Beyond Diagnosis and Treatment

The social protection landscape for people affected by TB in the WHO South-East Asia Region

World Health Organization
REGIONAL OFFICE FOR South-East Asia

Beyond diagnosis and treatment

The social protection landscape for people affected by TB in the WHO South-East Asia Region

World Health Organization
REGIONAL OFFICE FOR South-East Asia

Beyond diagnosis and treatment – The social protection landscape for people affected by TB in the WHO South-East Asia Region

ISBN: 978-92-9021-079-5

Suggested citation. Beyond diagnosis and treatment – The social protection landscape for people affected by TB in the WHO South-East Asia Region. New Delhi: World Health Organization, Regional Office for South-East Asia; 2023. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Printed in India

Contents

Acknowledgements

The WHO Regional Office for South-East Asia would like to acknowledge Global Health Strategies, contractual partners, for taking the lead in collecting, compiling and analysing the information and providing relevant recommendations and the way forward.

This report on the social protection measures (SPM) for people affected by TB in the South-East Asia Region is based on the inputs provided by respondents to the questionnaire from four Member States, national tuberculosis programme (NTP) managers, WHO staff members in the Regional Office and country offices, and participants of focus group discussions.

The following persons are specifically acknowledged for their valuable contributions: Dr Amiya Bhatia and Mr Daniel Carter from the London School of Hygiene and Tropical Medicine, and from Global Health Strategies (GHS) Dr Indira Behara Tankha, Mr Raman Sankar, Mr Maahir Vohra, Ms Gayatri Korgaonkar, Ms Vidhi Gupta and Ms Nivedita Gautam.

Disclosure

An in-depth analysis of the information collected from four Member States through literature review, questionnaire responses and focus group discussions provided an understanding on social protection measures (SPM) for TB-affected individuals. However, challenges and opportunities remain to understand further the benefits of social protection for TB patients and their families.

The implementation of SPM and further operational research is required to understand the challenges, benefits and future targeted interventions for TB-affected communities. To address the second pillar of the END TB Strategy on "Bold policies and supportive systems", and to achieve zero catastrophic cost for TB patients, SPM is vital to be implemented in all the Member States of the Region and regular monitoring of progress must be executed and maintained through routine data collection, research and innovation.

Abbreviations and acronyms

AIDS	acquired immune deficiency syndrome
BCC	behaviour change communication
CBO	community-based organization
CHC	community health centre
CSO	civil society organization
DR-TB	drug-resistant TB
DS-TB	drug-sensitive TB
ESP	essential services package
GDP	gross domestic product
Global Fund	The Global Fund to Fight AIDS, Tuberculosis and Malaria
GoN	Government of Nepal
HIV	human immunodeficiency virus
IEC	information, education and communication
LMICs	low- and middle-income countries
LSHTM	London School of Hygiene and Tropical Medicine
M&E	monitoring and evaluation
MAF-TB	Multisectoral Accountability Framework for TB
MDR-TB	multidrug-resistant TB
MoH	Ministry of Health
MoHFW	Ministry of Health and Family Welfare
MoPH	Ministry of Public Health
MoSW	Ministry of Social Welfare
MPI	Multidimensional Poverty Index
NESDB	Office of the National Economic and Social Development Board
NGO	nongovernmental organization
NSP	National Strategic Plan
NTP	National TB Programme
OOP	out of pocket
PLHIV	people living with HIV
RR-TB	rifampicin-resistant TB
SDG	Sustainable Development Goal
SE	South-East (Asia)
SPM	social protection measure
TB	tuberculosis
UHC	universal health coverage
USAID	United States Agency for International Development
WFP	World Food Programme
WHO	World Health Organization

Foreword

The WHO South-East Asia Region is home to one quarter of the global population but has a disproportionately high TB burden, accounting for more than 45% of global TB incidence and more than half of TB deaths. Social and behavioural determinants linked to poverty such as undernutrition, overcrowding, smoking, alcohol use and diabetes all contribute to TB vulnerability, and it is common for TB infection to exacerbate socio-economic hardships faced by TB-affected individuals and families. Globally, nearly half of TB-affected households spend more than 20% of their income on TB treatment.

The WHO South-East Asia Regional Strategic Plan towards Ending TB 2021–25 highlights the need for rigorous, evidence-based implementation of key social protection measures (SPMs) to prevent TB infection and enhance TB treatment outcomes. The Strategic Plan highlights how SPMs that address poverty and undernutrition specifically are crucial to shielding vulnerable groups from deprivation and exclusion caused by crises and shocks, and for accelerating the overall TB response.

In support of this agenda, this document identifies and studies the diverse SPMs and interventions being made in four countries of the Region – Bangladesh, Indonesia, Nepal and Thailand. It assesses TB-sensitive and TB-specific SPMs and highlights a series of recommendations for countries to consider while introducing SPMs. It urges all countries of the Region to strengthen economic support to TB patients and their families across the entire continuum of care, and to increase multisectoral accountability and collaboration. It highlights the need for increased psychosocial support for TB patients as part of broader efforts to improve access to integrated, people-centred TB care.

It is intended that this report will serve as a first step in generating Region-specific evidence on TB-sensitive and TB-specific SPMs while promoting dialogue, adaptation and action. I urge all TB stakeholders in the Region to effectively utilize the information contained herein and reiterate WHO's steadfast support to achieve the End TB milestones.

Dr Poonam Khetrapal Singh
Regional Director
WHO South-East Asia Region

Executive summary

Introduction

Tuberculosis (TB) has been a long-standing global health issue, causing significant physical, social, and economic challenges for affected individuals. The WHO South-East Asia Region, a group of 11 countries, carries the largest burden of TB cases in the world at 45% (in 2021). Economically disadvantaged populations are disproportionately affected by TB, as their marginalized circumstances create an environment conducive to the disease's spread and hinder treatment completion. The impact of TB goes beyond health, leading to unemployment, financial hardship, and increased risk of poverty for patients and their households. Malnutrition further exacerbates the disease's severity and mortality rates. The strong linkages and interplay between poverty, undernutrition, and TB highlights the complex relationship between these issues. Therefore, to accelerate the decline of TB, there is an urgent need to adopt a holistic, patient-centric approach that takes into account patients' economic, social, physiological and emotional needs.

In this context, the WHO Regional Office's Regional Strategic Plan towards Ending TB for 2021–2025 recognizes social protection measures (SPMs) as a key strategy area to address health-care system, sociocultural, and financial barriers. Objective 4 of this Strategic Plan focuses on SPMs to alleviate poverty and support households affected by TB and considers factors such as undernutrition and poor financial status. SPMs are crucial for shielding vulnerable groups from poverty, deprivation, and exclusion caused by crises and shocks. SPMs can play a crucial role in mitigating poverty among TB patients, preventing treatment disruption, and reducing the socioeconomic burden caused due to TB.

Study design and methodology

This study was undertaken with the objectives of identifying and documenting SPMs for TB, assessing the TB sensitivity of non-TB-specific SPMs, identifying barriers and challenges to the implementation of SPMs, and developing recommendations for national TB programmes (NTPs) in the South-East (SE) Asia Region to consider while introducing SPMs. The study focused on four countries – Bangladesh, Indonesia, Nepal, and Thailand – and followed an exploratory sequential mixed methods design for data collection and analysis. This included preliminary desk review and qualitative research through surveys and stakeholder interactions (in-depth interviews and focus group discussions).

Findings

The study highlights the diverse SPMs and interventions available in the selected countries. Overall, the findings reveal that specific SPMs have been implemented for patients with drug-resistant (DR)-TB in Bangladesh, Nepal, and select provinces in Indonesia. These measures include financial assistance, nutritional support, transportation allowance, and reimbursement for ancillary investigations. However, it is noted that while SPMs are available for DR-TB patients,

they are not universal in nature and do not include provisions for patients with drug-sensitive (DS)-TB. Psychosocial support and community engagement efforts are also recognized as crucial for TB patients. Furthermore, stakeholders emphasize the need to leverage existing social protection programmes to cater to the needs of TB patients, based on the social determinants and socioeconomic impact of the disease in specific locations. Poverty is identified as a significant factor that influences the development of and recovery from TB, exacerbating an already poor nutritional status and hindering healthcare seeking. During discussions, stakeholders suggested integrating patients with TB into relevant programmes to alleviate the financial burden of TB care. Lack of awareness among beneficiaries and administrative challenges were also identified as barriers to the effective implementation of social protection programmes. The country-level findings are detailed below.

(1) **Bangladesh.** In Bangladesh, SPMs are being implemented to address the burden of TB and ensure access to care and treatment for certain segments of TB-affected populations. The NTP provides cash transfers, reimburses investigation costs, and provides travel allowances for follow-up visits to patients with multidrug-resistant (MDR)-TB. In addition, the country has a National Social Security Strategy aimed at reforming the social security system and prioritizing the poorest and most vulnerable members of society. Various schemes and programmes have been initiated, which may be supportive for TB patients as well, such as cash transfers for financially insolvent disabled persons; widowed, deserted and destitute women; and vulnerable groups. Additionally, unconditional and conditional cash transfers are provided, and safety net systems have been established for the poorest, including employment-generation programmes and food transfers during disasters. However, Bangladesh's health system faces challenges such as low health expenditure, limited availability of legal documentation and slow implementation of healthcare financing strategies, resulting in a cascading impact on TB elimination efforts.

(2) **Indonesia.** The health system in Indonesia is decentralized, with responsibilities divided among the central, provincial, and district governments. A few provinces of the country provide social support for patients with DR-TB, which includes food and nutritional support, ambulatory services for patients to travel from the district level to the provincial level or beyond, and monthly support from the Ministry of Social Welfare (PKH). Overall, Indonesia has implemented various SPMs at the country level that aim to support the most vulnerable populations, including TB-affected individuals. The Program Keluarga Harapan (PKH) provides conditional cash transfers to families with health and education conditionalities. The Sembako Program offers non-cash food assistance, while the Program Kesejahteraan Sosial Anak (PKSA) provides conditional cash transfers to neglected children and youth. Other initiatives include social assistance for socially vulnerable people, unconditional cash transfer programmes, and social assistance for the severely disabled. While Indonesia has made progress in reducing poverty and implementing SPMs, further efforts are needed to improve access to standardized TB treatments, promote treatment adherence, and address the impact of comorbidities such as diabetes in TB patients.

(3) **Nepal.** Nepal has implemented TB-specific SPMs in the country. The National TB Control Centre (NTCC) provides transportation and nutritional support to people with DR-TB. Hostels for patients with DR-TB are available and monthly cash incentives are also

provided during the intensive phase of treatment. Nepal has other SPMs in place that may be supportive for TB patients, such as social security allowances for disabled persons, mid-day meals for students, and housing programmes. Overall, Nepal is working towards eliminating TB and reducing poverty, but there are challenges to overcome, such as improving case detection, enhancing access to health care, reducing social stigma, and ensuring comprehensive social protection measures for those affected by TB.

(4) **Thailand.** There are no TB-specific SPMs being implemented in the country. However, several SPMs are in place that may support people affected by TB in Thailand, such as the State Welfare Card Programme, Baan Mankong Programme, and monthly cash allowances for people with disabilities and those with HIV/AIDS. Further, Thailand has implemented TB-specific strategic plans and interventions to strengthen TB prevention, treatment and control, including enhancing human resource capacity and collaborating with partners. However, addressing social stigma, improving access to health-care services for migrants, and increasing awareness about available care are crucial for further progress in TB elimination.

Recommendations

The report provides key recommendations for addressing the various challenges related to TB to improve patient outcomes and break the cycle of poverty and disease. The recommendations focus on providing economic support, strengthening multisectoral accountability and collaboration, integrating nutrition support with patient care, and providing psychosocial support to enhance people-centred care.

(1) Providing economic support in various forms across the continuum of care

- *Cash transfers.* Member States could consider providing easily accessible cash transfers to TB patients, either conditional or unconditional, as well as indirect support for nutrition, medical health insurance, transportation, and housing.
- *Handholding support.* Bank accounts could be opened for all TB patients and support provided for those without accounts to ensure timely transfer of benefits.
- *Health insurance coverage.* National insurance schemes can be expanded to cover all diagnostics and inpatient care for TB patients, and a special TB benefits package could be developed to cover outpatient costs.
- *Vocational and rehabilitative support.* Post treatment, patients could be connected with relevant national livelihood programmes to reintegrate them into the workforce, and vocational training provided for family members.

(2) Accelerating efforts at strengthening multisectoral accountability and collaboration

- *Implementing a multisectoral accountability framework.* A baseline assessment could be conducted and a customized multisectoral accountability framework for TB (MAF-TB) developed to align the roles and responsibilities of stakeholders across sectors.
- *Fostering intersectoral ownership.* Bringing together relevant ministries, departments, the private sector, civil society, and affected communities would

ensure comprehensive access to social protection services. It is suggested to establish institutionalized structures and explore cross-sectoral financing.

(3) Integrating nutrition support with the patient's standard of care

- *Providing supplementary nutrition.* Cash transfers can be combined with distribution of food packages, incorporating calorie-dense and nutritious items that are easy for patients to consume. Advocacy could be conducted for private sector involvement in developing nutritious food products for TB patients.
- *Enhancing service delivery.* Leveraging the existing infrastructure and human resources of relevant government departments would help to facilitate service delivery. Similarly, nongovernmental organizations (NGOs) and community-based organizations (CBOs) could be engaged to deliver benefits to patients. Moreover, this disbursement of in-kind food at a health facility will provide an opportunity for interaction with the patient and a chance to counsel and follow up on treatment.

(4) Providing psychosocial support for people-centred care through integration of counselling and community-based support

- *Offering formal psychosocial support.* Counselling by health-care professionals for TB-affected households is recommended, along with training for health-care providers, and providing the necessary tools and services for this. Medical colleges and community settings can be partnered with for support services.
- *Improving awareness and empathy.* Designing and launching community-level information, education and communication (IEC) and behavior change communication (BCC) campaigns, involving local stakeholders, and targeting schools would help to improve awareness and dispel myths.
- *Fostering peer support.* TB survivors and affected individuals can be empowered to serve as advocates and peer supporters, sharing their experiences and providing information and support.
- *Implementing community-led monitoring.* Community-led monitoring for TB services can be used to assess quality, accessibility, and human rights issues. The data could be used for evidence-based decision-making and improving services, programmes, and policies.

Across all the aforementioned recommendations, a standardized monitoring and evaluation framework using predefined indicators should be rolled out to evaluate the adherence to and impact of such interventions. Furthermore, efforts must be made to create greater awareness on available entitlements and provisions. This information can be proactively disseminated by multiple actors of the TB ecosystem through various channels.

By implementing these recommendations, countries in the South-East Asia Region can enhance their overall TB response, promote patient well-being, and mitigate the socioeconomic impact of the disease.

Conclusion and the way forward

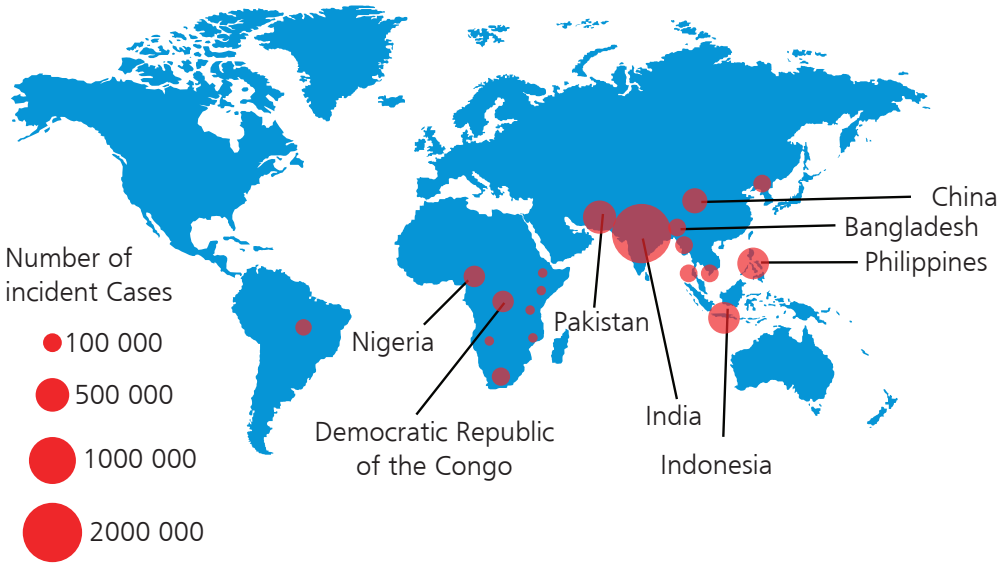
In conclusion, the heavy reliance on a biomedical approach alone is inadequate for moving towards eliminating TB. There is an imperative need to address the underlying comorbidities and social determinants of TB, especially after the COVID-19 pandemic. Social protection for TB patients can alleviate poverty, maintain work capacity, and prevent income loss, supporting emergency preparedness efforts. Collaboration between TB programmes, schemes, and communities is crucial to expanding the network of social protection, alongside free diagnosis and treatment, reducing the financial burden on patients. Addressing social protection needs is essential for achieving the TB-related UN Sustainable Development Goals (SDGs) and eliminating poverty. This report provides foundational evidence for the Region to facilitate dialogue among relevant stakeholders and accelerate policy development for designing, adopting and implementing TB-sensitive SPMs at the country level.

1. Introduction

1.1 Tuberculosis and the South-East Asia Region

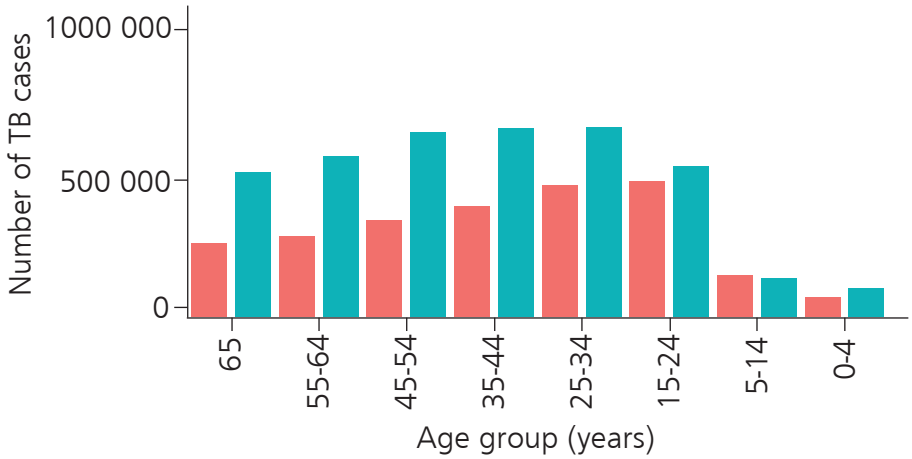
For decades, tuberculosis (TB) has been the leading cause of death from a single infectious agent worldwide. In 2021, an estimated 10.6 million people contracted the disease, with 1.6 million estimated deaths globally *(1)*. Around 90% of annual TB cases are observed in adults, with a higher incidence among men compared to women. The notification patterns of newly diagnosed TB cases vary across different regions. In the Americas and South-East Asia, there was an increase in TB notifications until 2019, followed by a significant decline in 2020 and some recovery in 2021. The Eastern Mediterranean Region experienced a notable decrease in notifications between 2019 and 2020, but it almost fully recovered in 2021. The European Region witnessed a clear negative impact in 2020, aligning with the pre-2020 trend. The Western Pacific Region did not show any recovery in 2021. Interestingly, the African Region had a modest decrease in 2020 and saw notifications surpassing 2019 levels in 2021. Fig. 1.1 and 1.2 provide deeper insight into the global TB trends and the various socioeconomic factors that determine the disease burden.

Fig. 1.1 Estimated TB incidence in 2021 in high-burden countries



Source: Global tuberculosis report, 2022

Fig. 1.2 Case notifications of people newly diagnosed with TB, disaggregated by age and sex (female in saffron; male in turquoise), 2021



Source: Global tuberculosis report, 2022

In 2014 and 2015, Member States of WHO and UN adopted WHO's End TB Strategy, which committed to a global reduction in the absolute number of TB deaths by 95% and a reduction in TB incidence rate by 90% by the year 2035 (Fig. 1.3) *(1)*. The three pillars of the Strategy were:

1. integrated, patient-centred TB care and prevention;
2. bold policies and supportive systems;
3. intensified research and innovation.

Fig. 1.3 WHO End TB Strategy *(2)*

TARGETS	MILESTONES 2020	MILESTONES 2025	SDG* 2030	END TB 2035
Reduction in number of TB deaths compared with 2015(%)	35%	75%	**90%**	**95%**
Reduction in TB incidence rate compared with 2015(%)	20%	50%	**80%**	**90%**
TB affected families facing catastrophic costs due to TB (%)	0%	0%	**0%**	**0%**

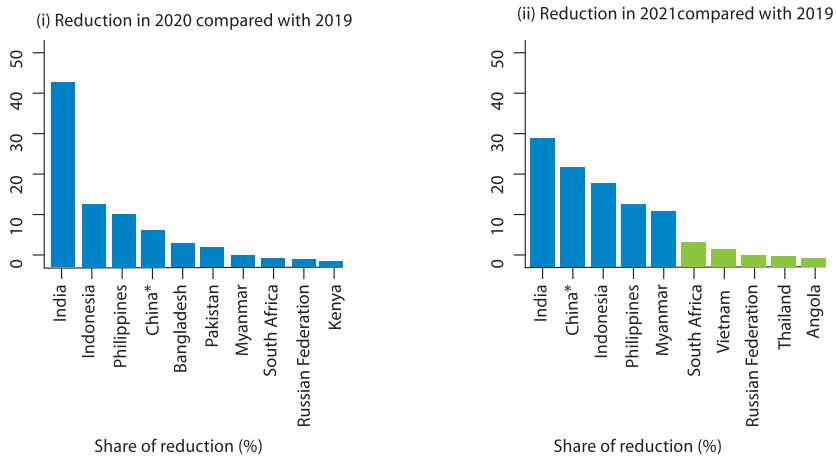
Source: WHO End TB Strategy *(2)*

Furthermore, WHO released an ethics guidance to ensure proper implementation of the End TB Strategy. This listed providing patients with the required social support and enabling equitable access to care as crucial to strengthening the TB elimination response *(3)*. The document, released in 2017, elucidates how the End TB Strategy is supported by ethical

principles and values, making it crucial to thoroughly analyse and tackle ethical concerns related to TB care and control. The initial phase involves clarifying the essence of ethics, its connection to human rights, and establishing methods to integrate ethical guidance into the activities of national TB programmes and other entities involved in implementing the End TB Strategy.

The WHO South-East (SE) Asia Region – a group of 11 countries that account for 26% of the world's population – carries the largest burden of TB cases in the world at 45% (in 2021) *(4)*. As is shown in Fig. 1.2, six of the 11 countries in the Region – Bangladesh, Democratic People's Republic of Korea, India, Indonesia, Myanmar and Thailand – are on the high TB-burden country list *(1)*. The SE Asia Region collectively was also unable to reach the 2020 milestone of 25% reduction in TB incidence between 2015 and 2020 and achieved only 11% cumulative reduction during this period. Thus, if ending TB at a global level is to be achieved, it is imperative that TB elimination in the SE Asia Region is made a priority (Fig. 1.4) *(1)*.

Fig. 1.4 The top 10 countries that accounted for >90% of the global reduction in case notifications of people newly diagnosed with TB in 2020 and 2021, compared with 2019



Source: Global tuberculosis report, 2022

The COVID-19 pandemic impacted health programmes globally, especially TB programmes, as human resources, diagnostics, and other health infrastructure for TB was repurposed toward the COVID-19 response. The pandemic led to an 18% drop in case notifications in 2020, with 10 countries contributing to 90% of this reduction *(1)*. While case notifications rose in 2021, they are yet to reach pre-pandemic levels.

As the world tries to recover from the COVID-19 pandemic, public health systems must build back better for a post-pandemic future in TB diagnostic, treatment, care and support services. These should be back on track so that countries can meet the Sustainable Development Goal (SDG) commitment to end TB by 2030.

1.2 Social determinants of TB

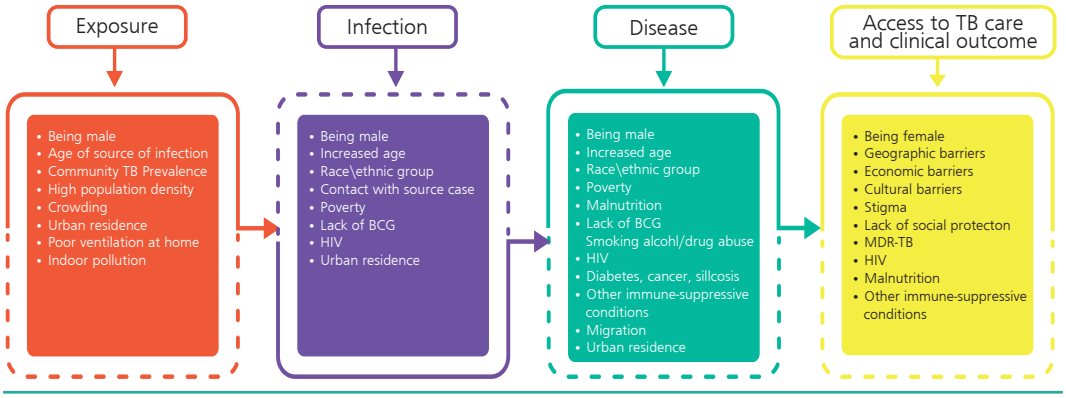
"The social determinants of health (SDH) are the non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and

the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems." – World Health Organization (5)

The social determinants of TB directly influence all modalities of TB pathogenesis and recovery (risk of exposure, susceptibility to disease progression, time taken for diagnosis and treatment, treatment adherence and success) (Fig. 1.5). The following list provides examples of the social determinants of health, which can influence inequities in all modalities of TB pathogenesis and recovery:

- Income and social protection
- Education
- Unemployment and job insecurity
- Working life conditions
- Food insecurity
- Housing, basic amenities and the environment
- Early childhood development
- Social inclusion and non-discrimination
- Structural conflict
- Access to affordable health services of decent quality

Fig. 1.5 Risk factors for different stages of TB pathogenesis and epidemiology



Source: Hargreaves JR et al. *(6)*

Unsafe living and working environments are key social determinants of TB. Crowded, badly ventilated living and working spaces, which are often a result of limited government spending and regulation on housing and workplaces, income inequality and poverty, can increase the risk of TB transmission.

Poverty is also a key social determinant of TB as its effects on the disease are profound. As extensive studies have substantiated in the past, there is a strong correlation between poverty and associated undernutrition, and TB *(7,8)*. The disease is five times more common among economically weaker populations. Over 95% of TB cases as well as TB deaths occur in developing countries, and each of the 30 high-burden countries for TB are low- and

middle-income countries (LMICs) *(9)*. This is because people living in LMICs and in poverty are more vulnerable to the illness due to the increased presence of risk factors associated with poverty: income restraints, undernutrition, crowded housing, limited access to health care, social stigma, etc. *(6)*. This close association between poverty and TB was particularly highlighted as the COVID-19 crisis pushed 4.7 million people in the SE Asia Region into extreme poverty *(10)*. Social isolation and lockdowns had reportedly increased inequities and human rights-related barriers to TB services within the Region *(11)*.

Undernutrition, a common problem in poor or low-income areas, increases the likelihood of developing active TB. Undernutrition, caused by factors such as food insecurity, poverty, and inefficient economic policies, accounts for 20% of the world's TB cases and is also responsible for an increased risk of negative treatment outcomes, relapse, and mortality *(12)*. TB-related stigma has been shown to impact health-care-seeking behaviour and treatment adherence among TB patients *(13)*. Thus, poverty-linked risk factors are the social determinants impacting the TB prevention–diagnosis–treatment pipeline and resulting in the inequitable distribution of the TB burden across the world *(14)*.

Importantly, the relationship between poverty and undernutrition, and TB is also bidirectional. It is a vicious circle where poor socioeconomic conditions lead to a high risk of contracting TB, and contracting TB worsens the family's socioeconomic condition. In addition to its long-term impact on health, TB also brings financial detriment to the affected individuals and their families, with close to one in two TB-affected households globally spending more than 20% of their household income on treatment *(9)*. A study conducted in India to understand the impact of TB on the educational and nutritional status of family members of patients found that among exposed families, wasting in children under 5 years was at over 70%, and almost 75% of children between 5 and 18 years had low basal metabolic rate (BMI) scores. Schooling among children from exposed families was threefold likely to be delayed, and 1.5-fold likely to be disrupted *(15)*.

In addition, people living in poverty may lack access to general health knowledge or access to health care, social protection, and the resources required to prevent exposure to TB risk factors, such as HIV, smoking, and alcohol consumption. Finally, poverty can also prevent people from having the power and resources to act on health knowledge. These determinants are not merely factors that put people at higher risk of contracting TB, but also act as barriers to accessing welfare schemes and consequently adherence to TB treatment.

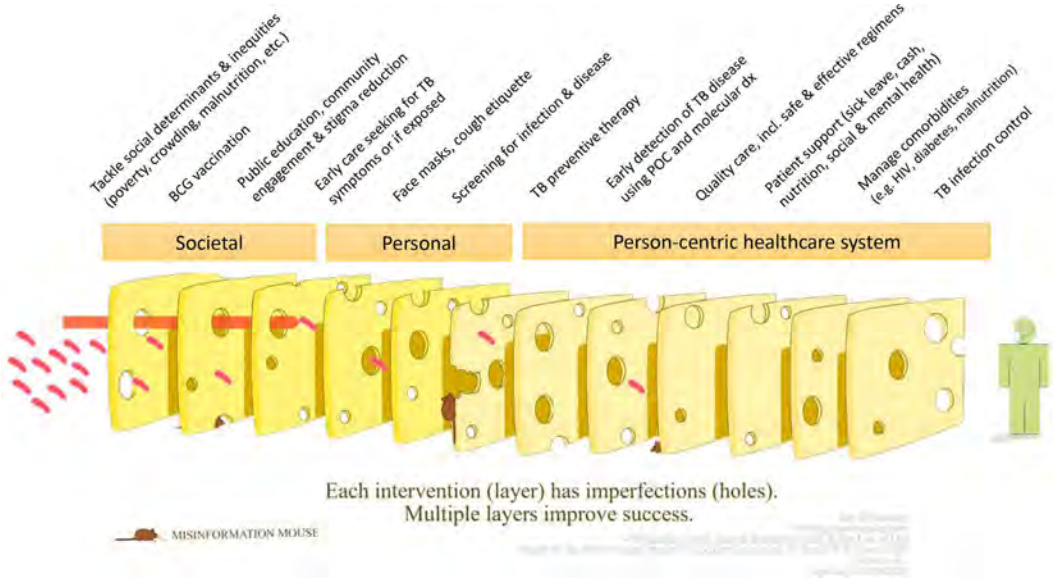
Traditionally, the response to TB has primarily relied on a biomedical approach to reduce the number of TB cases. This has involved strengthening the diagnostic and treatment infrastructure and building the capacities of health-care professionals providing these services. This model, however, has proven to be insufficient to reach the goals set by the WHO's End TB Strategy, including the goal to reduce the number of TB-affected families facing catastrophic costs to zero by 2020 *(16)*. The Strategy also called for interventions that address the social determinants of TB as well as their impact on people affected by TB.

For the past two decades, researchers and policy experts have been reorienting their focus from the conventional biomedical approach to TB elimination to a more holistic approach that addresses the social determinants of TB such as poverty and undernutrition. In 2018, at the UN High-Level Meeting (UN-HLM) on TB, Member States committed to go beyond

the health sector and enable holistic, multisectoral engagement to end TB. Following up on this commitment, the WHO Global TB Programme launched the Multisectoral Accountability Framework to Accelerate Progress to End TB by 2030 (MAF-TB), which is to be implemented at the country level with support from the WHO *(4)*.

Most recently, Zimmer et al. (2021) use their "TB Swiss cheese model" to elucidate how TB interventions exist as different layers within three broad levels: societal, personal and person-centric health-care system (Fig. 1.6). The holes in the layers are the various gaps in the interventions that lead to negative TB outcomes and need to be addressed to sufficiently protect individuals from infection or mortality *(17)*. The first layer in the model is to tackle the social and societal determinants of TB.

Fig. 1.6 The "Swiss cheese" model



Source: Zimmer et al., 2021

Many studies have advocated for multisectoral, collaborative action against poverty and poverty-linked risk factors to accelerate progress towards ending TB *(18)*.

1.3 Social protection measures and TB

In October 2021, the Regional Office launched the Regional Strategic Plan (RSP) towards Ending TB for 2021–2025, in which SPMs emerged as a key strategy area. This RSP takes into consideration the impact of COVID-19 on NTPs in the Region. The RSP 2021–2025 is in line with the Global End TB Strategy and identifies three barriers to be addressed to achieve the End TB targets (2):

1. **health-care system barriers**, which relate to the availability and quality of services and people's trust;
2. **sociocultural barriers**, inclusive of stigma and discrimination that get compounded by lack of awareness;

3. **financial barriers**, which include direct and indirect costs for the patient.

To address these challenges, the RSP has five objectives, of which Objective 4 is explicitly focused on SPMs as a mechanism to alleviate poverty and support households affected by TB.

1. Ensure universal access to high-quality, rights-based TB prevention and care services without stigma and discrimination for everyone, focusing on marginalized and vulnerable people.
2. Ensure high-level political commitment, adequate human and financial resources, and integrated services for TB.
3. Ensure mechanisms for multisectoral coordination and accountability for ending TB.
4. Reduce human suffering and the socioeconomic burden of TB by providing SPMs that have a key focus on poverty alleviation.
5. Promote people-oriented research and innovation for improved service delivery through the development and roll-out of new tools and innovative digital technologies.

The directive to use SPMs within the SE Asia Region finds application in the RSP while additionally taking into consideration the impact of COVID-19 on public health delivery in the Region. Objective 4 of the RSP focuses specifically on SPMs – including nutritional, psychosocial, and material support to TB patients. These objectives are being looked at through three lenses in the RSP (Fig. 1.7):

1. within TB programmes
2. within the health sector
3. beyond the health sector.

Fig. 1.7 The three lenses of the Regional Strategic Plan

Source: Regional Strategic Plan towards ending TB in the WHO SE Asia Region 2021–2025 *(19)*

What makes Objective 4 unique and critical to furthering any holistic roadmap on TB elimination is that it looks at the TB landscape from a non-clinical perspective. A measure such as this is significant as almost 23% of TB cases in the SE Asia Region are attributable to factors such as undernutrition, poor financial status, and lack of knowledge required to diagnose, treat and prevent TB *(19)*.

Objective 4 of the RSP 2021–2025 highlights the need to address the different types of barriers faced by TB-affected people outside of the patient pathway, thereby reducing human suffering and the socioeconomic burden of TB through SPMs and other poverty alleviation programmes. In addition to working within the public health matrix, it calls for mitigation of the social burden of TB through action taken outside the health sector, in line with the MAF-TB.

SPMs are an important mechanism for supporting patients to overcome the socioeconomic impact of the disease as they undergo anti-TB treatment. Some key definitions of SPMs are listed below in Table 1.1.

Table 1.1. Key definitions of social protection measures

S. no.	Organization	Definition
1	World Health Organization	Social protection measures aim to provide income for basic living (e.g. shelter, food) where people are destitute or suffer losses of income *(20).*
2	Asian Development Bank	Social protection is defined as the set of policies and programmes designed to reduce poverty and vulnerability by promoting efficient labour markets, diminishing people's exposure to risks, and enhancing their capacity to protect themselves against hazards and interruption/loss of income. Social protection consists of five major elements: (i) labour markets, (ii) social insurance, (iii) social assistance, (iv) micro and area-based schemes to protect communities and (v) child protection *(21)*.
3	The World Bank	Social protection systems help individuals and families, especially the poor and vulnerable, to cope with crises and shocks, find jobs, improve productivity, invest in the health and education of their children, and protect the aging population. Social protection programs are at the heart of boosting human capital and empowering people to be healthy, pursue their education, and seek opportunity to lift themselves and their families out of poverty *(22)*.

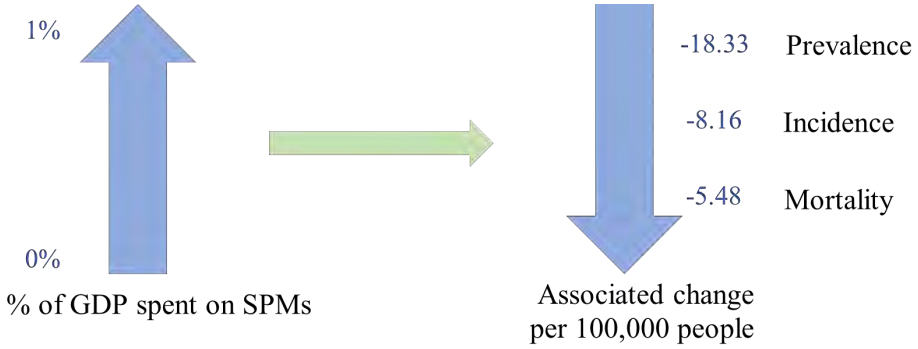
SPMs are policies and programmes geared to shield vulnerable groups from experiencing poverty, deprivation, or exclusion due to different crises and shocks, thereby enhancing their resilience to these. These measures are put in place to counter the social determinants of diseases and ensure access for people who are born, live, work, and age in vulnerable settings that often prevent them from accessing treatment made available to them. Such measures include different types of material, nutritional and psychosocial support. In the 2030 Agenda for Sustainable Development, the implementation of nationally appropriate SPMs was recognized as a target under SDG 1 of ending poverty.

Social protection for TB patients plays a crucial role in mitigating poverty or vulnerability to poverty by safeguarding their ability to work, preventing treatment disruption, and averting income loss. Additionally, providing social protection to TB patients contributes to enhancing emergency preparedness. According to a modelling analysis, eliminating poverty

and implementing social protection programmes along with universal coverage could lead to a reduction of more than 75% in global TB incidence. Even the implementation of SPMs alone would result in a significant decrease in TB cases *(17)*.

There is an inverse association between TB incidence and SPMs. A country that increased its social protection spending from zero to 1% of its gross domestic product (GDP) was associated with a change of –18·33 per 100 000 people in prevalence, –8·16 per 100 000 people in incidence, and –5·48 per 100 000 people in mortality (Fig. 1.8) *(23)*. The study examined the global correlation between the expenditure on social protection and the prevalence, incidence, and mortality rates of TB. Indeed, a modelling analysis has shown that expanding social protection coverage and ending extreme poverty could result in an 84·3% reduction in TB incidence by 2035 *(24)*.

Fig. 1.8 Inverse association between tuberculosis and social protection measures



Source: Siroka et al.

However, according to estimates by the International Labour Organization (ILO) in 2019, only 29% of the working-age population in the Asia-Pacific region is legally covered by comprehensive social security systems *(25)*. Social security systems are benefits that a society provides to individuals and households to ensure access to health care and guarantee income security – particularly in cases of old age, unemployment, sickness, disability, work injury, maternity, or loss of a breadwinner *(26)*.

Encouragingly, there are already several existing social support measures being implemented across the SE Asia Region. For instance, in India, in line with the country's National Strategic Plan 2017–25, the Government of India launched a direct benefit transfer scheme (cash transfer to the beneficiary's bank account) – the Nikshay Poshan Yojana, providing a monthly conditional cash transfer of INR 500 (US$ 6) to support the dietary needs of notified TB patients. To provide additional diagnostic, nutritional, and vocational support to those on TB treatment, the Government of India launched the Pradhan Mantri TB Mukt Bharat Abhiyaan in September 2022. This scheme provides a platform for individuals, elected leaders, corporates, and other organizations to become donors (Ni-kshay Mitras) to support patients in their recovery journey *(27)*.

In Indonesia, the United States Agency for International Development (USAID)-led Mobilizing Networks for Self-Reliance to Fight TB (or Mandiri TB, "TB Self-Reliance" in

Indonesian) is another example of strengthening support networks for drug-resistant (DR)-TB patients. The programme also furthers DR-TB patient care through a TB survivor organization by providing targeted training for pre-treatment counselling and skills to monitor treatment adherence *(28)*.

These are just a few examples of existing SPMs in the Region, which are being implemented in isolation from each other. But these SPMs cannot operate in geopolitical silos if the SE Asia community is to end TB. Considering how many people are affected economically in the Region, there is an urgent need to document the design and components of SPMs, develop a repository of learnings and best practices with regard to SPMs and how they can be implemented swiftly, at scale. To this end, it becomes imperative for countries and all relevant stakeholders to collaborate and develop a mechanism to learn from and augment each other's capabilities to end TB where possible.

2. Study design

2.1 Objectives

Global Health Strategies (GHS), on behalf of the WHO Regional Office for South-East Asia, undertook a study in four countries of the Region (Bangladesh, Indonesia, Nepal, and Thailand). The study had four primary objectives:

1. Identify and document existing SPMs as part of the care, management, and control of TB at the national (and, where applicable, subnational) level in Bangladesh, Indonesia, Nepal, and Thailand.
2. Assess the TB sensitivity (the extent to which these measures can be adapted to best meet the needs of TB-affected households) of non-TB-specific SPMs.
3. Identify key barriers and challenges in implementing SPMs, and document best practices in the adoption/adaptation, implementation, and scale up of SPMs for TB elimination.
4. Develop actionable recommendations for NTPs in the SE Asia Region to adapt or adopt proven interventions being implemented in other countries.

2.2 Methodology

The study followed an exploratory sequential mixed methods design[1] for its data collection and analysis. This included preliminary desk review and qualitative research through surveys and stakeholder interactions (in-depth interviews and focus group discussions).

The conceptual framework, questionnaires, interview guides, data extraction template, and data analysis template were developed in consultation with the London School of Hygiene and Tropical Medicine (LSHTM). The process involved the following steps.

2.2.1 Conceptual framework

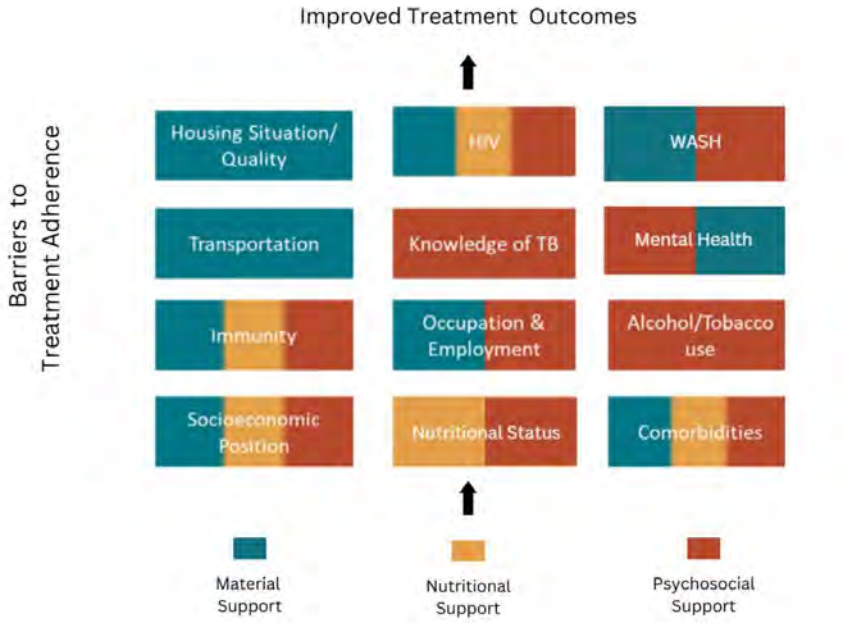
First, a conceptual framework was developed to illustrate the key links between SPMs (and their main components) and TB treatment outcomes. Its design was supported by conducting desk research and literary review of the existing SPMs in each of the target countries followed by interviews and surveys to provide context to these policies.

The study analysed specific types of barriers to access of SPMs, which have a crucial impact on treatment adherence at the individual and household levels, and how SPMs can mitigate the effect of these barriers on people affected by TB, thereby counteracting their negative impact and improving treatment outcomes.

1 A desk review was conducted to develop an understanding of the TB and social protection landscape, and existing schemes in the target countries. This was followed up by qualitative research through questionnaires, in-depth interviews (IDIs) and interviews to develop key findings and recommendations for NTPs.

Here, the measures have been categorized into material, nutritional and psychosocial support. Material support can comprise cash transfers, wage loss compensation, provision of housing, etc. Nutritional support could include in-kind transfers and meal programmes. Psychosocial support may entail peer groups, vocational training, and counselling (Fig. 2.1).

Fig. 2.1 Types of social protection measures



2.2.2 Desk review

GHS conducted desk research to gather pertinent information on the four target countries (Bangladesh, Indonesia, Nepal, and Thailand). The desk review informed the development of the survey questionnaires, interview guides and points of discussion for focus groups.

This phase included review of TB- and SPM-related documents from the target countries (national strategic plans, annual NTP reports, reports from ministries and joint monitoring missions), reports from WHO as well as other multilateral organizations and partners, databases on social protection and the global burden of disease, journal articles and publications, and media publications.

The general aim of the review was:

1. to determine the larger socioeconomic context contributing to the TB burden in the target countries;
2. to identify the SPMs available in the target countries and TB-specific SPMs for people affected by TB;
3. to map country-level linkages between social protection, TB treatment-related expenditure and TB control and elimination.

Once SPMs were identified, inclusion and exclusion criteria were developed to identify and shortlist the SPMs for data extraction and further analysis.

SPMs with the following components and approaches were included:

S. no.	SPM
1.	Unconditional and conditional cash transfers
2.	Conditional in-kind transfers, including nutrition programmes, public distribution systems, cooking fuel and food subsidies, food vouchers/stamps/coupons
3.	Income protection/wage loss compensation due to illness/guaranteed employment/minimum basic income/vocational training
4.	TB-specific social protection schemes beyond free/subsidized diagnosis and treatment (cash transfers/in-kind benefits, including treatment completion incentives to TB patients and enablers)
5.	Affordable/institutional housing
6.	Transport allowance to improve access to health care
7.	Existing avenues for patients to receive psychosocial support (including community support, support from self-help groups and patient/treatment support groups)
8.	Targeted interventions for people living in slums and temporary shelters, displaced people, members of TB key and vulnerable populations, such as children, health-care workers, Indigenous peoples, people living with HIV, people who use drugs, prisoners, miners, mobile and migrant populations, pregnant women, and the urban and rural poor
9.	Disability grants

SPMs with the following components and approaches were excluded:

S. no.	SPM
1.	Clinical benefits of universal health care/public health insurance (i.e. benefits involving direct diagnosis, treatment or care for a TB patient)
2.	Contributory social protection schemes such as contributory public health insurance, provident funds
3.	Labour-intensive public works programmes
4.	Labour market interventions
5.	Pensions and other benefits meant for older persons
6.	TB-specific incentives for the health system (incentives to health workers, private providers, treatment supporters, etc.)
7.	Benefits for work-injury victims

2.2.3 Surveys and stakeholder interactions (in-depth interviews and focus group discussions)

GHS developed country-specific questionnaires in consultation with the Regional Office and LSHTM to share with WHO and NTP officers from the four countries. Through these questionnaires, stakeholders were requested to provide information on the epidemiological profile and socioeconomic determinants impacting the TB burden in their country, as well as existing SPMs available to the public in their country. This was done to validate and cross-reference findings from the desk research, and better understand the barriers to SPM implementation and challenges faced by beneficiaries in the uptake of the SPMs. Responses from the surveys helped to determine the context in which these SPMs are implemented and the barriers where many are not implemented.

Key informant interactions	Country	Name	Designation
Written responses to questionnaires	Indonesia	Windy Oktavina	NTP
	Bangladesh	Afzalur Rahman	Programme Manager – TB
		Nazis Arefin Saki	National Professional Officer – TB, WHO
		Md Ferdous Wahid	Senior Manager – Communicable Disease Programme
	Nepal	Barsha Thapa	Technical Assistance for TB
Interviews and FGDs	Thailand	Phalin Kamolwat	Deputy Director, Bureau of Tuberculosis
		Gopinath Dyer	WHO

2.2.4 Key informant interactions

GHS conducted interviews with informants from key stakeholder groups in each country. In-depth interviews (IDIs) were conducted with NTP managers from the respective countries. The interviews were conducted with four to five informants as representative of different stakeholder groups key to the NTP. These included implementing agencies, donors, technical partners and nongovernmental organizations/civil society organizations (NGOs/CSOs). The guidelines were specifically developed to gather comprehensive information on the country's TB landscape, encompassing its social determinants and socioeconomic implications. Additionally, they aimed to assess the availability of social protection initiatives for both TB patients and the general population. Furthermore, the focus group discussions (FGDs) were structured to examine and authenticate the data compiled from desk research and questionnaire responses. Information gathered during the interviews was recorded and transcribed. Anecdotal evidence and direct observations offered by participants were compiled into interview summaries.

2.2.5 Data analysis and report development

GHS synthesized all of the gathered information to develop the findings and recommendations from this study, which were subsequently presented to the Regional Office for inputs. Data collection and analysis took place concurrently, directly integrating quality assurance into the approach through course corrections. The findings from the analyses across the countries were synthesized during the last stage of the assessment. The findings were interpreted by triangulating the results from the different data sources: desk review and key informant interactions. The primary data among the different sets of stakeholders were also compared with each other to get an idea about the insider (WHO respondents) and outsider (Ministry of Health/NTP managers and technical partner respondents) views for triangulation purposes. The report presents the findings categorized by country for all four countries that are part of this study. Each country subsection includes a succinct summary of its TB situation, a snapshot of the national TB programme, an analysis of the factors that impact accessibility to TB care and adherence to treatment in that specific Member State and concludes by elaborating on the various SPMs that affect individuals with TB in that country.

2.2.6 Limitations of the study

- **Accessibility of respondents and resources.** The scheduling constraints and non-availability of a few officials had an impact on the ability to access respondents. As a result, the medium used for data collection was not uniform; a mix of various interviewing mediums such as telephone, video and email questionnaires were employed. Due to time constraints, the coverage of ministry stakeholders was limited in a few Member States.
- **Desk review.** The secondary review was limited to documents available in English. Although many countries are adopting different types of patient support strategies for TB patients, only a handful of them have a well-established monitoring and evaluation (M&E) system to monitor results and assess the effectiveness of the programmes, as well as identify areas for improvement. Additionally, a large number of these initiatives are still in their early stages and have limited documentation of their activities and progress, in some cases.

3. Social protection landscape within the SE Asia Region

3.1 Bangladesh

3.1.1 Background

Bangladesh is a high-burden country for both DS- and DR-TB. During the pandemic, TB case notifications dropped by almost 22%. However, due to the implementation of several mitigation strategies, Bangladesh was able to bring notifications back to pre-pandemic levels in 2021 *(1)*.

Bangladesh's estimated TB burden as of 2021 *(1)*

Total population	169 million
Total TB incidence	375 000 [221 per 100 000]
MDR/rifampicin-resistant (RR)-TB incidence	4 500 [2.7 per 100 000]
HIV-positive TB incidence	730 [0.43 per 100 000]
HIV-negative TB mortality	42 000 [25 per 100 000]
HIV-positive TB mortality	170 [0.1 per 100 000]
Est. proportion of new TB cases with MDR/RR-TB	1%
Est. proportion of previously treated TB cases with MDR/RR-TB	4.8%
TB treatment coverage (notified/est. incidence)	82%
TB patients facing catastrophic total costs	–
TB case-fatality ratio (estimated mortality/est. incidence)	12%

3.1.2 Socioeconomic landscape

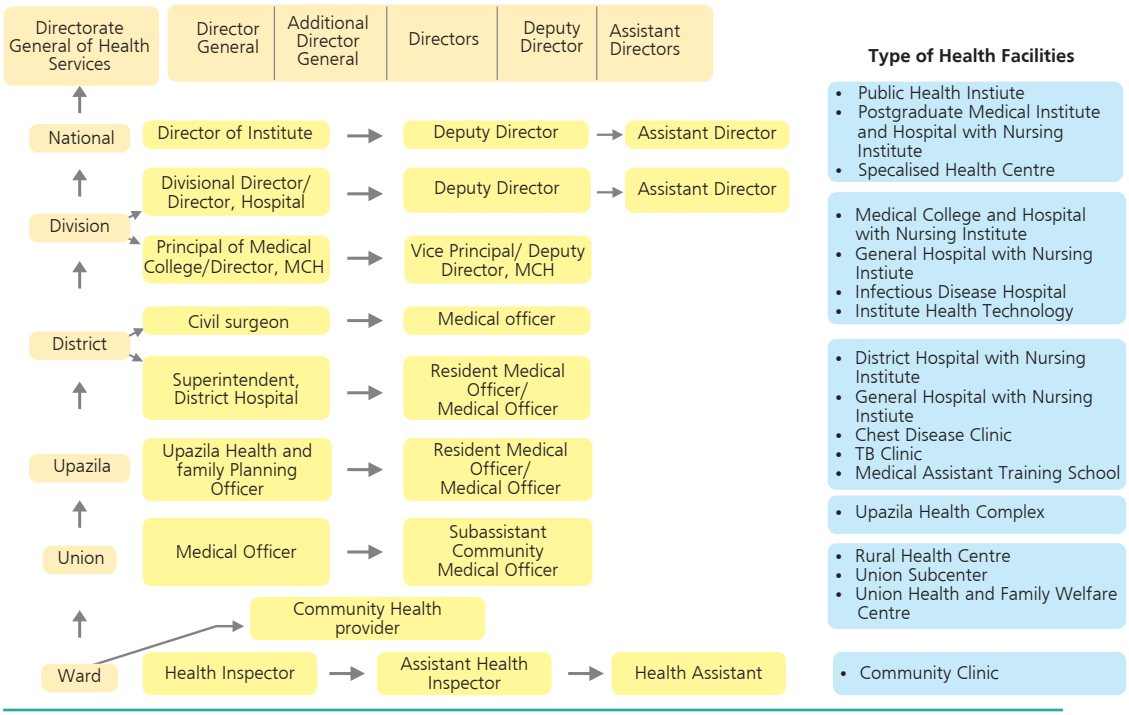
Since 2010, Bangladesh has shown significant economic and developmental progress, with its GDP being an average of 6.4%. The country has continued to work to reduce poverty and generate employment opportunities. There is also a strong pipeline of operations across the social protection and health-care sectors *(1)*.

3.1.3 Health systems in place to address TB

Bangladesh has a decentralized system of public health delivery. The Ministry of Health & Family Welfare (MoHFW) primarily manages general health and family planning services through the Directorates General of Health Services (DGHS) and Family Planning (DGFP). The DGHS manages the public health entities running at all administrative levels in the country:

district-level general and specialized hospitals, *upazila*[2] health complexes, union health, and family welfare centres as well as community clinics (Fig. 3.1).

Fig. 3.1 Bangladesh public health-care system



Source: Bangladesh Public Health Care System *(29)*

The DHGS is responsible for implementation of the Essential Services Package (ESP), a broad policy statement that determines the health benefits to be offered to the public across different tiers of public health facilities. The ESP was updated in 2016 for implementation during the 4th Health, Population and Nutrition Sector Programme period (2017–2022) and beyond. While its service coverage index more than doubled between 2000 and 2019, it remains below the average for LMICs *(30)*.

In 2019, Bangladesh's health expenditure was 2.48% of the country's GDP. Its current health expenditure per capita amounts to US$ 22.96. People in Bangladesh pay more than 70% of health-care costs out of pocket (OOP) *(31)*.

However, surveys and interactions with stakeholders revealed that Bangladesh's high TB burden can partly be attributed to the country's weak health system.

3.1.4 Expenditure

The development budget of the MoHFW and its agencies comes from the 4th Health, Population, and Nutrition Sector Development Programme (HPNSDP) 2017–2022. The total allocation under the revised annual development programme (RADP) for the DGHS was

2 Subunit of a district in Bangladesh

Bangladesh Taka (BDT) 3821.6 crore (US$ 36 585) *(32)*. Bangladesh's total public health expenditure amounted to US$ 123.29 purchasing power parity (PPP) per capita *(32)*, which was 2.48% of the country's GDP *(33)*. This set-up has proven to be insufficient as nearly a quarter of the country's households reported spending over 10% of the household budget on health care *(32)*.

To expand and improve its operations, Bangladesh has had a comprehensive health-care financing strategy and a corresponding implementation plan in place for the 2012–2032 period. However, the development of related legal documentation has been limited and the prioritization and necessary sequencing of actions are not well-defined, and implementation is noted to be slow *(30)*.

3.1.5 Social protection system

The National Social Security Strategy, 2015 was brought in to "reform the National Social Security System by ensuring more efficient and effective use of resources, strengthened delivery systems and progress towards a more inclusive form of social security that effectively tackles lifecycle risks, prioritizing the poorest and most vulnerable members of society". In 2021, the Government of Bangladesh allocated 17.83% of the total budget for fiscal 2021–2022 for social safety net programmes (SSNPs) *(34)*.

3.1.6 Key findings[3]

National TB Programme

The National Strategic Plan for TB Control 2021–2025 states that its budget is US$ 930 million of which US$ 429 million was identified as the financial gap and US$ 226 million was the funding gap during the allocation period 2021–2023. In this NSP, the NTP indicated that US$ 535 million was needed to fund the TB response, of which 30% is available from the Government of Bangladesh and 28% from international sources, leaving a funding gap of 42%. The NTP comes under the jurisdiction of the DGHS, MoHFW *(35)*.

Factors impacting access to TB care and treatment adherence

Children and adolescents, people living in informal settlements or slums, the elderly, and workers in factories and the informal sector are some of the key groups affected by TB. Stakeholder interviews revealed that poverty and lack of awareness around TB and its treatment are some of the key reasons for TB prevalence among these sections of the population. Furthermore, among the participants of the prevalence survey in Bangladesh, 65% of the bacteriologically confirmed TB cases were found to be current and previous smokers. Several research projects have elaborated on the factors that pose barriers for the people of Bangladesh to access TB treatment and adhere to it. Some of these factors are elaborated upon below.

3 Based on desk research and stakeholder interviews

Age

A research study noted that people between the ages of 21 and 35 years of age had sufficient knowledge to seek treatment for TB. However, people above the age of 26 years are more likely to seek treatment than those who are younger. This is possibly because people below the age of 26 years have professional or academic work that often prevents them from seeking treatment, despite having sufficient information on the topic *(36)*.

High tobacco usage

In Bangladesh, TB incidence rates are high among people who smoke tobacco. As of 2019, almost 45% of Bangladesh's male population was using tobacco. The NTP recognized smoking as a barrier to be tackled as part of TB treatment and has established interventions that target smoking control.

Socioeconomic status

People living in poverty, those who are homeless, and those who live in informal settlements are more likely to be at risk of contracting and spreading TB. This happens because people lack the means to access proper treatment and because they live in conditions that do not allow for proper ventilation.

Pre-existing health concerns

Diabetes mellitus is a risk factor for TB in Bangladesh. Therefore, a professional association developed an intervention to screen diabetes patients who are suspected of having contracted TB. Similarly, people with HIV are a high-risk group for contracting TB. Screening tests for HIV among TB patients, and vice versa, are infrequent and can be ramped up to prevent transmission and worsening of the disease.

Treatment adherence

One of the significant barriers to accessing TB treatment is that many patients stop treatment once they show initial signs of improvement. Furthermore, several patients in Category II are less likely to seek early treatment than Category I patients. This could be correlated to the fact that they are patients who have already received treatment and are reluctant to undergo the Category II treatment regimen, which consists of more potent first-line drugs, which earlier used to involve daily intramuscular streptomycin injections *(37)*.

3.1.7 Social protection measures for people affected by TB in Bangladesh

A summary of specific and sensitive schemes to help people with TB are listed below:

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
National Tuberculosis Programme	Bangladesh	1992	Directorate General of Health Services	Cash transfer, reimbursement, and travel allowances	TB patients
Allowances for widows, deserted and destitute women	Bangladesh	1998	Ministry of Social Welfare/Ministry of Women and Children Affairs	Cash transfers	Widowed, deserted, and destitute women
Safety net systems for the poorest	Bangladesh	2013	Ministry of Disaster Management & Relief and National Household Database (NHD)	Employment generation programme for the poorest; and scale up of social assistance coverage to the Rohingya under the Emergency Multi-Sector Rohingya Crisis Response Project	Vulnerable groups such as the Rohingya community and poor families
VGD — Vulner-able Group Develop-ment/ VWB — Vulner-able Women Benefit Pro-gramme	Bangladesh	1975	Ministry of Women and Children Affairs	Monthly ration of 30 kg of rice for 24 months	Ultra-poor rural women and their family members
VGF — Vulnerable Group Feeding Gratuitous Relief (GR) Programme	Bangladesh	1974	Government of Bangladesh, Ministry of Disaster Management and Relief, and World Food Programme	Food transfers during disasters and major religious festivals	Poor and destitute people, disaster-affected people and children, unemployed people during recession

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
SFP-PA — School Feeding Programme in poverty-prone areas	Bangladesh	2001	Ministry of Primary & Mass Education (lead agency), Directorate of Primary Education (implementing agency), World Food Programme (provides technical assistance)	In-school snacks and cooked meals	Schoolchildren in poverty-prone regions
Mother and Child Benefit Programme	Bangladesh	2019	Ministry of Women and Children Affairs	Monthly cash transfers and programme training	Beneficiaries enrolled under the Mother and Child Benefit Programme following the government-to-person (G2P) payment system
Ashrayan-2 and -3 Project	Bangladesh	1997	Supervised by the Prime Minister's Office (PMO)	Income-generating need-based training like handicrafts, poultry, pisciculture, gardening, agriculture, cattle rearing, etc.	Homeless and displaced population
Golden Citizen Card/ Shuborno Card Programme	Bangladesh	-	-	Free public transportation for disabled persons	People with disabilities
Assistance for cancer, kidney diseases and liver cirrhosis patients*	Bangladesh	-	Ministry of Social Welfare	Cash transfers	Patients with cancer, kidney disease and liver cirrhosis

*Current operations of the programme are unclear

3.1.8 TB-specific SPMs

Social support for DR-TB patients

The National TB Control Programme (NTCP) has established social support mechanisms for MDR-TB patients. These include *(29)*:

- nutritional support amounting to BDT 1000 (US$ 9.5) per month for MDR-TB patients from enrolment up to the completion of treatment. In case of hospitalization during the intensive phase of MDR-TB treatment, support is provided for accommodation, as well as food and cash incentives;
- reimbursement of ancillary investigation costs up to BDT 2500 (US$ 23.9);
- travel allowance to patients during the ambulatory period for follow-up visits.

These measures have proven to be very effective in ensuring treatment success *(38)*. Monetary support is transferred to the beneficiary through mobile banking via mCash *(39)*. The NTP provides "social support" to DR-TB patients. The most visible part of this support is a subsidy of about US$ 18 a month sent by direct transfer to the patient's account. If the patient is receiving directly observed treatment (DOT) in his or her community, his or her DOT provider also receives the subsidy as an incentive to provide regular services. In this way, recipients can afford more food for themselves and their families *(40)*.

3.1.9 TB-sensitive SPMs

Unconditional and conditional cash transfers

Unconditional and conditional cash transfers in the country are applicable in the form of allowances for the financially insolvent disabled; allowances for widowed, deserted and destitute women; and the programme for improving the livelihood of transgender, *bede,*[4] and disadvantaged community.

Safety net systems for the poorest

This project continues to work on the full deployment of information systems to manage major safety net programmes under the Ministry of Disaster Management & Relief (MoDMR), as well as the National Household Database (NHD) for which the Bangladesh Bureau of Statistics (BBS) now has data-sharing arrangements in place with four ministries/departments. The project's focus is now on the Additional Financing (Grant) of US$ 100 million. The Employment Generation Programme for the Poorest Plus (EGPP+) has been completed for FY 2022 covering over 33 000 households. *(41)*.

4 Bede people form an Indo-Aryan nomadic ethnic group in Bangladesh.

VGD – Vulnerable Group Development/VWB – Vulnerable Women Benefit Programme

This Programme is the largest intervention in the poverty reduction drive in Bangladesh. It is implemented and governed by the Ministry of Women and Children Affairs (MoWCA) and the Ministry of Food & Disaster Management with the involvement of the World Food Programme (WFP) and the help of local NGOs in Bangladesh. The main objective of this Programme is to address the marginalization of the poor, to bring sustainable improvement to the lives of the ultra-poor and give special attention to the food security and nutritional status of disadvantaged women. The payment for food programmes is transferred by the Ministry of Food at the end of the financial year. The budget allocations for the VGD programme were BDT 1191.85 crore (~US$ 112 million) in FY 2017, BDT 1605.7 crore (~US$ 150 million) in FY 2018, and BDT 1685.07 crore (US$ 158 million) in FY 2019. A sharp increase in VDG beneficiaries has been observed from FY 2017.

VGF — Vulnerable Group Feeding

This Programme provides monthly food transfers to poor households during religious festivals, lean seasons, and natural disasters. It provides 10–30 kg of rice per month per household, with different provisions for specific vulnerabilities. About half of the VGF support is provided during festivals and the other half is used for disaster relief. During natural disasters, it works in tandem or concurrently with Gratuitous Relief (GR). VGF is implemented by the Department of Disaster Management (DDM) under the Ministry of Disaster Management and Relief (MoDMR). It receives administrative support from the World Bank Group's Safety Net Systems for the Poorest (SNSP) Project, which aims to enhance the efficiency and transparency of VGF and other major programmes under DDM with the modernization of systems and business processes.

For VGF, DDM makes annual allotment plans based on poverty rates and the incidence of natural disasters in the country. Based on these estimates, DDM issues allotment orders, which translate into food grain delivery orders by food controllers of the Ministry of Food; and actual food deliveries are received by Union chairmen from local food depots of the public food distribution system (PFDS). The entire process following the allotment from DDM is overseen by District Commissioners and Upazila Nirbahi Officer (UNOs). *(42)*.

Gratuitous Relief (GR) Programme

The Gratuitous Relief (GR) Programme provides short-term, ad-hoc cash and in-kind relief during shocks such as floods through in-person distribution by district and *upazila* administrators. It has a shock-responsive framework as it can be employed to provide cash, food, or reconstruction support. This scheme is also implemented by the DDM under the MoDMR. It was scaled up to reach 75 million beneficiaries from March to June 2020 as a response to the COVID-19 crisis *(43)*.

SFP-PA — School Feeding Programme in poverty-prone areas

The School Feeding Programme in poverty-prone areas (SFPPPA) began in 2001 and operates in 104 subdistricts in Bangladesh. Starting in 2010, WFP gradually handed over management

responsibility to the government. In-school snacks, which are served in 88 subdistricts, take the form of a 75 g pack of fortified biscuits. The Department of Primary Education manages the central procurement of fortified biscuits from enlisted biscuit manufacturers and the delivery of biscuits to primary schools is done through NGOs. Since October 2019, hot cooked meals (including vegetable *khichuri* and *khichuri* with boiled eggs) have also been prepared on a daily basis in 16 subdistricts. The Programme is run by the Ministry of Primary & Mass Education (lead agency), Directorate of Primary Education (implementing agency), WFP (provides technical assistance) *(44)*.

Mother and Child Benefit Programme

The MCBP was introduced in 2019 and is implemented by the MoWCA with technical assistance from WFP. It combines the rural-based Maternal Allowance (MA) and the urban-based Lactating Mother Allowance (LMA) programmes and introduces new programme components such as nutrition training, improved linkages to health services and a new child benefit programme. Women receive a monthly cash transfer of BDT 500 (US$ 4.8) for 24 months.

In August 2021, WFP facilitated the transfer of this allowance to 171 155 beneficiaries enrolled under the Mother and Child Benefit Programme following the government-to-person (G2P) payment system *(45)*.

Ashrayan-2 and -3 Project

Ashrayan ("to shelter") is a large-scale housing development project for the homeless and the displaced. It is a fully subsidized, semi-permanent resettlement project that was inaugurated in 1997 to alleviate poverty through comprehensive rehabilitation of homeless/landless/disaster-displaced people. A total of 298 000 have been rehabilitated through Ashrayan *(46)*. The programme is supervised by the Prime Minister's Office (PMO) and is one of the fast-moving projects in the Annual Development Programme (ADP) *(47)*.

Golden Citizen Card/Shuborno Card Programme

This Programme provides free public transportation for differently abled persons. According to a new Transparency International Bangladesh report, differently abled people must pay between BDT 1000 (US$ 9.5) and BDT 3000 (US$ 28.7) extra to be included in the government's disability allowance scheme. They are also forced to pay an additional fee of BDT 1000–3000 to receive the government's Shuborno card, according to the report *(48)*. It stated that 24–67% of the money provided by the grant was being embezzled from the differently-abled allowances *(49)*.

Assistance for patients with cancer, kidney disease and liver cirrhosis

The programme is implemented by the Department of Social Services (DSS), which comes under the Ministry of Social Welfare (MoSW). The MoSW transferred BDT 5.4 million (US$ 51 695) to 54 patients under this cash transfer scheme *(50)*.

Allowances for financially insolvent, differently abled persons

This means-tested cash transfer programme provides a monthly allowance of BDT 700 (US$ 6.7) as basic income support to differently abled persons living in poverty. It is implemented by the DSS, under the MoSW. In 2019, the number of beneficiaries was 1 million *(51)*.

3.1.10 Scope for new TB-adaptable SPMs

While Bangladesh has TB-specific measures for the benefit of those affected by TB, stakeholders believe that those affected by TB can benefit from non-clinical interventions such as stronger economic, nutritional, psychosocial, and investigative support.

3.2 Indonesia

3.2.1 Background

Indonesia is a country with a high TB burden. Delayed diagnosis and continual transmission in the country contribute to a high mortality rate, which is the second-highest rate in the world after India *(52)*. The occurrence of TB is predominant among people with diabetes mellitus, patients affected with kidney and liver diseases, and people who smoke. These cause loss of productivity, which has significant consequences for the country's economy.

Indonesia's estimated TB burden, 2021 *(1)*

Total population	274 million
Total TB incidence	969 000 [354 per 100 000]
MDR/RR-TB incidence	28 000 [10 per 100 000]
HIV-positive TB incidence	22 000 [8.1 per 100 000]
HIV-negative TB mortality	144 000 [52 per 100 000]
HIV-positive TB mortality	6 500 [2.4 per 100 000]
Est. proportion of new TB cases with MDR/RR-TB	2.2%
Est. proportion of previously treated TB cases with MDR/RR-TB	25%
TB treatment coverage (notified/est. incidence)	45%
TB patients facing catastrophic total costs	38%
TB case-fatality ratio (estimated mortality/est. incidence)	16%

3.2.2 Socioeconomic landscape *(1)*

Indonesia has shown remarkable progress in reducing the poverty rate in the country, as it is down to under 10% from 1999 to 2019 (before COVID-19). Indonesia has one of the largest health-care programmes in the world, the Jaminan Kesehatan Nasional, which covers over

252 million people. The programme is implemented by the Social Security Administrator for Health (BPJS-K) agency. Everyone under the BPJS-K is eligible to receive free health services, including organ transplants. The health status in the country has shown significant improvement over the past 25 years, and life expectancy has risen to 71 years from 63 years. However, the progress on maternal mortality and communicable diseases has been slow, and the incidence of TB and malaria remain high in the country. Smoking has also seen a rise, which is a primary reason for the lack of adherence to TB treatment in Indonesia.

An official of the Ministry of Health (MoH) revealed that a group that is particularly vulnerable to the effects of TB are people living in slums and those living in poverty. People living with HIV were also identified as a high-risk group *(53).*

3.2.3 Health systems in place to address TB

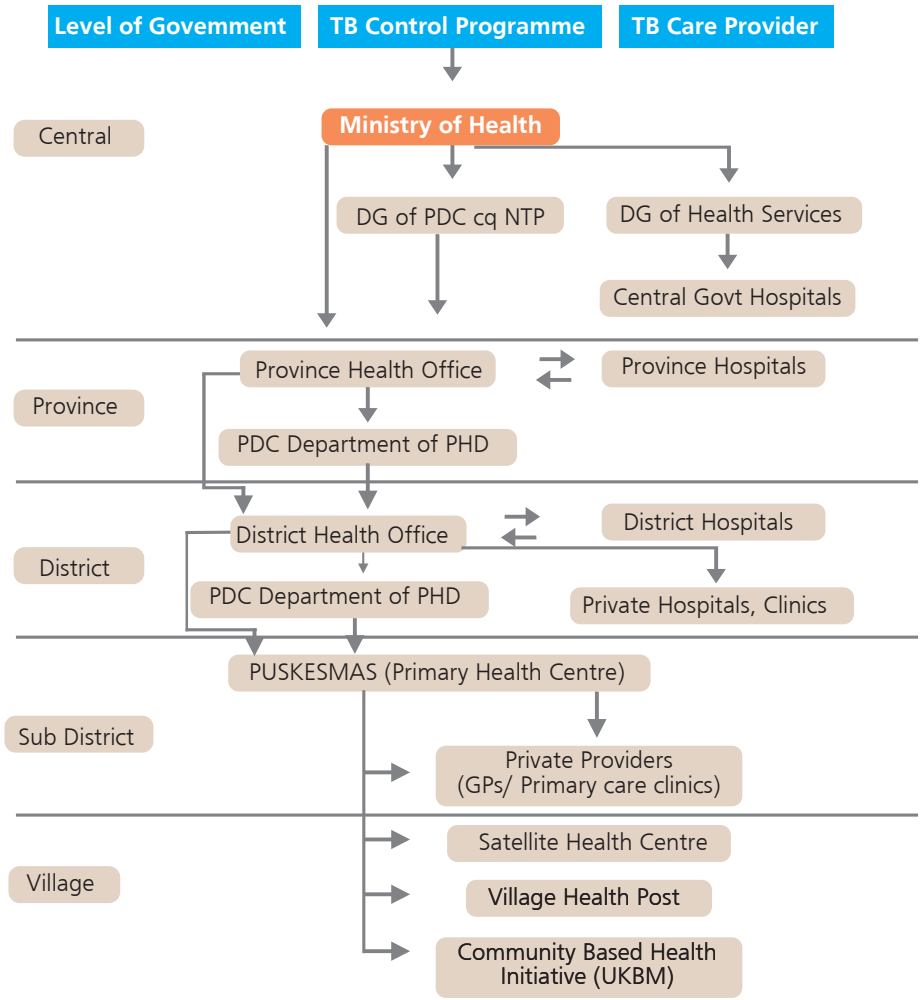
Since 1999, Indonesia has undergone a decentralization process, where large amounts of public funding and service delivery were transferred from the national level to provincial and district governments. The public system is administered in line with the decentralized government system, with responsibilities lying with Indonesia's central, provincial, and district governments.

At the national level, health development efforts have been a political priority. The central MoH is responsible for the management of some tertiary and specialist hospitals, provision of strategic direction, setting of standards and regulations, and ensuring the availability of financial and human resources. Provincial governments are responsible for the management of provincial-level hospitals, providing technical oversight and monitoring district health services, and coordinating cross-district health issues within the province. District/municipality governments are responsible for the management of district/city hospitals, and the subdistrict community health system. This system is organized in three tiers: on top of the chart is the community health centre (CHC) (*Puskesmas*), followed by health subcentres at the second level, and village-level integrated posts at the third level (Fig. 3.2).

3.2.4 Decentralization

Following a health reform in 1999, health services were decentralized to provincial and district governments under the Ministry of Home Affairs. They handle planning and manage service delivery at their level. The MoH manages regulatory responsibilities and a few key operations, such as immunization. Provincial governments organize health services through the provincial health offices (PHOs), which coordinate health issues within the provincial region and across districts. The district/municipality governments own district/municipality hospitals and organize health services through district/municipality health offices (DHOs). DHOs also operate health services provided through the primary health centres (*puskesmas*) and their networks. However, the relationship between the MoH, PHO, and DHO is not a hierarchical one. The district/municipality government is not "under" the provincial government. Each level has its own mandates and areas of authority. Within the decentralized health system, the hospital is not subordinate to the health office, and the DHO does not answer to the PHO. Likewise, the PHO is not responsible to the MoH, but to the provincial governor.

Fig. 3.2 Structure and organization of the delivery of health services



Source: Ministry of Health *(54)*

3.2.5 Geographical burden

In Indonesia, urban areas are more affected than rural ones. In 2018, Java and Bali had two thirds of the TB burden of the country *(55).*

Based on bacteriological evidence, the prevalence of TB per 100 000 in Indonesia was 759 (95% CI: 589.7–960.8) with variations across areas: 913 (95% CI 696.7–1,176.7) Sumatra, 593 (95% CI 447.2–770.6) Java-Bali, and 842 (95% CI 634.7–1,091.8) other islands *(52).*

Health-care provision in Indonesia has traditionally been fragmented, with private insurance being provided for those who can afford it alongside basic public coverage for the most impoverished in society and nongovernmental organizations (NGOs) working in specialized areas providing services to those not covered by public or private schemes.

3.2.6 Universal health coverage

In January 2014, the government launched *Jaminan Kesehatan Nasional* (JKN, National Health Insurance), a scheme to implement universal health care. It was expected that spending on health care would increase by 12% a year and reach US$ 46 billion a year by 2019. As of 2023, 252 million people are covered by the scheme. The aim was to grant free services for all hospitalizations in basic (class 3) hospital beds. JKN is provided by BPJS Kesehatan (*Badan Penyelenggara Jaminan Sosial Kesehatan*, Social Security Administrator for Health).

The JKN scheme is financed by central and local government revenues to provide subsidies for the poorest 40% of the population and social security contributions from workers and employers.

Non-contributory Health Insurance/Penerima Bantuan Iuran component (PBI)

The poorest 40% of households are targeted for PBI membership. The poverty status of PBI beneficiaries is determined in accordance with Government Regulation No. 101 of 2013, based on data from the unified database of social assistance recipients maintained by the National Team for the Acceleration of Poverty Reduction (TNP2K).

The programme brings together four key JKN stakeholders – the MoH, Social Security Administrator for Health (BPJS-K), National Social Security Council or Dewan Jaminan Sosial Nasional (DJSN), and Ministry of Finance – to facilitate the coordination and sequencing of needed reforms.

3.2.7 Health financing

In 2019, Indonesia's health expenditure was 2.9% of the country's GDP. OOP expenditure equalled ~35% of the total health expenditure *(56).*

3.2.8 Social protection system

Indonesia Social Assistance Reform Program (with support from the World Bank)

In 2005, the Government of Indonesia began developing the Basis Data Terpadu untuk Program Penanggulangan Kemiskinan (henceforth Unified Database, UDB), an electronic database containing social, economic, and demographic information. This was an important first step in establishing the information architecture for social protection and allowed for a major scaling up of social assistance programmes.

A Statistics Indonesia survey, the Pendataan Sosial Ekonomi (PSE; Socioeconomic Data Collection), was the starting point for the UDB. The 2005 survey included basic information on 19 million households in the bottom 30% of income distribution. The UDB is currently managed by an inter-ministerial working group led by the Ministry of Social Affairs, including TNP2K, Ministry of Planning, Coordinating Ministry of Human Development and Culture,

Ministry of Education, MoH, Ministry of Home Affairs (Civil Registry), BPJS-K, the Central Bureau of Statistics.

The 2020–2024 National Medium-Term Development Plan (RPJMN) talks about fulfilling basic services: strengthening the implementation of social protection in the country by strengthening the implementation of security, social assistance, and subsidies and improving health services towards universal health coverage (UHC) by improving public health nutrition and disease control, including TB. In 2021, the Ministry of Social Affairs continued three social assistance programmes, namely, Basic Food Cards/Non-Cash Food Assistance (BPNT), Family Hope Program (PKH), and Cash Social Assistance (BST).

3.2.9 Key findings[5]

National TB Programme

In January 2020, Indonesia's President launched a TB Elimination Initiative, which was followed by a Presidential Decree in March 2020. A TB indicator was included in the package of minimum standards for national monitoring by the Ministry of Home Affairs.

In 2021, President Joko Widodo issued Presidential Regulation No. 67 of 2021 concerning the control of TB. The Coordinating Ministry for Human Development and Culture established the Tuberculosis (TB) Multi-Sector Forum to strengthen multisectoral commitment at the local government level. The Central Government, based on Presidential Regulation No. 67, formed a team to accelerate TB reduction, consisting of 19 ministries and institutions and a partnership forum consisting of 35 multisector partners *(*57*).* As per the Joint External Monitoring Mission (JEMM) 2020, Strategy no. 5 of the President's Initiative is to ensure the achievement of Indonesia's human resource development targets by reducing the social, cultural, and economic impacts due to TB on individuals, families, and communities.

The Indonesian Ministry of Social Affairs invested in the Family Hope Programme (PKH) for community welfare. "Next year, PKH will be used to maintain people's purchasing power and for the distribution of aid in the first quarter; it is given on a monthly basis," said Minister of Social Affairs Juliari P. Batubara, accompanied by the Director-General of Social Protection and Security Pepen Nazarudin in the "Technical Coordination Meeting to Improve the Quality of Human Resources for Family Programs". PKH is also used to support government programmes in combating TB, by providing additional health components in the form of assistance for families whose members have TB. "We really support the government in tackling tuberculosis by providing assistance in the amount of Indonesian Rupiah (IDR) 3 million (US$ 194) per year," said Social Minister Mr. Juliari.

Factors impacting access to TB care and treatment adherence

Delayed treatment

A study revealed that delay in treating TB is a primary barrier to adequate TB treatment in Indonesia. Participants revealed that this is largely due to a lack of awareness around TB

5 Based on desk research and stakeholder interviews

disease and its treatment, which leads to delays in the identification of symptoms and seeking treatment accordingly *(58)*.

Lack of standard TB treatment

Patients receiving care for TB in Indonesia have reported variations in the treatment regimens in private clinics as opposed to regimens in the CHCs. A lot of the CHC staff is also not trained adequately to cater to the patient's needs, which may arise from the stigma around the disease or the lack of proper allocation of funds. Much of the staff is also not integrated into the TB programme and has been noted to deliver insufficient counselling and information to patients. This further leads to inadequate management of drugs for treatment and documentation of the patient's treatment process *(57)*.

Non-adherence to treatment regimens

Many TB-affected patients in the country often do not adhere to the treatment regimen, causing the effects of the disease to worsen and risk of transmission to increase. Patients also face an issue in managing the adverse effects of the drugs, which makes their visits to the CHCs irregular (*59*).

Pre-existing health concerns

According to research, there is a prominent relationship between patients with TB and those affected by diabetes mellitus and other health issues. Diabetes mellitus is not just a risk factor but also a condition that affects the diagnosis and treatment of TB. Other comorbidities, such as diseases related to the kidney and liver, also make diagnosis and treatment for TB difficult for health-care providers *(60)*.

3.2.10 Social protection measures for people affected by TB in Indonesia

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
Program Keluarga Harapan (PKH)/ Family Hope Programme	Indonesia	2007	Ministry of Social Affairs	Conditional cash transfers for family with health and education conditionalities	Family must be included in the SISKADA (Integrated Social Registry) and ranked below a certain poverty cut-off point

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
The Sembako Program/Food Assistance Programme	Indonesia	2017	Ministry of Home Affairs	Non-cash food assistance	Families of the lowest social economic condition in accordance with the allocations made by the Government, and whose names are included in the List of Family Beneficiaries (KPM) issued by the Ministry of Social Affairs are the beneficiaries.
Program Kesejahteraan Sosial Anak (PKSA)	Indonesia	2013	Ministry of Social Affairs	Conditional cash transfers	Neglected children and youth, including those who are homeless, differently abled, have HIV/AIDS, and children of isolated Indigenous communities
Perlindungan Sosial untuk Tuna Sosia/ Social Assistance for Socially Vulnerable People	Indonesia	2019*	Ministry of Social Affairs	Basic social services	Vulnerable people such as victims of drug abuse, the homeless, beggars, people living with HIV/AIDS, transgender people, and abandoned people with chronic diseases
Bantuan Langsung Sementara Masyarakat (BLSM)/ Unconditional Cash Transfer Programme	Indonesia	2013	Ministry of Finance and Ministry of Social Affairs	Unconditional cash transfers	Poorest 25% of Indonesian households

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
Asistensi Sosial Penyandang Disabilitas Berat (ASPDB)/Social Assistance for the Severely Disabled	Indonesia	2020	Ministry of Social Affairs	Direct monthly cash transfers	People who are differently abled and those with physical or mental issues that limit their ability to conduct physical, spiritual, or social functions adequately
Rahabilitasi Rumah Tidak Layak Huni (RS-RTLH)/ Uninhabitable House Rehabilitation Programme	Indonesia	2017	Ministry of Social Affairs	Social assistance is directly transferred to eligible households	PKH beneficiaries and other poor families with social welfare cards to improve their housing and sanitation facilities
Komunitas Adat Terpencil (KAT)/ Empowerment of Indigenous Community	Indonesia	2019	Minister of Social Affairs	Improves access to essential services in these communities by developing housing and providing a living allowance and essentials, such as clothing and bedding	1128 geographically isolated ethnic groups
Bantuan Stimulan Perumahan Swadaya (BSPS)	Indonesia	2021*	Ministry of Public Works and Public Housing	Social assistance to develop new housing, improve quality of housing, or develop and improve public facilities, empowering low-income households to build or improve the quality of their homes and ensure a secure dwelling	

*Estimated year of launch

3.1.11 TB-specific SPMs

Some provinces already provide social support for patients with DR-TB, which includes food and nutritional support, ambulance for transportation from the district level to the provincial level or beyond, and monthly support from the Ministry of Social Welfare (PKH).

3.1.12 TB-sensitive SPMs

Program Keluarga Harapan (PKH)/Family Hope Programme

The Programme consists of conditional cash transfers for families with health and education conditionalities. To be eligible, a family must be included in the UDB (now called the Integrated Social Registry, or SISKADA) and ranked below a certain poverty cut-off point. They must also meet at least one of the following conditions: a family member is pregnant or lactating; the family has one or more children below 6 years of age; the family has children aged 7–21 years attending primary or secondary school; or the family has children aged 16–21 years who have not yet completed basic education. Furthermore, PKH beneficiary families must comply with the relevant health and education conditions to receive the cash transfers, which are made only after verification of compliance with the conditionalities. The mother is the main recipient in most cases. Since November 2016, eligible families that have a severely differently abled or elderly person (70 years and older) living with them also receive additional transfers as long as they have not yet been covered by other social affairs programmes (such as the old age assistance programme).

The Sembako Program/Food Assistance Programme

The previous food subsidy programme (Rastra Subsidy or RSRS) was transformed into non-cash food assistance (BPNT) in 2017 in 44 selected cities. At the end of 2019, the Food Social Assistance Programme in all regencies/cities was implemented by the BPNT Program using electronic cards directly from the beneficiaries. BPNT was distributed to beneficiaries through the banking system, which could be used subsequently for buying rice and/or eggs from e-Warong, allowing beneficiaries to have more balanced nutrition. In 2020, the BNPT was further transformed into the Sembako Program to strengthen social protection and improve the effectiveness of food social assistance programmes. By launching the Sembako Program, the index of assistance would be increased and the types of commodities that could be acquired were expanded, so as not only to cover rice and eggs, as was the case was with the BNPT Program.

Program Kesejahteraan Sosial Anak (PKSA)

This programme offers conditional cash transfers for neglected children and youth, including those who are homeless and differently abled, have HIV/AIDS, and children of isolated Indigenous communities. Neglected children and youth up to the age of 18 years; children living in the streets; children living with disabilities; children in contact with the law and vulnerable youth; and children in need of special protection (including victims of violence/abuse and exploitation such as trafficking, sexual abuse, and child labour; children living with HIV/AIDS; and children of isolated Indigenous communities) are also covered by the scheme and offered conditional cash transfers.

Perlindungan Sosial untuk Tuna Sosia/ Social Assistance for Socially Vulnerable People

This programme provides assistance for socially vulnerable people such as victims of drug abuse, the homeless, beggars, people living with HIV/AIDS, transgender people, and abandoned people with chronic diseases.

Bantuan Langsung Sementara Masyarakat (BLSM)/Unconditional Cash Transfer Programme

The poorest 25% of Indonesian households are eligible to receive BLSM transfers. Eligible households use their social assistance cards to prove their eligibility for BLSM and other programmes. The cards are delivered to eligible households via the national postal service after their poverty status is verified by the UDB.

Asistensi Sosial Penyandang Disabilitas Berat (ASPDB)/Social Assistance for the Severely Disabled

The ASPDB provides essential services to differently abled people and those suffering physical or mental conditions that limit their ability to conduct physical, spiritual, or social functions adequately. Direct cash transfers of IDR 300 000 (US$ 19.4) per person per month are provided to caregivers or family members of people who are severely affected to maintain their health and meet their daily basic needs.

Rahabilitasi Rumah Tidak Layak Huni (RS-RTLH)/Uninhabitable House Rehabilitation Programme

This government programme provides social assistance for PKH beneficiaries and other poor families with social welfare cards to improve their housing and sanitation facilities. The Ministry of Social Affairs implements the programme, which was estimated to cost IDR 25.65 billion (US$ 1.9 million) in 2017 *(61)*. Assistance is directly transferred to eligible households.

Komunitas Adat Terpencil (KAT)/ Empowerment of Indigenous Communities

Offered to 1128 geographically isolated ethnic groups, the three-year programme improves access to essential services for these communities by developing housing and providing a living allowance and essentials, such as clothing and bedding.

Bantuan Stimulan Perumahan Swadaya (BSPS)

Through BSPS, the Ministry of Public Housing (MoPH) provides social assistance to develop new housing, improve the quality of housing, or develop and improve public facilities, empowering low-income households to build or improve the quality of their homes and ensure a secure dwelling. BSPS is specifically targeted at low-income households in coastal, remote, and natural disaster-prone and slum areas. The JEMM 2020 states that the MoH sent an official letter to the Minister of Home Affairs and Infrastructure asking for the renovation of 1250 houses for poor TB patients, especially those with DR-TB.

3.1.13 Scope for new TB-adaptable SPMs[6]

Indonesia has TB-specific schemes and programmes in place to cater to the needs of those affected by TB. These can be further strengthened with SPMs in the form of nutritional, economic, psychosocial, and legal support for patients with TB and those affected by the disease.

3.3 Nepal

3.3.1 Background

Nepal is one of the 30 high-burden countries for MDR/RR-TB and was recently added to the list in 2021. An estimated 69 000 people fell ill with TB in 2020/2021. However, the NTP registered only 29 000 patients, with 58% of cases missing. Similarly, out of the 2200 people estimated to have contracted MDR/RR-TB, only 687 were detected and only 418 of these were put on treatment (60.8%). Nepal also reports the highest case-fatality percentage (27%) in the Region and the second lowest treatment coverage rate (41%) in the Region after Myanmar (33%) *(1)*.

Nepal's estimated TB burden, 2021 *(1)*

Total population	30 million
Total TB incidence	69 000 [229 per 100 000]
MDR/RR-TB incidence	2800
Est. proportion of new TB cases with MDR/RR-TB	540 [1.8 per 100 000]
Est. proportion of previously treated TB cases with MDR/RR-TB	17 000 [58 per 100 000]
HIV-positive TB incidence	220 [0.73 per 100 000]
HIV-negative TB mortality	4%
HIV-positive TB mortality	5.8%
TB treatment coverage (notified/estimated incidence)	41%
TB case-fatality ratio (estimated mortality/estimated incidence)	27%

In 2019, nearly five million Nepalis representing 17.4% of the total population were found to be multidimensionally poor. Based on interviews with stakeholders and desk review, children and rural populations were noted to be the most disproportionately affected. However, the country has made significant progress in reducing poverty since 2014. No country with a similar starting level of poverty reduced its Multidimensional Poverty Index (MPI) faster than Nepal. Between 2014 and 2019, Nepal almost halved the incidence of multidimensional poverty from 30% to 17% *(1)*.

6 Survey answered by official of the Ministry of Health, Indonesia

Nepal has Universal Social Protection (USP) imprinted into the fabric of its legal system. Its 2015 Constitution guarantees rights such as free basic health care, food security and sovereignty, appropriate housing, and employment to its citizens. It also guarantees social security to marginalized and vulnerable citizens. However, only around 17% of the Nepalese population were noted to be covered by at least one social protection benefit in 2021 *(61)*.

The government-financed Social Health Insurance Programme provides subsidized contributory insurance in all 77 districts of Nepal. As per this scheme, a family with up to five members has to pay a premium of Nepali Rupee (NPR) 3500 (US$ 27.21) annually and avail free medical treatment worth NPR 100 000 (US$ 777.34) in total *(62)*. The Regulations provide for 100% subsidy to people affected by MDR-TB, HIV and leprosy, differently abled people and their families *(63)*.

The Government of Nepal (GoN) implements the NTP through the National TB Control Center (NTCC), one of the core centres within the Ministry of Health and Population (MoHP). It is responsible for formulating policies, strategies and plans and carrying out monitoring, evaluation and quality assurance of the NTP *(64)*.

3.3.2 Key findings[7]

National TB Programme and National Strategic Plan

The GoN had launched and endorsed the Nepal TB Free Declaration Initiative in October 2021, following a High-Level Meeting for Renewed TB Response in the WHO SE Asia Region (to better implement the TB Programme at the local level) *(65)*.

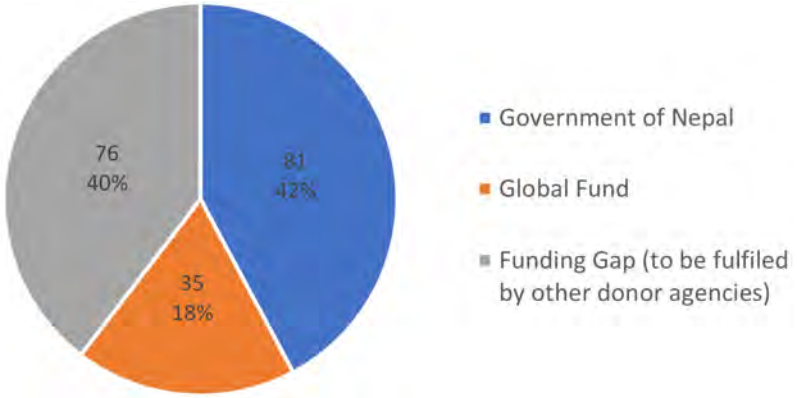
Under the new Initiative, "TB care and support mechanisms" would be set up at the *palika*[8] level as part of community engagement endeavours within the first year of the Declaration. The implementation guidelines also laid out the process for carrying out annual "social audits" of the Initiative at the ward level "to publicize the results of the various stages of the TB Free Initiative in the presence of the general public and stakeholders and to address the issues raised from the discussion".

However, interviewed stakeholders stated that the local bodies could not execute the social audits in the first year of its implementation, but that these have been planned for in the annual workplan for 2022.

The NTCC is also responsible for implementing the strategies of the National Strategic Plan (NSP) to Eliminate Tuberculosis 2021/22–2025/26. The total budget for the NSP 2021/22–2025/26 is estimated at US$ 192 million. While the GoN has committed US$ 81 million (42%), the Global Fund has committed US$ 35 million between 2021/2022 and 2023/2024. The funding gap for the NSP period is an estimated US$ 76 million (40%), which is expected to be fulfilled by other donor agencies such as USAID, KNCV, LHL International, TB REACH, JICA and PATH (Fig. 3.3) *(66)*.

7 Based on desk research and stakeholder interviews
8 Palika is the Nepali term for the rural municipality.

Fig. 3.3 Funding of the NSP 2021/22–2025/26 (in US$ million)



A key policy action proposed in the NSP is the implementation of a multisectoral approach to addressing TB-related comorbidities *(68).* Interviewed stakeholders stated that the NTCC has been collaborating with the National AIDS and STI Control Centre so that all people living with HIV (PLHIV) are screened for TB and vice versa. Due to this protocol, HIV testing among TB patients has increased from 18% in 2015 to ~70–75% now.

The NTCC has also collaborated with Nepal's Nutrition Programme to screen all severe acute malnutrition (SAM) cases for TB. While this initiative has not been implemented by the GoN yet, the Global Fund's network of local partner organizations has been undertaking screening of patients with TB for SAM in 43 districts.

A key challenge for multisectoral action, however, is coordination between the various programmes and their implementing ministries.

The Programme has also been reporting a downward trend in the case notification rate (CNR) (all forms of TB/100 000 population) since 2017–2018. However, stakeholders noted that the downward trend in the CNR is due to an increase in missed cases, and not a positive trend towards TB elimination (Fig. 3.4).

Fig. 3.4 Case notification rate (per 100 000 cases) for TB in Nepal, 2017–2021 *(66)*

To tackle this challenge of missing cases, the NTP, with support from Save The Children (STC) Nepal, has planned and conducted active case-finding rounds at the community level through community camps, in prisons, and among migrant populations. While stakeholders attributed the missing cases to the social stigma associated with TB and high transportation costs, the Global Fund has assigned a technical assistant (TA) to identify the cause behind this drop in case notifications. Based on the findings of the TA, the NTCC, in collaboration with the Global Fund and partners, will formulate targeted strategies to address the issue of missing cases.

3.3.3 Factors impacting access to TB care and treatment adherence

According to stakeholders, the following factors are the key barriers that impede progress towards TB elimination and should be the focus of SPMs.

Poverty

As per the Nepal MPI Report 2021, 17.4% of the total population was multidimensionally poor. Most of the people were deprived in housing materials, clean cooking fuel, years of schooling, assets, and nutrition. Considering the indicator weights, limited years of schooling and nutritional deprivation contribute most to the ongoing multidimensional poverty in Nepal. Furthermore, a whopping 44% of poor people were children under the age of 18 years *(67)*.

Access to TB care

Interviewed stakeholders noted that transportation is a critical challenge faced by TB patients when seeking treatment. Only around 62% of Nepalese households have access to health services within 30 minutes. This number drops even lower to 59% for rural households due to geographical barriers such as difficult terrain, poor road conditions and lack of transportation. While the farthest distance to a tertiary care centre in Kathmandu could be just 15 km, in rural areas, a tertiary care centre could be more than 100 km away. This forces the rural population to negotiate their need for adequate TB support with socioeconomic variables *(68)*.

Furthermore, only a few government hospitals are listed to provide DR-TB services under the National Health Insurance Programme. Additionally, required medicines are often available only in limited quantities at these hospitals. Due to this and other logistical issues, patients are often forced to pay OOP, the stakeholder noted.

Social stigma

Interviewed stakeholders noted that social stigma associated with TB remains high in the community, which consequently leads to underreporting as TB patients hesitate to get tested. This, bundled with the fact that TB and COVID-19 patients exhibit similar symptoms, further exacerbated the situation.

Loss of income

Stakeholders highlighted the negative impact TB treatment has on the capacity of the patient and/or their caregivers to engage in economic activities. The long treatment duration prevents patients from working, which affects the living conditions and nutritional intake of the patients as well as their families, especially in cases where the patient is the sole earner.

Lack of citizenship

Stakeholders also pointed out that patients are required to show proof of citizenship to avail services at government facilities. However, a number of patients are either Tibetan refugees, foreigners residing in Nepal for work, or Indian citizens residing in the border areas, which prevents them from accessing the support they need. This is because many SPMs are designed for citizens of the nation and people without an official citizenship status cannot avail these schemes.

3.3.4 Social protection measures for people affected by TB in Nepal

Despite free basic TB diagnostic tests, medicines and financial support for people with DR-TB, approximately one in two people with TB face catastrophic costs (defined as the total TB-related costs equivalent to more than 20% of a household's annual income) while accessing TB care in Nepal (*69*).

The 2019 Joint Monitoring Mission (JMM) Report had noted that even patients with uncomplicated pulmonary TB incurred NPR 10 000 (US$ 76) in direct and indirect costs before diagnosis. They had to spend around NPR 40 000 (US$ 303) on transport and food expenses to obtain treatment. Two patients with complicated or severe TB had incurred expenditures of over NPR 450 000 (US$ 3409) and they had not yet completed their treatment. The minimum wage in Nepal is NPR 15 000 (US$ 114) per month.

A summary of sensitive schemes to help people with TB are listed below:

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
Social Security Allowance for Disabled Persons	Nepal	1996	Ministry of Home Affairs	Tri-annual allowance via bank transfer or hand delivery	People who are profoundly or severely differently abled, as indicated by the red and blue colours of their differently abled cards, respectively

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
National School Mid-Day Meals Programme/ Diva Khaja Karyakram	Nepal	2008	Ministry of Education, Science and Technology	Relevant municipality transfers cash to the school	Students from early grade learning to the fifth grade
Food for Education Programme/ Shikshaya ko Lagi Khadya Karyakram	Nepal	1996	Food for Education Project, Ministry of Education, Science and Technology; World Food Programme (WFP)	WFP delivers rice, dal, salt and oil for school meals in various districts of Nepal	Students in food-insecure communities
Children Affected By AIDS (CABA) Fund	Nepal	2014	Save the Children	Monthly cash transfers	Children living with HIV and/or affected by AIDS
Safe Citizen Housing Programme	Nepal	2018	Ministry of Urban Development	Bank transfers in two tranches of 60% and 40%	People living below the poverty line whose houses have thatched roofs to ensure appropriate, safe and environmentally friendly housing
PMEP — Prime Minister's Employment Programme	Nepal	2019	Ministry of Labour, Employment and Social Security	Skill enhancement training and employment opportunities	Unemployed Nepali youth
PWEP — President's Women Empowerment Programme	Nepal	2017	Ministry of Women, Children and Senior Citizens	Skill enhancement training and self-employment	Poor and marginalized women
EVENT II — Enhanced Vocational Education and Training	Nepal	2017	Ministry of Education, Science and Technology	Skill enhancement training	Underprivileged youth (16–40 years), especially from backward areas, women, Dalits, marginalized tribes, differently abled persons

3.3.5 TB-specific SPMs

The NTP in Nepal has implemented the following SPMs to shield DR-TB patients from catastrophic costs.

Transportation and nutritional support

While the NTP does not currently provide any social support to people with drug-sensitive TB (DS-TB), the Programme does provide a monthly cash transfer of NPR 3000 (US$ 23) to people with MDR-TB as transportation and nutritional support for receiving ambulatory care in government treatment centres *(70)*. The NTP has proposed increasing this incentive to NPR 5000 (US$ 38) per month but is awaiting final approval from the MoHP.

The incentive is provided to DR-TB patients on a quarterly basis (in instalments of NPR 9000 [US$ 68]), but interviewed stakeholders noted delays in disbursement of funds, which led to grievances among DR-TB patients. Another challenge with the disbursement of incentives is the absence of bank accounts or proper documentation among DR-TB patients, as several them are either from remote rural areas or not Nepali citizens.

DR-TB hostels

The NTP also runs hostels in different parts of the country for patients with DR-TB and provides them with accommodation, food, and treatment during the intensive phase of treatment. During this period, these patients are also provided a monthly cash incentive of NPR 1000 (US$ 7.6) to take care of their economic needs. The NTP has proposed increasing this incentive to NPR 2000 (US$ 15) per month and its implementation is currently under way. As per a national TB stakeholder, the budget for both the nutritional and transportation support, and DR-TB hostels is approximately NPR 5 000 000 (US$ 37 877) annually. Both these schemes annually support around 800–1200 beneficiaries in total.

Nutrition baskets for patients with DR-TB

The Global Fund following COVID-19 pandemic provided to patients with DR-TB with nutrition baskets for the first 6 months of treatment to supplement the incentives one-time to NTP in Nepal. The primary aim of this intervention is to ensure that these patients and their families have access to proper nutrition during the initial stages of treatment and reduce drop-out rates.

3.3.6 TB-sensitive SPMs

According to the National Integrated Social Protection Framework, different ministries and public institutions implement 16 types of programmes and 76 schemes. Some of the schemes have evolved with the changing needs of the country's vulnerable population. Security allowances have been revised and updated over the years. For the purpose of this study, GHS shortlisted the following SPMs in Nepal based on the inclusion and exclusion criteria (in the Methodology section) for further analysis on their adaptability for people affected by TB:

- Social Security Allowance for Disabled Persons

- National School Mid-day Meals Programme (Diva Khaja Karyakram)
- UN WFP's Food for Education Programme (Shikshaya ko Lagi Khadya Karyakram)
- Safe Citizen Housing Programme
- Prime Minister's Employment Programme (PMEP)
- President's Women Empowerment Programme (PWEP)
- Enhanced Vocational Education and Training (EVENT II)
- Children Affected by AIDS (CABA) Fund

Of the aforementioned schemes, stakeholders were asked to select the ones that could be adapted to include people affected by TB in their country. The following scheme was selected:

Children Affected by AIDS (CABA) Fund

Since mid-April 2014, Save the Children, Nepal implemented a cash transfer programme for children living with HIV and/or affected by AIDS (CABA) in Nepal. The Community Care Centre (CCC), managed by the National Association of People Living with HIV (NAP+N), implements the programme in 66 districts of Nepal. The programme provides NPR 1000 (US$ 7.6) a month to children living with HIV (CLHIV) *(70)*.

The CABA Fund has aided in improving the nutritional and educational status of children as households spend the majority of that sum on food or educational materials for children. A number of families with CLHIV, particularly those who reside far from service centres, use the incentive to defray travel fees to receive antiretroviral therapy services.

Scope for new TB-adaptable SPMs

Stakeholders were of the opinion that monthly cash incentives similar to the CABA Fund would be very beneficial for children with TB, especially children with DR-TB. However, stakeholders noted that the operational costs for addition of children with TB to the CABA Fund would be intensive, and coordination between the TB and HIV departments and support from development partners and donors would be necessary to implement such a programme.

3.4 Thailand

3.4.1 Background

Thailand is a high-burden country for TB and TB/HIV. Of the 30 high TB-burden countries, Thailand was reportedly one of the countries with the highest levels of treatment coverage in 2020. Among high TB-burden countries, Thailand stands out as having a high universal health care service coverage index (SCI) of 80 and a low level of catastrophic health expenditures at 2% of households *(5)*.

Thailand's estimated TB burden, 2021 *(1)*

Total population	72 million
Total TB incidence	103 000 [143 per 100 000]
MDR/RR-TB incidence	2400 [3.4 per 100 000]
HIV-positive TB incidence	8900 [12 per 100 000]
HIV-negative TB mortality	9600 [13 per 100 000]
HIV-positive TB mortality	1700 [2.4 per 100 000]
Est. proportion of new TB cases with MDR/RR-TB	1.7%
Est. proportion of previously treated TB cases with MDR/RR-TB	9.8%
TB treatment coverage (notified/est. incidence)	70%
TB patients facing catastrophic total costs	30%
TB case-fatality ratio (estimated mortality/est. incidence)	11%

3.4.2 Socioeconomic landscape *(71)*

According to the World Bank, Thailand has made significant progress in socioeconomic development, advancing from a low-income to an upper-middle-income country in less than a generation. While the progress has been reflected in the education, health care, and employment of many people, growth in the country has slowed since 2015. Though Thailand has a seemingly remarkable universal health coverage (UHC) programme, the slowing growth is expected to raise costs in the health-care sector. As per the WHO database, Thailand's health expenditure was 3.79% of the country's GDP. Its current health expenditure per capita amounted to US$ 731.31. OOP expenditure equalled ~8.67% of the total health expenditure.

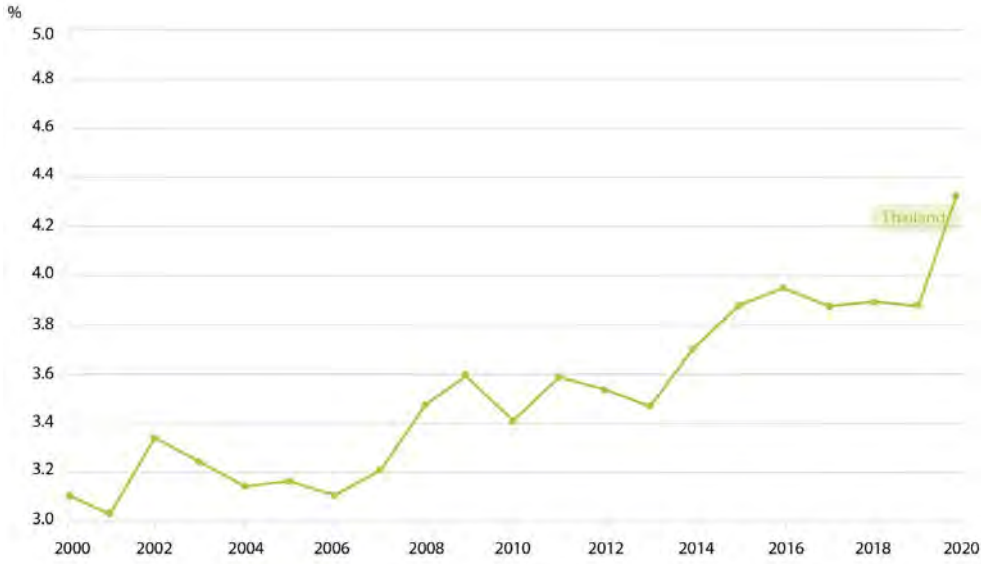
The UHC programme aims to achieve equitable access to quality health services and provide financial risk protection. It is also a means to address other health-related targets as part of the SDGs to reduce morbidity and mortality due to communicable and noncommunicable diseases (Fig. 3.5).

3.4.3 Health systems in place to address TB

The Ministry of Public Health (MoPH) is the national health authority responsible for formulating and implementing health policy. It leads and is supported by platforms such as the National Health Commission, the Health Systems Research Institute and National Health Security Office (NHSO) *(72)*.

Thailand has a long history of decentralization of health management to the provincial health offices (PHOs). All public hospitals under the MoPH have the financial power to retain and use revenue according to regulations, subject to a regular audit by the auditor general. The PHO also holds regulatory power, such as issuing new licenses or renewing annual licenses of private pharmacies and private clinics, and consumer protection on food, drugs, and cosmetics in the respective provinces *(73)*.

Fig. 3.5 World Bank data on Thailand's health expenditure, 2000–2020 *(32)*



Source: World Bank data on Thailand's health expenditure

In 2002, Thailand implemented UHC through the Universal Coverage Scheme (UCS), which is run by the NHSO, by integrating its four health insurance programmes that sought to cover the whole population. The UCS is financed by general tax and covers approximately 76% of the population not covered by the other two insurance schemes. The comprehensive benefit package includes general medical care, rehabilitation services, high-cost medical treatment, and emergency care. The scheme has increased health-care access and reduced incidences of catastrophic health expenditure.

3.4.4 Social protection system

The Department of Social Development and Welfare is the primary social protection agency, providing services to the country's needy and distressed citizens. The 2018–2037 National Strategy for Thailand's Development includes a target of increasing incomes for the bottom 40% of the population by 15% (NESDB 2018). It sets out the need to "conduct targeting of social investment to provide assistance to poor and underprivileged people", including by developing measures to "accurately identify" those who need support.

3.4.5 Key findings[9]

Factors impacting access to TB care and treatment adherence

According to the stakeholders and desk research, the following factors are the key barriers impeding progress toward TB elimination and should be the focus of SPMs to ensure better well-being of those affected by TB.

9 Based on desk research and stakeholder interviews

Social stigma *(74)*

Social stigma is one of the key factors preventing global TB elimination. It can lead to delays in seeking a diagnosis, poor adherence to treatment, and hindrance in contact investigations. A study by *Public Health Action* found evidence of both enacted and felt stigma. Enacted stigma is actual discrimination, while felt stigma is fear of discrimination.

Poor access to health-care services *(75)*

As many as 4 million migrants live in Thailand, of which 30% are unregistered. Many of these people work in hazardous environments, which makes them more susceptible to the effects of TB. These migrants affected with TB have to pay treatment costs as the policies cover only registered civilians and many hospitals have regulations to not engage any unregistered migrant patients.

Lack of proper and accessible information *(75)*

According to research, it has been noted that there is limited knowledge among the population about the availability of free care. Language barriers and legal status are some of the challenges for many people who are not able to access information or services.

3.4.6 Social protection measures for people affected by TB in Thailand

A summary of specific schemes to help people with TB is given below:

Scheme	Country	Year of initiation	Implement-ing authority	Design	Eligibility
State Welfare Card Programme	Thailand	2017	Ministry of Finance	Cash transfer via electronic card	Low-income households (under Thai Baht [THB] 100 000)
Baan Mankong Programme	Thailand	2003	Community Organizations Development Institute (CODI), Ministry of Social Development and Human Security	Cash grants	Low-income people and city dwellers living in slums

Scheme	Country	Year of initiation	Implementing authority	Design	Eligibility
Monthly cash allowance for differently abled people	Thailand	2010	Local administrative organization, Ministry of Interior	Monthly living allowance via face-to-face cash collection, bank transfer or e-payment system	Thai national residents who are differently abled (including with visual, hearing, physical, intellectual and mental limitations) who have a card issued under the authority of the Persons with Disabilities' Quality of Life Promotion Act, B.E. 2550 (2007), and who are not under public institutional care
Monthly living allowance for patients with HIV/AIDS	Thailand	2000	Ministry of Social Development and Human Security	Monthly living allowance given as unconditional cash transfer by the local government agency	Diagnosed AIDS patients lacking income, abandoned, without any caretakers, or unable to provide for themselves
Social assistance for those with HIV/AIDs and their families	Thailand	2000	Ministry of Social Development and Human Security	Social assistance	Families of people living with AIDS
National School Lunch Programme/Khrong Kan Arhan Krangwankhrong*	Thailand	1952	Office of the Basic Education Commission (OBEC), Ministry of Education	In-kind transfer where schools apply for funds (THB 20 per student per day) allocated by the Department of Local Administration for nutritious lunches	Kindergarten and primary school students identified as poor
National School Milk Programme-Kan Ahanserm (Nom) Rongrian*	Thailand	1952	Ministry of Agriculture	In-kind transfer	Kindergarten and primary school students

* The meal programmes continue to function under the same name (76).

3.4.7 TB-specific SPMs

Thailand Operational Plan to End TB (2017–2021) *(77)*

Thailand Operational Plan to End Tuberculosis 2017 – 2021 had the goal to reduce the incidence of TB by 12.5% per year, from 171/100000 population in 2014 to 88/100000 by the end of 2021. Some of the strategic interventions include the following:

- Increase access to early TB diagnosis via molecular diagnostics for all presumptive TB cases, namely, elderlies, prisoners, HIV-infected persons and migrant workers and ensure national access to molecular diagnostics capacity.
- Conduct TB case finding in key target populations, namely children under 5 years of age living with TB patients, and HIV-infected persons to ensure treatment of latent TB infection.
- Support the private sector and civil society to garner their participation in TB diagnosis, treatment and care, as well as patient referral.

Thailand's Centre for Disease Control also focused strategies on tackling the TB burden *(78)*. Its key focus was to collaborate with the Global Fund and TB/HIV partners for implementing TB-preventive therapies among PLHIV. The focus was also on methods to pilot new TB diagnostic methods for advanced stages of HIV disease.

3.4.8 TB-sensitive SPMs

State Welfare Card (SWC) Programme

The Ministry of Finance established this Programme in 2017 as a basic social safety net for low-income households through monthly "near-cash" allowances for food, public transport and utility bills.

To qualify, applicants must demonstrate that they earn less than THB 100 000 (US$ 2894) per year, own assets worth less than THB 100 000, and own property worth less than specified levels. Beneficiaries may be eligible for other programmes and payments if they earn less than THB 30 000 (US$ 868) per year. The funds are transferred in credit form into the beneficiary's electronic smart card on a monthly basis. Recipients are allowed to spend the credits up to allowance limits at specified outlets. Credits expire at the end of each calendar month and cannot be carried over or saved *(79)*.

People earning less than THB 30 000 annually receive THB 300 (US$ 8.6) per month for food and household items, while those annually earning in the THB 30 000–100 000 range receive THB 200 (US$ 5.7). This credit can be used only at State-subsidized "Thong Fah" or "Blue Flag" shops that sell essential household items. SWC holders also receive credits that can be redeemed from transport providers in Bangkok and six nearby provinces' public transportation (THB 1500 [US$ 43.4] per month, or THB 500 (US$ 14.4) per mode of transportation), and up to THB 330 (US$ 9.5) for water, electricity, and LPG gas utilities (THB 45 [US$ 1.3] per quarter) *(80)*.

In 2021, a total of THB 16.4 billion (or US$ 0.5 billion) were disbursed to the 13.65 million SWC holders *(81)*. After eligibility requirements were revised in September 2022, officials reported that 1.86 million people across Thailand had already registered for the SWC project *(82)*. The Thai government periodically offers skills training courses to groups, including training through the National Village and Urban Community Fund; skills training for vulnerable women; and community-based career development programmes *(82)*.

Baan Mankong Programme

On a larger scale, the Baan Mankong ("secure housing") Programme is a community-driven project that supports networks of poor communities to survey, map, and upgrade poor and informal settlements across Thai cities. Community Organizations Development Institute (CODI), the implementing agency, issues infrastructure subsidies and/or subsidized loans for the projects directly to the community *(79)*.

However, the Programme also offers a cash grant for housing improvement of THB 25 000 (US$ 723) per household as well as a utility systems development grant for current (THB 30 000) and new (THB 50 000 [US$ 1447]) estates. Implementation in some communities also involved identifying vulnerable groups and building rooms or community homes for them (known as *Baan Klang* or central houses), as well as allotting a few rooms to be rented by those who cannot upgrade to remain in the community *(83)*.

National School Lunch Programme (NLSP)/Khrong Kan Arhan Krangwankhrong

Established first in 1952, the NSLP is run by the Ministries of Education and Interior. It is an in-kind transfer programme in which Thai schools that have been identified as impoverished provide nutritious lunches to their students in kindergarten and at primary levels. Fortified food and micronutrient supplements are added to the in-school meals offered to students five days per week of the nine-month school year *(79)*.

Non-perishable food is provided by the government food reserves to the NSLP. Local vendors are employed to buy perishable goods. The Programme works in a variety of ways based on the management at each institution. Parents of the pupils work as volunteers to cook the meals at some schools *(79)*.

Schools apply to the Department of Local Administration for funds to run the programme, which are allocated at the rate of THB 20 (US$ 0.58) per student per day.

National School Milk Programme/ (Kan Ahanserm (Nom) Rongrian)

The country is divided into three "school milk zones" to ensure the balance of supply and demand and support an equal allocation of resources. Consumers and suppliers of milk must be within the same zone, e.g. raw milk in Zone 1 must be processed by a dairy in Zone 1 and consumed by schools in Zone 1 *(79)*. The Ministry of Agriculture also provides for an in-kind transfer for kindergarten and primary school students. Ultra-high temperature/pasteurized milk is given as an in-school snack five days per week during the nine-month school year.

Monthly cash allowance for differently abled people

This scheme was launched in 2010 by the local administrative organization, Ministry of Interior under the Persons with Disabilities Quality of Life Promotion Act. It offers a monthly living allowance to differently abled Thai national residents (including visual, hearing, physical, intellectual, and mental limitations) who have a card stating that they are differently abled and who are not under public institutional care. A monthly cash allowance of THB 1000 (US$ 28.9) is also offered for differently abled people.

Monthly living allowance for persons with HIV/AIDS

The Ministry of Social Development and Human Security set up a monthly living allowance in 2000 to support diagnosed AIDS patients. The allowance is an unconditional cash transfer for persons living with HIV/AIDS who lack income, are abandoned without any caretakers, or are unable to provide for themselves. They receive THB 500 per month to meet basic expenses. Its disbursal is managed by the local government agency. The scheme reported 87 683 beneficiaries in 2018 *(79)*.

Social assistance for persons with HIV/AIDS and their families

This scheme was set up by the Ministry of Social Development and Human Security in 2000. For up to three times, families of people living with AIDS can avail THB 2000 (US$ 57.8) to cover essential expenses, medical bills, or occupation-related costs. It also offers additional financial aid of up to THB 1000 for AIDS-affected families with one child and THB 3000 (US$ 86.8) for families with more than one child and with both parents deceased *(79)*.

4. Discussion

Tackling the social determinants of TB through social protection is an essential component of the post-2015 End TB Strategy. SPMs can strengthen the resilience of TB patients, their families and households. However, evidence informing these policies is still scarce. Through this study, an array of social protection interventions being undertaken by the four selected countries in the South-East Asia Region, namely, Bangladesh, Indonesia, Nepal, and Thailand, were identified and studied to better understand the role of SPMs and other forms of support in relation to the burden of TB on patients and their households.

Three of the countries studied implemented specific SPMs for TB patients. However, these measures were not universally applicable and were designed to address the needs of a particular segment of the TB population.

To help their people better manage the financial consequences of TB, the NTPs of Bangladesh and Nepal, and select provinces in Indonesia, have implemented social support initiatives targeting a specific subset of the TB population, namely, DR-TB patients. The provided support encompasses various aspects, such as food and nutritional assistance, travel allowances, provision of ambulances for transportation, cash transfers for supplementary diagnostics, as well as meeting monthly requirements for nutrition and transportation. However, it is important to note that these countries currently do not extend any form of social support to DS-TB patients.

To illustrate, Nepal's NTP provides a monthly cash allowance of NPR 3000 (US$ 23) to people with DR-TB for transportation and nutritional support as social protection costs *(84)*. In addition, there are hostels in different parts of the country for DR-TB patients to provide them with accommodation, food, and treatment during the intensive phase of treatment. During this period, DR-TB patients are also provided a monthly cash incentive of NPR 1000 (US$ 7.6) to take care of their economic needs.

Similarly, the NTP in Bangladesh provides reimbursement of ancillary investigations costing up to BDT 2500 (US$ 23.9) and a travel allowance to patients for follow-up visits during the ambulatory period and BDT 1000 per month (US$ 9.5) to MDR-TB patients since enrolment up to the completion of treatment to support their nutritional requirements.

Additionally, psychosocial support is also recognized as a form of social protection since it establishes a network and environment that empowers individuals with TB to adhere to and successfully complete their treatment, follow preventive therapy, and prevent further impoverishment. There are several examples of psychosocial support and community engagement efforts being undertaken in the Region. For instance, in Indonesia, the USAID-led Mobilizing Networks for Self-Reliance to Fight TB (or Mandiri TB, "TB Self-Reliance" in Indonesian) is an example of strengthening support networks for DR-TB patients. As part of the Tuberculosis Free Nepal Declaration Initiative, TB care and support mechanisms will

be established at the local (*palika*) level for carrying out social audits annually. Through this mechanism, the government aims to raise awareness and publicize the results of various stages of the TB Free Initiative in the presence of the general public and stakeholders *(84)*.

Existing SPMs catering to different segments of the general population may be linked to patients with TB, based on the social determinants and impact of TB in those countries.

According to the stakeholders interviewed in the study, multiple social determinants significantly influence all aspects of the development of TB and process of recovery. Among these determinants, poverty was highlighted as a major factor with profound effects on the disease. Among other things, poverty exacerbates the poor nutritional status of the affected population, leading to secondary immunodeficiency. This combination of poverty and undernutrition not only increases the susceptibility to TB but also delays health-care seeking among those already ill. Furthermore, stakeholders noted that the adverse effects of TB and its treatment hinder patients' ability to reintegrate into the workforce, thereby impacting their overall livelihood and survival.

Based on these observations, the respondents brought to attention that several social protection interventions exist within their countries that can be leveraged to support patients with TB. This can be achieved by broadening the scope of these existing programmes/schemes to include those with TB, either through the establishment of interdepartmental linkages or integration into NTPs. This will ensure that patients with TB and their families are protected from the substantial costs associated with accessing or continuing TB care. For instance, in Bangladesh, eligible patients with TB can be linked to the programme providing allowances (conditional cash transfers) for financially insolvent, differently abled persons or the programme providing financial assistance to persons with cancer, kidney disease and liver cirrhosis. Similarly, in Indonesia, TB patients and their families can be enrolled with the Program Keluarga Harapan (PKH)/Family Hope Programme for availing conditional cash transfer support and the Sembako Program/Food Assistance Programme for leveraging non-cash food assistance. Similarly, in Nepal, patients with TB and their families can be linked to the Prime Minister's Employment Programme and Enhanced Vocational Education and Training programme to help them join back into the workforce.

Furthermore, there are a few countries in the Region that have implemented non-cash nutrition supplementation programmes for vulnerable and marginalized populations such as the Vulnerable Group Feeding Programme in Bangladesh, which provides monthly food transfers to poor households during religious festivals, lean seasons, and natural disasters, and the Sembako Program/Food Assistance Programme in Indonesia, which provides non-cash assistance to citizens for purchasing rice, eggs and other nutritional commodities. These programmes are not specifically for those with TB and respondents in this study have recommended the introduction of targeted nutritional supplementation programmes for those with TB, especially those with DR-TB.

In the countries under study, lack of awareness among beneficiaries is a significant factor contributing to the low coverage of social protection programmes.

Based on interviews with stakeholders from the countries in this study, there are several key factors that pose barriers to accessing and adhering to TB treatment, as well as hinder efforts towards TB elimination. Poverty is identified as a major obstacle, as it limits access to general health knowledge, health-care services, and the resources necessary for TB prevention. Additionally, poverty prevents individuals from acting on health knowledge, further exacerbating the problem. Another significant barrier is the discontinuation of treatment by patients once they show initial signs of improvement. Access to TB care is also hindered by challenges such as transportation limitations, limited availability of DR-TB services and medicines, and the requirement of proof of citizenship at government facilities. Social stigma surrounding TB remains high and leads to underreporting and delays in seeking diagnosis and treatment. The loss of income due to long treatment duration affects both patients and their caregivers, impacting their living conditions and nutritional intake.

Furthermore, stakeholders underscored that one of the major reasons related to user access is lack of awareness among the recipients resulting in low coverage of social protection programmes. Even if they are aware, there is insufficient information regarding the eligibility requirements for enrolment into these programmes. Moreover, respondents acknowledged that sometimes administrative and logistical challenges lead to delays in the disbursement of financial support, negatively impacting the beneficiaries. Moreover, with respect to cash transfers/allowances, they emphasized that the requirement of a mandatory bank account poses issues, as many individuals in low-resource settings either lack access to a bank or do not possess their own bank accounts. Additionally, there is a lack of formal monitoring mechanisms to ensure that each recipient is receiving the necessary support.

5. Recommendations

5.1 Providing economic support in various forms across the continuum of care

Poverty not only increases the vulnerability to TB, but also delays health-seeking among those already sick. Due to the challenges of the catastrophic economic implications of TB and widespread economic downturn due to the COVID-19 pandemic, it is crucial to provide economic support to the impoverished and break the cycle of poverty and disease.

Key recommendations

- **Cash transfers.** It is recommended that other countries in the Region provide economic support to persons with TB as easily accessible cash transfers (conditional or unconditional) or as indirect support for nutrition, medical health insurance, transportation, housing, etc. Further, the monetary assistance should be paired with consistent guidance to help patients effectively utilize the incentive for their treatment expenses and overall well-being.
- **Handholding support.** It is recommended to facilitate the opening of bank accounts for all patients seeking TB treatment and provide support to those who do not have one. If there are any technical or operational delays in setting up a bank account, the NTP could make alternative arrangements to ensure that patients receive benefits without any denial or delay in patient support.
- **Health insurance coverage.** It is suggested to ensure that all diagnostics and inpatient care for TB patients are covered under national insurance schemes, if applicable. Developing a special TB benefits package that could cover outpatient costs would be beneficial, as not all cases will require hospitalization. Greater cover for outpatient expenses would be a valuable area of support.
- **Vocational and rehabilitative support.** It is recommended to create vocational and rehabilitative support for the patient post-treatment completion by connecting them with relevant national livelihood programmes. Linking cured individuals or family members with programmes allows the patient to be re-integrated into the workforce. Further, it is suggested to leverage support from development partners and local NGOs to provide vocational training for cured individuals and family members so that they are empowered to earn a livelihood.

5.2 Accelerating efforts to strengthen multisectoral accountability and collaboration

People affected by TB need the support of social protection policies and programmes to help them recover from sickness and manage any disability or loss of function that results from TB without suffering catastrophic financial loss or other avoidable hardships. This requires effective multisectoral collaboration with key actors from both within and outside the health sector.

Key recommendations

- **Multisectoral accountability framework.** Countries in the Region are recommended to undertake a baseline assessment review and progress mapping using WHO's MAF-TB. Further, countries can develop their own MAF-TB, which is customized to the country's context and can help align the roles and responsibilities of different stakeholder groups, including the public health sector, civil society and private sector partners. This approach will enable an assessment of the capabilities, capacities and resource availability with each stakeholder group, as well as establish their respective levels of accountability. By leveraging this framework, countries can not only establish accountability for each stakeholder group but also define measurable indicators and benchmarks to monitor their performance and contributions in supporting TB patients and accelerating the reduction of TB within the country. Overall, by implementing a country-specific MAF-TB, the coordination, accountability, resource allocation, and monitoring of stakeholders can be improved. This ultimately leads to a more comprehensive and effective support system for TB patients, promoting timely diagnosis, treatment, and care throughout their journey towards recovery.
- **Intersectoral ownership.** Countries could bring together stakeholders across relevant ministries and departments, such as health, finance, education, food, social welfare, justice, labour, transport and migration, the private sector, national and international partners, and civil society, affected communities and patients for ensuring comprehensive access to social protection services. This can be facilitated by establishing formal institutionalized structures that have a well-defined mandate and set of guidelines for guiding and executing important strategies and activities pertaining to cross-sectoral accountability and cooperation.

  At the level of the government, relevant ministries and their corresponding departments could explore synergies for identifying fiscal space and cross-sectoral financing to ensure equitable and efficient utilization of national resources. A dedicated team can be established as part of the NTP, which works closely with the various government departments to identify and advocate for amendment/adaptation of policies and schemes for social protection of marginalized groups. International organizations, civil society and communities can support the effort and increase the potential for social protection schemes to reach more people, especially those left behind by the current provision of TB services.

  To illustrate, in 2021, the Coordinating Ministry for Human Development and Culture, Indonesia established the Tuberculosis (TB) Multi-Sector Forum to strengthen multisectoral commitment at the local government level. The Central Government formed a team to accelerate TB reduction, consisting of 19 ministries and institutions and a partnership forum consisting of 35 multisector partners for reducing the social, cultural, and economic impacts of TB on individuals, families, and communities.

5.3 Integrating nutrition support with patient's standard of care

Undernutrition is both an important risk factor for, and a common consequence of TB. Considering the magnitude of the issue and available evidence, it is imperative to urgently focus on the management of nutrition among patients with TB and meaningfully link them to SPMs.

Key recommendations

- **Supplementary nutrition.** Taking country-level experiences into consideration, it is recommended that cash transfers for nutrition support be complemented by the distribution of food packages. Food baskets must be designed as per guidelines, considering the local tastes and preferences, and the supply chain management capabilities of the country. Food baskets should incorporate calorie-dense, nutritious items that can be consumed with minimum effort by the patient. In this regard, dry fruits, nuts, milk powder, soya bean oil or nutritious dry mixes would be beneficial. Furthermore, both at the regional and national levels, it is recommended to advocate with the private sector to expand their corporate social responsibility (CSR) and encourage the development of nutritious food products for patients with TB.
- Service delivery. Service delivery can be assigned to a relevant government department or implemented with external support. Local NGOs and community-based organizations (CBOs) can also support service delivery and improve awareness on entitlements and preventive behaviours among beneficiaries. Moreover, this disbursement of in-kind food at a health facility will provide an opportunity for interaction with the patient and a chance to counsel and follow up on treatment.

5.4 Providing psychosocial support for people-centred care through integration of counselling and community-based support

Across the Region, increasing evidence has highlighted that patients with TB face various psychosocial challenges while undergoing treatment due to the long duration of treatment, side-effects of the drugs, as well as the deep-seated stigma attached to the disease.

Key recommendations

- **Formal psychosocial support for TB-affected households.** It is recommended that countries in the Region ensure counselling by health-care professionals (health-care providers or community health workers) for TB-affected households as a critical component of TB care to help them cope with their emotional needs and boost their morale. Member States could undertake periodic training of all health-care providers on patient-centred counselling and ensure the availability of the necessary tools and services to support them in performing their duties. In this regard, countries can partner with national and subnational medical colleges for organizing health camps, conducting educational sessions, and offering counselling and support services in community settings such as local clinics, schools, and community centres. Formal psychosocial support would need to be tailored and adopted as per the need, ability to scale up and economic feasibility of countries.
- **Improving awareness and empathy.** At the community level, active campaigns could be designed and launched of information, education and communication (IEC) and behaviour change communication (BCC). These would be so designed as to resonate with the individual- and community-level aspects of the disease. Awareness campaigns could also target schools to improve awareness on the aspects of prevention, prevailing myths

and misconceptions, signs and symptoms of the disease as well as on services, drugs and support mechanisms available under government programming, including SPMs. Local governments, NGOs, CSOs, CBOs, religious leaders and patient support groups should be involved and encouraged to play a pivotal role in expanding community awareness-generation interventions. These initiatives can also be integrated into IEC/BCC campaigns that are being planned/conducted to promote SPMs in the country.

- Peer support. Local communities, people who are directly affected by TB and people who have had TB but have been cured should be seen as active beneficiaries of the health services. They can join the fight against TB. Countries in the Region can facilitate, engage and empower TB survivors and people affected by TB to be effective advocates and peer supporters. Peer supporters can act as advocates, or provide information, either on a one-on-one basis or in support groups or by regularly sharing their experiences with the community at large.
- **Community-led monitoring.** To engage communities more holistically and to make them an integral part of the joint TB response, countries in the Region could introduce community-led monitoring (CLM) for TB services. CLM will assess the quality, availability, acceptability, and accessibility of the TB services, human rights violations, stigma and barriers to social protection systems for people with and affected by TB. Further, CLM can be used for observing challenges and gaps, identifying best practices and reaching out to marginalized populations through regular and systematic data collection. These data can then be leveraged by policy-makers and programme implementors for evidence-based decision-making and incorporating actions to improve services, programmes, and policies.

Cross-cutting recommendations. Although social protection schemes for TB patients are available in a few countries in the Region, implementation challenges such as equity considerations, timeliness, coverage, and quantum of support have to be regularly assessed. Therefore, across all the aforementioned recommendations, it is recommended that a standardized M&E framework using predefined indicators be rolled out to evaluate the adherence to and impact of such interventions.

Furthermore, efforts are needed to create greater awareness on available entitlements and provisions. This information can be proactively disseminated by multiple actors of the TB ecosystem, such as the government, treating physicians, community health workers, TB champions/peer educators, NGOs, CBOs, religious leaders, patient support groups and any other informed citizen of the community. The various channels that can be leveraged for spreading awareness could include social media campaigns, speaking opportunities at high-visibility events at both rural and urban levels, development and distribution of IEC materials, among others. Lastly, patients must be sensitized and counselled to use economic assistance for treatment costs and general well-being only.

6. The way forward

It is widely acknowledged that a biomedical approach alone is inadequate for progress towards eliminating TB. There is a need to address the underlying comorbidities and social determinants of TB, especially after the COVID-19 pandemic. Social protection for TB patients is important because it can help them alleviate poverty, maintain their work capacity, and prevent loss of income. This, in turn, supplements countries' efforts at emergency preparedness by building more responsive and resilient healthcare ecosystem. Therefore, TB programmes and partners should work with other programmes, schemes and communities to expand the network of social protection. By providing free diagnosis and treatment alongside social protection, it can help to reduce the financial burden on patients. It is imperative to address the social protection needs of those with TB to achieve the disease-specific UN SDGs and eliminate poverty. Therefore, tackling the social determinants of TB through social protection is a crucial element of the post-2015 End TB Strategy. However, evidence informing comprehensive policies in this area is still limited.

This report can be leveraged as foundational evidence for the Region to identify, document and take into consideration some of the best practices pertaining to adoption/ adaptation, implementation, and scale up of SPMs for TB elimination in the Region. Additionally, through this evidence, NTPs can call upon stakeholders involved in achieving the SDGs and End TB targets in countries to recognize that all goals are highly interlinked, and there is a need to combine and complement each other's efforts to end TB and the determinants behind this disease. Underpinning this report, the principal actors in the Region can engage in brainstorming, deliberation, and ultimately convene a dedicated session on SPMs pertaining to the care, management, and control of TB during the forthcoming meeting of national TB programme managers, partners and specialists at the regional level. This will eventually facilitate dialogue for accelerating progress in policy development and implementation of TB-sensitive and -inclusive SPMs at the country level.

References

1. World Health Organisation. Global Tuberculosis Report 2022. Geneva: World Health Organisation. 27 October 2022. Available at: https://www.who.int/publications/i/item/9789240061729. Accessed on – November 2022.
2. World Health Organisation. The End TB Strategy. Geneva: World Health Organization. 2015. Available at: https://apps.who.int/iris/bitstream/handle/10665/331326/WHO-HTM-TB-2015.19-eng.pdf?sequence=1&isAllowed=y. Accessed on – November 2022.
3. World Health Organisation Ethics guidance for the implementation of the end TB strategy. Geneva: World Health Organisation. January 2017. Available at: https://apps.who.int/iris/handle/10665/254820. Accessed on – November 2022.
4. World Health Organization. Global Tuberculosis Report 2021. Geneva: World Health Organisation. 4 October 2021. Available at: https://www.who.int/publications/i/item/9789240037021/. Accessed on – December 2022.
5. World Health Organisation. (2022, October 28). Social Determinants of Health. World Health Organisation. 28 October 2022. Available at: https://www.who.int/health-topics/social-determinants-of-health#tab=tab_1. Accessed on – January 2023.
6. Hargreaves, J. R., Boccia, D., Evans, C. A., Adato, M., Petticrew, M., & H. Porter, J. D. The Social Determinants of Tuberculosis: From Evidence to Action. American Journal of Public Health. 20 September 2011. Available at: https://doi.org/10.2105/AJPH.2010.199505. Accessed on – November 2022.
7. Silva, S., Arinaminpathy, N., Atun, R., Goosby, E., & Reid, M. B. (2021). Economic Impact of Tuberculosis Mortality in 120 Countries and the Cost of not Achieving the Sustainable Development Goals Tuberculosis Targets: A Full-income Analysis. The Lancet Global Health. 3 September 2021. Available at: https://doi.org/10.1016/s2214-109x(21)00299-0. Accessed on – November 2022.
8. Pathak, D., Vasishtha, G., & Mohanty, S. K. (2021). Association of multidimensional poverty and tuberculosis in India. BMC Public Health. 11 November 2011. Available at: https://doi.org/10.1186/s12889-021-12149-x. Accessed on – November 2022.
9. World Health Organization: WHO & World Health Organization: WHO. (2023). Tuberculosis. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/tuberculosis. Accessed on – November 2022.
10. Asian Development bank. COVID-19 Pushed 4.7 Million More People in Southeast Asia Into Extreme Poverty in 2021, But Countries are Well Positioned to Bounce Back — ADB. Asian Development Bank. July 2022. Available at - https://www.adb.org/news/covid-19-pushed-4-7-million-more-people-southeast-asia-extreme-poverty-2021-countries-are-well#:~:text=MANILA%2C%20PHILIPPINES%20(16%20March%202022,presented%20at%20the%20Southeast%20Asia. Accessed on – January 2023.
11. Singh, P. Strengthening social protection for TB patients: Lessons from COVID-19. *PLOS Global Public Health*, 2(8), e0000950. August 2022. Available at-https://doi.org/10.1371/journal.pgph.0000950. Accessed on – January 2023.
12. Sinha, P., Lönnroth, K., Bhargava, A., Heysell, S. K., Sarkar, S., Salgame, P., Rudgard, W. E., Boccia, D., Van Aartsen, D., & Hochberg, N. S. Food for thought: addressing undernutrition to end tuberculosis. *Lancet Infectious Diseases*, 21(10), e318–e325. March 2021. Available at - https://doi.org/10.1016/s1473-3099(20)30792-1. Accessed on – January 2023.
13. Heijnders, M., & Van Der Meij, S. The fight against stigma: An overview of stigma-reduction strategies and interventions. *Psychology Health & Medicine*, 11(3), 353–363. Jan 2007. Available at - https://doi.org/10.1080/13548500600595327. Accessed on – January 2023.

14. Lönnroth, K., Jaramillo, E., Williams, B. G., Dye, C., & Raviglione, M. C. Drivers of tuberculosis epidemics: The role of risk factors and social determinants. *Social Science & Medicine*, 68(12), 2240–2246. June 2009. Available at - https://doi.org/10.1016/j.socscimed.2009.03.041. Accessed on – January 2023.

15. Goyal-Honavar, A., Markose, A. P., Chhakchhuakk, L., John, S. M., Joy, S. A., Kumar, S. D., Saha, S. K., Palathinkal, J. R., Bula, S. S., Yalamanchili, S., Krishna, S., Jebakumar, D., Marconi, S., & Dani, S. Unmasking the human face of TB- The impact of tuberculosis on the families of patients. *Journal of Family Medicine and Primary Care*, 9(10), 5345. October 2020. Available at - https://doi.org/10.4103/jfmpc.jfmpc_670_20. Accessed on – January 2023.

16. Satyanarayana, S., Thekkur, P., Kumar, A., Lin, Y., Dlodlo, R. A., Tayler-Smith, K., Zachariah, R., & Harries, A. D. An Opportunity to END TB: Using the Sustainable Development Goals for Action on Socio-Economic Determinants of TB in High Burden Countries in WHO South-East Asia and the Western Pacific Regions. *Tropical Medicine and Infectious Disease*, 5(2), 101. June 2020. Available at - https://doi.org/10.3390/tropicalmed5020101. Accessed on – January 2023.

17. Zimmer, A. S., Klinton, J. S., Oga-Omenka, C., Heitkamp, P., Nyirenda, C., Furin, J., & Pai, M. Tuberculosis in times of COVID-19. *Journal of Epidemiology and Community Health*, 76(3), 310–316. March 2022. Available at - https://doi.org/10.1136/jech-2021-217529. Accessed on – January 2023.

18. Pedrazzoli, D., Boccia, D., Dodd, P. J., Lönnroth, K., Dowdy, D. W., Siroka, A. M., Kimerling, M. E., White, R., & Houben, R. M. G. J. Modelling the social and structural determinants of tuberculosis: opportunities and challenges. International Journal of Tuberculosis and Lung Disease, 21(9), 957–964. September 2017. Available at - https://doi.org/10.5588/ijtld.16.0906. Accessed on – January 2023.

19. World Health Organization. Regional Strategic Plan towards ending TB in the WHO SE Asia Region 2021–2025. World Health Organization. Regional Office for South-East Asia. July 2021. Available at - https://apps.who.int/iris/bitstream/handle/10665/349900/9789290228974. Accessed on – November 2022

20. World Health Organization. Social protection: shared interests in vulnerability reduction and development. World Health Organization. July 2012. Available at - https://www.who.int/publications/i/item/9789241503655. Accessed on – November 2022.

21. Asian Development Bank. Social protection. Asian Development Bank. July 2003. Available at - https://www.adb.org/sites/default/files/institutional-document/32100/social-protection.pdf. Accessed on – January 2023.

22. The World Bank. The World Bank in Social Protection - Overview. World Bank. April 2023. Available at - https://www.worldbank.org/en/topic/socialprotection/overview. Accessed on – April 2023.

23. Siroka, A., Ponce, N. A., & Lönnroth, K. Association between spending on social protection and tuberculosis burden: a global analysis. The Lancet. *Infectious diseases*, 16(4), 473–479. December 2015. Available at - https://doi.org/10.1016/S1473-3099(15)00401-6. Accessed on – January 2023.

24. Carter, D. J., Glaziou, P., Lönnroth, K., Siroka, A., Floyd, K., Weil, D., Raviglione, M., Houben, R., & Boccia, D. The impact of social protection and poverty elimination on global tuberculosis incidence: a statistical modelling analysis of Sustainable Development Goal 1. *The Lancet. Global health*, 6(5), e514–e522. March 2018. Available at - https://doi.org/10.1016/S2214-109X(18)30195-5. Accessed on – January 2023.

25. International Labour Office. World Social Protection Report 2020-22: Social Protection at the Crossroads – in Pursuit of a Better Future. International Labour Organization. 2021. Available at - https://www.ilo.org/wcmsp5/groups/public/@ed_protect/@soc_sec/documents/publication/wcms_817572.pdf. Accessed on – January 2023.

26. International Labour Organization. Facts on Social Security. *International Labour Organization.* Available at - https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/documents/publication/wcms_067588.pdf. Accessed on – January 2023.

27. *Ministry of Health and Family Welfare. Hon'ble President Smt. Droupadi Murmu launches 'Pradhan Mantri TB Mukt Bharat Abhiyaan' to eliminate TB by 2025*. Press Information Bureau. September 2022. Available at - https://pib.gov.in/PressReleasePage.aspx?PRID=1858006#:~:text=The%20President%20also%20launched%20the,complete%20their%20journey%20towards%20recovery. Accessed on – January 2023.

28. U.S. Agency For International Development. *Indonesia Tuberculosis Roadmap Overview, Fiscal Year 202. U.S. Agency for International Development*. 2021-2022. Available at - https://www.usaid.gov/global-health/health-areas/tuberculosis/resources/news-and-updates/global-accelerator-end-tb/tb-roadmaps/indonesia. Accessed on – January 2023.

29. Ministry of Health and Family Welfare. Mission report: the Bangladesh TB joint monitoring mission, September 1-10, 2019, figure-5, page-35 (unpublished) and Available at - https://www.researchgate.net/figure/MOHFWs-Structure-of-Health-Services-Delivery_fig1_289433106, Accessed on – July 2023.

30. World Health Organization. Health Financing Progress Matrix assessment: Bangladesh 2021. *World Health Organization*. June 2022. Available at - https://www.who.int/publications/i/item/9789240048331. Accessed on – January 2023.

31. World Health Organization. Global Health Expenditure Database. *World Health Organization*. July 2023. Available at - https://apps.who.int/nha/database/. Accessed on – January 2023.

32. World Health Organization. Life Expectancy at Birth (years). World Health Organization. July 2023. Available at - https://www.who.int/data/gho/data/indicators/indicator-details/GHO/life-expectancy-at-birth-(years). Accessed on – February 2023.

33. The World Bank Open Data. Current Health Expenditure of (% of GDP) – Bangladesh. The World Bank. April 2023. Available at - https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS?locations=BD Accessed on – January 2023.

34. Requejo, J. H., & Strong, K. on behalf of the Child Health Redesign writing team. Redesigning health programmes for all children and adolescents. *BMJ*, 372. March 2021. Available at - https://doi.org/10.1136/bmj.n533. Accessed on – December 2022.

35. Official Website of National Tuberculosis Control Program of Bangladesh. Available at - https://www.ntp.gov.bd/. Accessed on – November 2022.

36. Mondal, M. N.I, Nazrul, H. M., Chowdhury, M. R. K., & Howard, J. a. K. Socio-demographic factors affecting knowledge level of Tuberculosis patients in Rajshahi City, Bangladesh. *African Health Sciences*, 14(4), 855. January 2015. Available at - https://doi.org/10.4314/ahs.v14i4.13. Accessed on – January 2023.

37. Htike, W., Islam, M. S., Hasan, M. Z., Ferdous, S., & Rifat, M. Factors associated with treatment delay among tuberculosis patients referred from a tertiary hospital in Dhaka City: a cross-sectional study. *Public Health Action*, 3(4), 317–322. December 2013. Available at - https://doi.org/10.5588/pha.13.0067. Accessed on January 2023.

38. World Health Organization. Guidance for national strategic planning for tuberculosis. *World Health Organization*. August 2022. Available at - https://www.who.int/publications/i/item/9789240052055. Accessed on – November 2022.

39. University Research Co. TB CARE II. *URC*. January 2023. Available at - https://www.urc-chs.com/projects/tb-care-ii/ . Accessed on – December 2022.

40. United States Agency for International Development. USAID's Global Tuberculosis (TB) Strategy. *U.S. Agency for International Development*. October 2022. Available at - https://www.usaid.gov/global-health/health-areas/tuberculosis/resources/publications/usaid-global-tuberculosis-strategy-2023-2030. Access on – January 2023.

41. The World Bank. Implementation status and Results Report –SOUTH ASIA | Bangladesh | Social Protection & Jobs Global Practice. *The World Bank*. November 2013. Available at - https://documents1.worldbank.org/curated/en/099220206302224530/pdf/P13263407ac2ad00d0921d02e48fc09a13f.pdf. Access on – December 2023.

42. Cho & Ruthbah. Does Workfare Work Well? The Case of the Employment Generation Program for the Poorest in Bangladesh. *The World Bank*. April 2018. Available at - https://documents1.worldbank.org/curated/en/693021522689848382/pdf/WPS8395.pdf. Accessed on – January 2023.

43. Sengupta S. Linking Forecast-based Financing and social protection: Why should National Societies care? In *Red Cross Red Crescent Climate Centre*. December 2021. Available at - https://www.climatecentre.org/wp-content/uploads/RCCC-Final-Advocacy-Brief-for-NS_Linking-Social-Protection-and-FbF_New.-V4pdf.pdf. Accessed on – December 2023.

44. Global Child Nutrition Foundation. Survey Infographics. *The Global Survey of School Meal Programs*. January 2021. Available at - Infographics | The Global Survey of School Meal Programs | GCNF. Accessed on – November 2023.

45. World Food Programme. WFP Bangladesh Country Brief. August 202. *OCHA Services, Relief Web*. Bangladesh. September 2021. Available at - https://reliefweb.int/report/bangladesh/wfp-bangladesh-country-brief-august-2021 Accessed on – December 2022.

46. Parvin, A., Hakim, S.S., & Islam. Policy, design, and way of life in resettlement projects: The case of Ashrayan, Bangladesh. *International Journal of Disaster Risk Reduction*. May 2022. Available at - International Journal of Disaster Risk Reduction | ScienceDirect.com by Elsevier. Accessed on – January 2023.

47. Islam, J. How Ashrayan project helps attaining SDGs. *The Business Standard*. April 2022. Available at - https://www.tbsnews.net/bangladesh/how-ashrayan-project-helps-attaining-sdgs-408958. Accessed on – February 2023.

48. Staff Correspondent. Graft blights safety scheme for disabled. *The Daily Star*. February 2021. Available at - https://www.thedailystar.net/backpage/news/graft-blights-safety-scheme-disabled-2043441. Accessed on – December 2022.

49. Dhaka Tribune. TIB: Upto 67% of disability allowance embezzled from public allowance grant. *Dhaka Tribune*. February 2021. Available at - https://archive.dhakatribune.com/bangladesh/2021/02/11/tib-upto-67-of-disability-allowance-embezzled-from-public-allowance-grant. Accessed on – January 2023.

50. Netrokona Correspondent. 54 patients get financial aid in Netrokona. *Bangladesh Post.* December 2021. Available at - https://bangladeshpost.net/posts/54-patients-get-financial-aid-in-netrokona-75990. Accessed on – December 2022.

51. Anwar, Rubaba.; Cho,Yoonyoung; Aziz,Ashiq. Allowances for the Financially Insolvent Disabled: Program Brief. *The World Bank*. September 2019. https://documents.worldbank.org/en/publication/documents-reports/documentdetail/456261552536945647/allowances-for-the-financially-insolvent-disabled-program-brief. Accessed on – December 2022.

52. Susilawati, T. N., & Larasati, R. A recent update of the diagnostic methods for tuberculosis and their applicability in Indonesia: a narrative review. *Medical Journal of Indonesia*, 28(3), 284–291. March 2019. Available at - https://doi.org/10.13181/mji.v28i3.2589. Accessed on – December 2022.

53. The World Bank. Overview. *The World Bank in Indonesia.* April 2022. Available at - https://www.worldbank.org/en/country/indonesia/overview. Accessed on – January 2023.

54. World Health Organization. The Republic of Indonesia Joint External Monitoring Mission for Tuberculosis. *World Health Organization*. January 2017. Available at - https://tbindonesia.or.id/wp-content/uploads/2021/06/INDONESIA-JEMM-2020-Eng-1.pdf. Accessed on – December 2022.

55. Noviyani, A., Nopsopon, T., & Pongpirul, K. Variation of tuberculosis prevalence across diagnostic approaches and geographical areas of Indonesia. *PLOS ONE*, 16(10), e0258809. October 2021. Available at - https://doi.org/10.1371/journal.pone.0258809. Access on – January 2023.

56. World Health Organization. The Global Health Observatory. *World Health Organization.* Available at - https://www.who.int/data/gho. Accessed on – December 2022.

57. S, H. D. S. R. TB control forum seeking to boost multi-sector commitment: ministry. *Antara News*. June 2022. Available at - https://en.antaranews.com/news/232205/tb-control-forum-seeking-to-boost-multi-sector-commitment-ministry. Accessed on – January 2023.

58. Pradipta, I. S., Idrus, L. R., Probandari, A., Puspitasari, I. M., Santoso, P., Alffenaar, J. C., & Hak, E. Barriers to Optimal Tuberculosis Treatment Services at Community Health Centers:AQualitative Study From a High Prevalent Tuberculosis Country. *Frontiers in Pharmacology*, March 2022. Available at- https://doi.org/10.3389/fphar.2022.857783. Accessed on-January 2023.

59. OECD. Social Protection System Review of Indonesia, OECD Development Centre. OECD Publishing, April 2019. Available at- https://doi.org/10.1787/788e9d71-en. Accessed on - January 2023.

60. Alisjahbana, B., van Crevel, R., Sahiratmadja, E., den Heijer, M., Maya, A., Istriana, E., Danusantoso, H., Ottenhoff, T. H., Nelwan, R. H., & van der Meer, J. W. Diabetes mellitus is strongly associated with tuberculosis in Indonesia. *The international journal of tuberculosis and lung disease: the official journal of the International Union against Tuberculosis and Lung Disease*, *10*(6), 696–700. June 2006. Available at - https://pubmed.ncbi.nlm.nih.gov/16776459/. Accessed on – February 2023.

61. International Labour Organisation. World Social Protection Report 2020-22: Social protection at the crossroads – in pursuit of a better future. *International Labour Organization*. September 2021. Available at- https://www.ilo.org/global/publications/books/WCMS_817572/lang--en/index.htm. Accessed on - January 2023.

62. Samiti, R. S. Health insurance scheme reaches all 77 districts. *The Himalayan Times*. March 2021. Available at - https://thehimalayantimes.com/nepal/health-insurance-scheme-reaches-all-77-districts. Accessed on - November 2022.

63. Niti NOTE. Policy Landscape of Social Protection in Nepal. *Niti Foundation*. 2019. Available at - https://nitifoundation.org/policy-landscape-of-social-protection-in-nepal/. Accessed on - January 2023.

64. Centers for Disease Control and Prevention. DTBE Strategic Plan 2022-2026. *Centre for Disease Control and Prevention.* September 2022. Available at-https://www.cdc.gov/tb/about/strategic-plan-background.htm. Accessed on - January 2023.

65. The Microdata Library, World Bank. Demographic and Health Survey 2011. *The World Bank*. June 2017. Available at- https://microdata.worldbank.org/index.php/catalog/1466. Accessed on - January 2023.

66. World Health Organization. WHO releases updated guidance on national strategic planning for tuberculosis. *World Health Organization*. August 2022. Available at -https://www.who.int/news/item/16-08-2022-who-releases-updated-guidance-on-national-strategic-planning-for-tuberculosis. Accessed on - December 2022.

67. International Labour Organisation. Nepal Child Labour Report based on data drawn from the Nepal Labour Force Survey 2008. *International Labour Organization*. January 2011. Available at - https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---ilo-kathmandu/documents/publication/wcms_182988.pdf. Accessed on - January 2023.

68. Adhikari, B., Mishra, S. R., & Schwarz, R. Transforming Nepal's primary health care delivery system in global health era: addressing historical and current implementation challenges. *Globalization and Health*, 18(1). January 2022.Available at-https://doi.org/10.1186/s12992-022-00798-5. Accessed on- January 2023

69. Dixit, K., Biermann, O., Rai, B., Aryal, T. P., Mishra, G., De Siqueira-Filha, N. T., Paudel, P. R., Pandit, R., Sah, M. K., Majhi, G., Levy, J. W., Van Rest, J., Gurung, S. C., Dhital, R., Lönnroth, K., Squire, S. B., Caws, M., Sidney, K., & Wingfield, T. Barriers and facilitators to accessing tuberculosis care in Nepal: a qualitative study to inform the design of a socioeconomic support intervention. BMJ Open. October 2021. Available at - https://doi.org/10.1136/bmjopen-2021-049900. Accessed on - January 2023.

70. Government of Nepal. National Tuberculosis Program Nepal. In Ministry of Health Department of Health Services National Tuberculosis Center. 2017. Available at-https://www.nepalntp.gov.np/wp-content/uploads/2018/03/Final-Annual-Report-NTPN-2018.pdf. Accessed on - January 2023.

71. The World Bank. Thailand Overview. World Bank. April 2023. Available at - https://www.worldbank.org/en/country/thailand/overview. Accessed on – January 2023.

72. World Health Organization. Achieving the targets for universal health coverage: how is Thailand monitoring progress? WHO South-East Asia Journal of Public Health. April 2019. Available at - https://apps.who.int/iris/bitstream/handle/10665/329435/seajph2019v8n1p10.pdf?sequence=1&isAllowed=y. Accessed on - January 2023.

73. Legido-Quigley, Helena & Asgari-Jirhandeh, Nima. Resilient and people-centred health systems: progress, challenges and future directions in Asia. World Health Organization. Regional Office for South-East Asia. 2018. Available at - https://apps.who.int/iris/handle/10665/276045. Accessed on – January 2023.

74. Ngamvithayapong-Yanai, J., Luangjina, S., Thawthong, S., Bupachat, S., & Imsangaun, W. Stigma against tuberculosis may hinder non-household contact investigation: a qualitative study in Thailand. *Public Health Action*, 9(1), 15–23. March 2019. Available at - https://doi.org/10.5588/pha.18.0055. Accessed on - January 2023.

75. Phyo, N., & Karapetyan, G. S. How to mobilize TB polices in Thailand to fill the field gaps to tackle TB burden in migrant population: A civil society perspective. *International Journal of Infectious Diseases*, 73, 177. August 2018. Available at -https://doi.org/10.1016/j.ijid.2018.04.3815. Accessed on - January 2023.

76. The Global Child Nutrition Foundation. The GCNF Global Survey of School Meal Programs: Kingdom of Thailand. The Global Child Nutrition Foundation. 2019. Available at - https://gcnf.org/wp-content/uploads/2021/01/CR_Thailand_09_2020.pdf. Accessed on – January 2023.

77. Government of Thailand. Thailand Operational Plan to End Tuberculosis 2017–2021. Department of Disease Control, Thailand. 2017. Available at -https://www.tbthailand.org/download/Manual/Thailand%20Operational%20Plan%20To%20End%20%20TB_2017_2021.pdf. Accessed on - January 2023.

78. Centre for Disease Control and Prevention. Thailand Strategic Focus. *CDC Division of Global HIV & TB*. September 2022. Available at -https://www.cdc.gov/globalhivtb/where-we-work/Thailand.pdf. Accessed on - January 2023.

79. Sharpe, J., Jain, H., Lamanna, F., Marskell, J. D., Moroz, H. E., & Palacios, R. J. Towards Social Protection 4.0: An Assessment of Thailand's Social Protection and Labor Market Systems. The World Bank. March 2022. Available at - *https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099355003222210182/p1720900ac89ac04a0af690df16549eb2e7.* Accessed on – January 2023.

80. Chantanusornsiri, W. Welfare card registration likely to reopen. Bangkok Post. March 2021. Available at - https://www.bangkokpost.com/business/2084187/welfare-card-registration-likely-to-reopen. Accessed on – January 2023.

81. Asian Development Bank. Thailand: COVID-19 Active Response and Expenditure Support Program: Completion Report. Asian Development Bank. January 2023. Available at - https://www.adb.org/projects/documents/tha-54177-001-pcr. Accessed on – February 2023.

82. Fronde, N. Opening day of 2022 welfare sees 1.86 million people register. *Thaiger*. September 2022. Available at - https://thethaiger.com/hot-news/economy/opening-day-of-2022-welfare-sees-1-86-million-people-register. Accessed on – February 2023.

83. Ddgarcia. Advancing Inclusive and Resilient Urban Development Targeted at the Urban Poor: Urban and Peri-Urban Agriculture for Strengthening Pro-Poor Resilience in Asian Cities: Investment Needs and Opportunities Consultant's Report. Asian Development Bank. November 2022. Available at - https://www.adb.org/projects/documents/reg-51325-001-tacr-9. Accessed on – January 2023.

84. Government of Nepal, National Tuberculosis Control Center. National Tuberculosis Program Nepal. Government of Nepal, Ministry of Health & Population Department of Health Services National Tuberculosis Control Center. March 2020. Available at - https://nepalntp.gov.np/wp-content/uploads/2020/04/NTP-Annual-Report-2075-76-2018-19.pdf. Accessed on – January 2023

The WHO End TB Strategy and the South-East Asia Regional Strategic Plan towards Ending TB (2021–2025) aim to mainstream the social protection measures as a key intervention to alleviate the sufferings of TB patients and their families. These measures support households affected by TB and provide relief from TB-related catastrophic costs.

This landscape analysis was undertaken to understand the TB-specific and TB-sensitive social protection measures currently ongoing in four Member States – Bangladesh, Indonesia, Nepal and Thailand. It assesses the benefits of these measures that TB patients and their families receive from the government and other stakeholders. The study finds that in addition to psychosocial support and involvement from the community, direct economic and financial cash transfers, rehabilitation as well as multisectoral collaboration, and accountability are crucial to adequately extend the benefits of social protections measures for TB patients. The provision of nutritional support and enhanced service delivery will facilitate the achievement of the End TB targets and also help in reducing poverty in tandem.

This report includes the salient observations of the survey, evaluates the impact of the measures, and makes recommendations.

World Health Organization
REGIONAL OFFICE FOR South-East Asia

9 789290 210795