWID, and PLHIV can be educated and updated with TB management knowledge and skills on regular basis to enhance service utilization and advocacy for the TB/HIV co-infection management.
- The gaps in the TPT coverage among the close contacts of the PwTB detected from the HIV HRGs, and PLHIV should be plugged with a high priority as TB is still a major killer among those groups. Tailor-made advocacy and corrective measures based on the local challenges (like TPT medicine stock-out at the health-system or low supply, community resistance to TPT, side-effects of TPT medicines and LTFU, lack of TPT awareness and education) can be designed in the HIV-projects. The project-staff of the HIV-projects require to work more closely with the ART centres for the necessary patient-wise follow-ups, and tracking of the TPT coverage and adherence, and subsequently document the successful completion of TPT.

CHAPTER 14

Conclusions and Recommendations

HPPI has established valuable insights and lessons backed by evidences of its TB projects since 2014–2015.

Table 7: Summarised lessons of HPPI in its TB projects

1. High burden of TB and persisting missing PwTB in urban-based Key Vulnerable Populations (KVP), such as the homeless, migrants, and people living in unauthorised slums, remain widespread issues.
2. High levels of Lost to Follow-Up (LTFU) and high TB mortality, especially among migratory homeless populations, continue to pose significant programmatic challenges.
3. Optimal services for KVP can be delivered through dedicated, highly committed field teams, but this requires additional resources, which need to be sustained.
4. The role of CSO partners is critical in facilitating multi-sectoral coordination and collaboration, which in turn enhances the socio-economic support for economically disadvantaged and underprivileged PwTB.
5. The support of CSO partners is essential for effective community engagement, promoting gender equity, restoring human rights, and working towards the de-stigmatisation of community members affected by TB.

HPPI puts forward the following recommendations to the NTEP based on the critical observations and lessons learnt in its TB projects between 2015–2025.

Table 8: Recommendations of HPPI

1. Saturated screening coverage of the urban high-risk and hard-to-reach population and sustaining it is a critical requirement for TB elimination in the cities. We recommend to achieve this through various mechanisms such as promotion of the NGO-PP schemes of the NTEP, mobilizing CSR funds, and other internal and external sources of funds.
2. We also recommend to engage the CSO partners strategically, to reach and serve the urban high-risk and hard-to- reach people through contractual formalities e.g. similar to the Targeted Interventions (TI) initiatives of the National AIDS Control Programme (NACP), so that sustained interventions can be established to cut the transmission of TB among the urban KVP, and produce long-standing impact like reduction of TB incidence. This is key to achieve the goal of TB elimination.

Annexure A: Integrated TB Projects of HPPI – Detailed, Project-wise Results

Integration of Tuberculosis Control with the Existing Health & Development Projects of HPPI							
2016–2017							
Rural projects							
Sr No	**Name of the reporting project- Rural**	**Total Population informed about TB**	**No of people screened for TB symptoms**	**No of TB presumptive cases detected & referred to DMC**	**No of TB presumptive cases tested in DMC**	**No of TB positive cases**	**No of TB cases put on DOT**
1	Community Development Project (CDP)-Karahal, MP	10,000	1,118	50	42	17	16
2	CDP Lucknow, UP	50,000	413	20	6	5	2
3	AWC Neemrana, HR	10,000	391	27	3	1	1
4	GA-Neemrana, HR	10,000	806	30	1	1	1
5	Farmer Club Alwar, HR	100,000	670	33	6	1	1
6	Farmer Club Project Badaun, UP	50,000	481	47	48	10	10
7	Farmer Club Project Unnao, UP	50,000	225	9	9	0	0
8	Farmer Club Project Dausa, RJ	100,000	636	20	2	2	2
9	TCE Bihar (Saksham)	100,000	5,000	530	61	30	25
10	TCE Lucknow, UP	300,000	6,625	541	245	102	96
12	HOPE – REWARI, HR	100,000	10,656	20	10	1	1
	Total: Rural	**880,000**	**27,021**	**1,327**	**433**	**170**	**155**
Urban projects							
1	Community Development Project(CDP)-Delhi Central GRC	52,570	485	12	6	4	4
2	Community Development Project Delhi East: Homeless Resource Center (HRC)	50,000	2,620	63	42	9	9
3	HOPE Delhi-Target Intervention (TI) Project	50,000	12,500	75	42	18	16
4	Total Control of the Epidemic (TCE) Narela-North, DEL	40,000	9,502	205	46	10	8
5	AWC Gurgaon DELL, HR	20,000	1,794	4	0	0	0
6	AWC Jagtpura, RJ	10,000	296	20	20	1	1
7	AWC Malviya Nagar, DEL	10,000	89	3	3	0	0
8	CDP Gurgaon, HR	40,000	1,687	36	10	7	4
	TOTAL: Urban	**272,570**	**28,973**	**418**	**169**	**49**	**42**

Annexure B: Detailed list of Lessons Learnt in HPPI's Project LEAD 1, Programmatic Component-wise

Sr No	Key operational challenges which the project addressed	Broad programmatic areas	Strategic activities	Results (1st May 23 to 31st July 24); Field implementation: Aug'23 to July'24 = 12 months	Critical learnings
1	Extreme mobility of the homeless, migratory, and mobile people of the large metropolitan cities makes it highly challenging to reach them during the routine working hours (between morning till evening) of the public health system including the existing mobile health services. The MoH has currently no additional workforces to reach the targeted communities during their off-working hours.	**OUTREACH**	Deployed project implementation team at the cities with 113 City Field Officers (CFOs) in 4 cities to implement the ground-level activities with the targeted population Organized outreach activities based on the convenient time of the targeted communities of the four metropolitan cities through meticulous micro-planning Evening, night, early morning outreach.	609,102 people reached in 4 cities Delhi – 154,601 Howrah – 150,702 Hyderabad – 153760 Peri-urban Mumbai – 150,039 People reached per day per CFOs (20 days a month) on an average Delhi - 15 Howrah - 22 Hyderabad - 23 Peri-urban Mumbai - 22	We should have additional ground-level health-workers (like CFOs of LEAD) to reach the highly mobile targeted communities at the odd hours like early morning, evening, and night. Detailed day-wise micro-plan for outreach activities can help to enhance the outreach coverage. More number of ground-level health-workers can reach predominantly more scattered homeless and migratory population (Delhi deployed 38 CFOs as the targeted population of Delhi were mostly homeless and migratory in Delhi; where other cities had less homeless population with 25 CFOs in each of those cities)
2	Screening for TB symptoms, especially the homeless, migratory and mobile people at the busy streets and public places of the populous metropolitan cities is highly challenging, due to their continuous mobility, stigma, myths and misconceptions around TB, social resistance, peer-pressure, and mistrust for the unknown/outside people.	**SCREEN**	Conduct symptomatic screening (mostly) Add on AI-aided CXR and cough-sound screening for small-scale selected population in pilot mode (Between Jan'24 to Jul'24)	Around 609,102 people screened in 4 cities, 19,767 presumptive cases identified # people screened to detect 1 presumptive case: Delhi – 25 Howrah – 30 Hyderabad – 31 Peri-urban Mumbai – 41 Proportion of presumptive cases detected through CXR community screening Delhi = 15% Proportion of presumptive cases detected through cough-sound community screening Delhi = 11% Hyderabad = 24%	Meticulous, CFO-wise field-action plan for symptomatic screening can help in achieving the project-targets of screening One-to-one screening can be highly effective to detect presumptive cases in highly mobile, high-risk population through continuous follow-up and tracking in the field Community-based CXR and cough-sound AI can increase the yield of presumptive cases Strategic partnership with relevant organizations is highly effective to bring add-on screening tools like CXR and cough-sound (Project example: Medanta hospital for CXR, and Wadhwani AI for cough-sound)

3	Stigma related to TB-testing is a major challenge, especially for the illiterate, and semi-literate community members with poor TB awareness and risk perception. Homeless and migratory people can't access labs easily for sample submission for testing. Chronic alcoholism within the targeted communities is a barrier to TB testing as the intoxicated person can't be convinced easily to get a TB test done. High chances to lost-to-follow-up on referrals of the presumptive cases to the health-facilities (HFs) for TB-testing Limitations of CXR facilities in the public health system	**TEST**	Conduct Pre-test counselling (based on the tool described in the operational manual of the project LEAD) for preparing the presumptive cases for undergoing TB-testing Sputum collection and transportation (SCT) to the chest-clinics/HFs to enhance TB-testing (most frequently done activities by the CFOs) Accompanied referral for testing Follow-up with the presumptive case and labs after a referral MoU with selected private diagnostic facilities for conducting CXR for the assessment of the presumptive cases and detection of 'clinically diagnosed TB', whenever needed.	Proportion of presumptive cases tested (presumptive tested/presumptive detected) Delhi – 83% Howrah – 93% Hyderabad – 81% Peri-urban Mumbai – 79%	Pre-test counselling can be effective to promote TB-testing and improve its acceptability in the targeted communities SCT can be highly effective to test the presumptive cases of the homeless and mobile people Accompanied referral can be useful for those where SCT is not possible Follow-up after referrals is a must to ensure TB-testing CXR coverage of the presumptive cases can be optimized by engaging the private diagnostics Good collaboration with the public health-facilities and improving their understanding about the needs of the targeted communities can enhance TB-testing further Key reasons of non-testing as observed in LEAD (Detailed data available in Project Performance Report) -Resistance to TB-testing -Lost-to-follow-up -Cured after short-course anti-biotic -Premature death

4	Non-availability of the person to receive the test-result due to constant mobility Denial of a positive result Resistance of the health-system labs to test additional samples brought by the project-staff Sub-optimal NAAT tests which resulted in low detection.	**DIAGNOSIS**	Identify the community networks of the person tested to track his/her movements and whereabouts on a daily basis Collect test-result reports for the community members and reach the results for them. Conduct monthly review meetings with the health-facilities, labs and DTOs Coordinate NAAT testing between a NAAT and non-NAAT health-facility Conduct small-scale innovative interventions beyond ACF to reach PwTB 1. Follow-up of cured TB patients/TB survivors, 2. Initially MTB negative presumptive cases continuing with symptoms, 3. Health-facility based screening, 4. Screening at odd places	Number of people screened to detect 1 PwTB or NNS[12] (Screened/PwTB detected) Delhi: 100 Howrah: 369 Hyderabad: 252 Peri-urban Mumbai: 242 Positivity rate in % (PwTB detected/presumptive tested) Delhi: 30% Howrah: 9% Hyderabad: 15% Peri-urban Mumbai: 21% Results of innovative interventions *Follow-up of cured TB patients and their household contacts expressed by NNS* Howrah:7 Peri-urban Mumbai: 135 *Follow-up of symptomatic presumptive cases initially MTB negative expressed by NNS* Hyderabad: 1.4 Peri-urban Mumbai: 2 *Health-facility (HF) based screening expressed by NNS* Howrah: 21 (positivity rate = 15%) Hyderabad: 3 (positivity rate = 40%) Positivity rate: Howrah Hyderabad HF 15 40 Comm. 9 20 *Screening at odd places (popular liquor shops) expressed in NNS* Howrah: 21 The LEAD approach also helped to detect PwTB from women in good number, especially in peri-urban Mumbai % of PwTB is more in female than male. However, the strategies of the project to detect more children with TB were not sufficient. (Male: Female: Children ratio) – city-wise: Delhi: 50:41:9 Howrah:63: 35:2 Hyderabad: 51:45:4 Peri-urban Mumbai: 39:53:7	Helping people to receive the test-result reports, and tracking them through community networks can be helpful to identify and locate the PwTB on the ground Innovations beyond ACF can be highly effective to reach additional missing PwTB Flexibility in project-approach and motivation of the CFOs can bring about those innovations in course of implementation. Home-based screening of the cured TB patients can yield better result than telephonic screening Regular collaboration and monthly review meetings with the local health-system and NTEP staff can achieve optimum systemic responses to meet the augmented community demands for TB testing Intensified co-ordinations between NAAT-sites and non-NAAT sites with strategic planning can ensure higher upfront testing rate by NAAT. Engagement and mobilization of the female CFOs can be useful to screen the household level women, and detect a greater number of women with TB (Peri-urban Mumbai). Health-facility based screening can give better yield of TB patients than community-based screening Screening at unusual and odd but strategic places can detect missing TB patients Strategic selection of the urban target groups can be useful to enhance the yield of the PwTB • Delhi: 51% PwTB from homeless • Hyderabad: 84% PwTB from unauthorised slums • Howrah: 95% PwTB from unauthorised slums • Peri-urban Mumbai: 91% PwTB from PwTB from unauthorised slums

5	High degree of initial lost-to-follow-up due to high mobility, stigma, fear of losing jobs/daily wages, peer-pressure, alcohol, and drug addictions.	**TREATMENT INITIATION**	Conduct Post-test counselling (based on the tool described in the operational manual of the project LEAD) for preparing the PwTB for undergoing TB-treatment at the HFs Prepare the Person with TB with a 'what to do to continue the drugs while on travel during TB treatment' with the help of a tool described in the operational manual of the project LEAD) Accompanied referral to the HFs for ensuring treatment initiation Retrieve initial LTFU cases with the help of the community networks of the PwTB	Proportion of PwTB initiated on treatment • Delhi: 99% • Howrah:99% • Hyderabad: 98% • Peri-urban Mumbai: 96%	Post-test counselling and preparing the PwTB for treatment, and accompanied referral of the PwTB to the HFs for treatment initiation can be effective strategies to ensure higher proportion of treatment initiation and minimize initial LTFU Trust building with the health-system can enhance treatment initiation of those PwTB without any documented addresses as treatment was started many a time based on the project staffs' commitment to support.
6	High number of LTFU, mostly in homeless and migratory PwTB due to better feeling after treatment initiation and discontinue treatment, side-effects of the drugs, alcoholism, drug addiction, stigma, fear of losing jobs, and peer-pressure.	**TREATMENT ADHERENCE SUPPORT**	Conduct intensified follow-up visits at the place of the PwTB after treatment initiation (up to a total of 36 visits in 6-month duration treatment) to ensure treatment adherence with repeated counselling, motivation, and nutritional education Retrieve LTFU cases by mobilizing the community networks Monitor the PwTB who are travelling through regular telephonic contacts	Low LTFU and mortality rate in LEAD project in comparison to the past TB projects of HPPI with the homeless people of Delhi (2017 – 2021) – described in the poster presentation titled 'Improving TB treatment adherence in mobile, and homeless people detected with tuberculosis (PwTB) by Humana People to People India (HPPI),' in the Union World conference on Lung Health 2024 Main causes of LTFU as observed in LEAD - 30% initial LTFU - 24% resistance to treatment - 13% alcoholism - 11% ADRs - 8% migration - 8% drug addiction Main causes of mortality as observed in LEAD - 26% Late diagnosis - 20% old age - 19% alcoholic - 14% malnourished - 8% drug addiction - 5% DRTB	Intensified FU personal visits, community-based tracking, and counselling during movement of the PwTB can be highly effective to improve treatment success, and reduction of LTFU and mortality For future projects, specific strategies for early diagnosis of TB, mitigating influences of alcohol and drugs, and community resistance can be useful to address the issues of treatment adherence further.

7	Resistance to TB Preventive Treatment Scarcity of TPT drugs at the HFs	**PREVENTIVE TREATMENT SUPPORT**	Conduct screening of HHCs both at the community and HFs Provide treatment initiation support and adherence support	HHCs Screened: 7231 HHCs found to be eligible for TPT: 6888 HHCs initiated on TPT: 2741 HHCs completed TPT: 308 (Reference: Project performance report) City-wise proportion of treatment-initiation and treatment-completion respectively: Delhi: 3.4% and 72% Howrah: 51% and 15% Hyderabad: 74% and 12% Peri-urban Mumbai: 57% and 4.8% -The project data somehow hinted to a situation like enhanced TPT initiation but sub-optimal TPT completion which might be well attributed to the short duration of the project (1 year) where completion of TPT among those who were initiated couldn't be tracked fully.	A counselling aid for TPT education, initiation, and adherence support can be helpful, especially in the case of mobile, and homeless population. LEAD phase 1 didn't utilize such counselling aid or tool for TPT. Meticulous follow-up after the initiation of TPT can help to ensure its successful completion; however, that was suboptimal in LEAD 1 due to absence of proper strategic approach and guideline for TPT Ready and uninterrupted supply of TPT drugs at the HFs is a must to improve the TPT coverage
8	Poor socio-economic status is the major challenge of the targeted communities of LEAD 1. They often face situations with absence of food, shelter, livelihood, and social security & support. Addiction and alcoholism are common. They not only increase their vulnerability to TB, but equally hamper diagnosis, and treatment outcome of TB, leading to high disease burden and mortality.	**SOCIO-ECONOMIC SUPPORT**	Give access to DBT/NPY of the NTEP Collaborate with various other community stakeholders and service-providers to enhance support for the PwTB in terms of providing food, shelter, livelihood, social security, welfare schemes and healthcare Link them to de-addiction facilities.	LEAD facilitated DBT/NPY of the NTEP to PwTB • Delhi: 1206 (78%) • Howrah: 359 (88%) • Hyderabad: 514 (84%) • Peri-urban Mumbai: 584 (94%)	Socio-economic support to the PwTB from various resources and stakeholders, together with the TB services can be useful to improve treatment adherence, self-esteem, stigma-reduction, and linkages with the various service-providers and stakeholders for their better livings. Gender responsive services, as introduced by LEAD to respond to the special needs of the TB affected women, can reduce stigma, improve service utilization, and enhance men's engagement for the care of the TB affected female family members.

Annexure C: The results of the CSR-supported project of HPPI

Sr No	Project Name	State-Coverage	Project Duration	Corporate Partner	Screening	Presumptive	Tested for TB	PwTB
1	Integrated Slum Development Project ISDP	"Maharashtra and Haryana (combined)"	April 2023-Till Feb25	Bank of America	47,615	575	463	79
2	Integrated Slum Development Project (ISDP)	"Telangana"	April 2023-Till March24	Bank of America	12,538	189	179	22
3	Community Development Project (CDP)	Haryana	February 2024 -Till Feb25	Sanni Foundation	3,373	453	442	14
4	Project NIRAMAYA-Manesar	Haryana	July 2024-Till Feb25	Johnson and Johnson	15,447	160	71	6
5	Project NIRAMAYA-Ch. Sambhaji Nagar	Maharashtra	June 2024-Till Feb25	Johnson and Johnson	30,352	1627	1,624	74
6	Arogya	Rajasthan	April 2023 -Till Feb25	Chambal Fertilizer and Chemical Ltd (CFCL)	28,316	379	342	35
7	Community Development Project (CDP)	Maharashtra	June21 -Till Mar 24	DoW Chemicals	212,137	2,312	1,666	273
	Total				**349,778**	**5,695**	**4,787**	**503**

Annexure D Performances of the HIV projects of HPPI in TB detection and care

Sr No	Name of the HIV project	Type of the HIV project	Targeted populations	Total Target	Reporting period	# Screened	
						HRGs	PLHIV (screened for TB/enrolled for ART)
1	TCE Lucknow (Uttar Pradesh)	LWS	"FSW 584 MSM 25 PWID 85 Migrants 5914 Truckers 368 Preg 1484 Other vulnerable 10283"	18,743	2020 - 2024	60,264	353/353
2	HOPE Unnao (Uttar Pradesh)	TI-composite	"FSW MSM PWID"	2,200	2020 - 2024	6,036	46/46
3	HOPE Delhi	TI	FSW	2,400	2020 - 2024	32,003	14/14
4	HOPE Kothakota (Telangana)	TI - composite	"FSW MSM PWID"	3,072	2020 - 2024	5,588	36/36

# Presumptive		# Tested for TB		# PwTB		Treatment initiated		Treatment completed		TPT initiated/ screened		TPT completed	
HRGs	**PLHIV**	**HRGs**	**PLHIV**	**HRGs**	**PLHIV**	**HRGs**	**PLHIV**	**HRGs**	**PLHIV**	**HHCs**	**PLHIV**	**HHCs**	**PLHIV**
7,157		5,441		654	5	654	5	654	4	417 out of 1,264	225 out of 353	417	225
250		205		6	6	6	6	4	5	3 out of 3	3 out of 46	2	3
146		105		6	0	6		6		0	0	0	0
21		21		2	2	2	2	2	2	0	34 out of 36	0	34

References

1. HPPI-Axshya Report
2. Evaluation Report of the TB initiative of the homeless people of Delhi
3. Estimation of TB burden in the homeless people of Delhi
4. Final Project Performance Report of Project LEAD
5. Abstracts of Project LEAD which were presented in the Union World Lung Conference 2024
6. Performance Report of Project TASA
7. Abstract of Project TASA which was presented in the Union World Lung Conference 2024
8. Abstract of CSR-supported project presented in the NATCOM 2024

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