SAARC Regional Strategy for Elimination of Tuberculosis 2018–2023
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**Guiding Principles**

- **Objective 1**: To diagnosed TB patients early. This includes universal drug-susceptibility testing, and systematic screening of contacts and high-risk groups.

- **Objective 2**: To provide optimal treatment for all people with TB including drug-resistant TB, and patient support.

- **Objective 3**: To enhance TB/HIV Collaborative activities and proper management of co-morbidities like DM.

- **Objective 4**: To provide Preventive treatment of persons at high risk.

- **Objective 5**: To intensified research and innovation related to TB.

- **Objective 6**: To reduce the human suffering and socioeconomic burden associated with TB.

- **Objective 7**: To strengthen the engagement of communities, civil society organizations, and public and private care providers.

- **Objective 8**: To enhance political commitment with adequate resources for TB care and prevention.

**Action Plan**

**References**
PREFACE

Tuberculosis (TB) is one of the major public health problems in the member states of South Asia Association for Regional Cooperation (SAARC). It includes Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Out of 30 high TB disease burden countries (HBC) in the world, three countries (Bangladesh, India and Pakistan) are in the SAARC region. There are estimated 10.4 million new cases of TB, and 6.6 million cases were notified in 2016. The SAARC region carries 36% of the global burden of TB.

SAARC Tuberculosis and HIV/AIDS Centre (STAC) had launched “SAARC Regional Strategy for Control/Elimination of Tuberculosis (2013-2017)” in the SAARC region which has been implemented in all the member states. With the implementation of the first regional strategy, the National TB Control Programmes of some of the member states have already set their target for elimination of TB from their respective countries for e.g. Bhutan 2020, India 2025 and Maldives 2020.

In line with the End TB Strategy, STAC has developed “SAARC Regional Strategy for Elimination of TB (2018-2023)” to decline the burden of TB while working towards elimination of TB in the SAARC region by 2027. The strategy will be implemented for the period of five years. The SAARC Regional Strategy is developed with the joint efforts and inputs of all the member states to address the challenges and issues in the region.

The SAARC TB elimination strategy is guided on the principles of strong coalition with civil organization and communities. It is based on equity, fairness and integrity, scientific evidence and respect for gender and human rights. High priority to research and innovation is given which will contribute in achieving the strategic goals. The commitment to high quality diagnostic will be done from SAARC Supra National Laboratory. The Centre will review this strategy time again to meet the national and the regional targets for elimination of tuberculosis from the SAARC member countries.

Dr. Rajendra Prasad Pant
Director
ACKNOWLEDGEMENT

We would like to acknowledge Dr. R.P. Bichha, Former Director (STAC) and Dr. A.P. Weerakoon, Former Epidemiologist (STAC) and Dr. R. Sultana, Research Officer (STAC) for their contribution in bringing out this document.

We also acknowledge Mr. K.B. Basnet and Mr. D. Subba, STAC Officials for their sincere and hard work in the preparation of this document.

June 2019
# Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>ACSM</td>
<td>Advocacy, Communication and Social Mobilization</td>
</tr>
<tr>
<td>AIDS</td>
<td>Acquired Immuno-deficiency Syndrome</td>
</tr>
<tr>
<td>ARI</td>
<td>Annual Risk of Infection</td>
</tr>
<tr>
<td>ART</td>
<td>Anti Retroviral Treatment</td>
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<tr>
<td>CDR</td>
<td>Case Detection Rate</td>
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<tr>
<td>CSR</td>
<td>Corporate Social Responsibility</td>
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<tr>
<td>DOT</td>
<td>Directly Observed Treatment</td>
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<tr>
<td>DRS</td>
<td>Drug Resistance Surveillance/Survey</td>
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<tr>
<td>GFATM</td>
<td>Global Fund The Global Fund to fight AIDS, Tuberculosis and Malaria</td>
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<tr>
<td>HBC</td>
<td>High-burden country</td>
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<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
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<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goal</td>
</tr>
<tr>
<td>MDR-TB</td>
<td>Multi-Drug-Resistant Tuberculosis</td>
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<tr>
<td>NGO</td>
<td>Nongovernmental Organization</td>
</tr>
<tr>
<td>NTP</td>
<td>National Tuberculosis Control Program</td>
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<tr>
<td>PLHA</td>
<td>People Living with HIV/AIDS</td>
</tr>
<tr>
<td>PPM</td>
<td>Public–Private Mix</td>
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<tr>
<td>QMS</td>
<td>Quality Management System</td>
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<tr>
<td>SAARC</td>
<td>South Asia Association for Regional Cooperation</td>
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<tr>
<td>SEAR</td>
<td>WHO South-East Asia Region</td>
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<tr>
<td>SRL</td>
<td>Supranational Reference Laboratory</td>
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<tr>
<td>STAC</td>
<td>SAARC Centre for TB and HIV/AIDS</td>
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<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>WHA</td>
<td>World Health Assembly</td>
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<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>XDR-TB</td>
<td>Extensively drug-resistant TB</td>
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</table>
SAARC Regional Strategy for Elimination of Tuberculosis

1. TUBERCULOSIS: A Global Scenario:

TB is the ninth leading cause of death worldwide and the leading cause from a single infectious agent, ranking above HIV/AIDS. In 2016, there were an estimated 1.3 million TB deaths among HIV negative people (down from 1.7 million in 2000) and an additional 374 000 deaths among HIV-positive people. An estimated 10.4 million people (90% adults; 65% male; 10% people living with HIV) fell ill with TB in 2016 (i.e. were incident cases). Most of the estimates number of incident cases in 2016 occurred in the WHO South-East Asia Region (45%). The top five countries, with 56% of estimated cases were (in descending order) India, Indonesia, China, Philippines and Pakistan.

Globally, the TB mortality rate is falling at about 3% per year. TB incidence is falling at about 2% per year; this needs to improve to 4–5% per year by 2020 to reach the first milestones of the End TB Strategy. Globally, the proportion of people who develop TB and die from the disease (the case fatality ratio, CFR) was 16% in 2016. This needs to fall to 10% by 2020 to reach the first milestones of the End TB Strategy.

Between 2000 and 2016, TB treatment averted an estimated 44 million deaths among HIV negative people. Among HIV-positive people, TB treatment supported by ART averted an additional 9 million deaths. Drug-resistant TB is a persistent threat, with 490 000 million cases of multidrug-resistant TB (MDR-TB) emerging in 2016 and an additional 110 000 cases that were susceptible to isoniazid but resistant to rifampicin (RR-TB), the most effective first-line anti-TB drug. The countries with the largest numbers of MDR/RR-TB cases (47% of the global total) were China, India and the Russia.

2. HIV/AIDS: A Global Scenario:

The world has embarked on a mission to end the AIDS pandemic. There is a global consensus that activities for HIV prevention and care services need to be accelerated to reach the targets of ending AIDS by 2030. Early enrollment in ART services contributes significantly to the ability for expanded ART access to make impact on averting AIDS related morbidity
and mortality and reducing HIV transmission. The political declaration on HIV and AIDS, the global community adopted new targets and made firm political commitments for 2020 and 2030. These targets aim to “fast track” the response, to accelerate scale up in the next five years.

In the year 2016, it is estimated that the number of people living with HIV globally was 36.7 million [30.8 million–42.9 million] there were 2.1 million (1.7 million–2.6 million) new HIV infections in 2016. In addition, there were 1.0 million [830 000 – 1.2 million] AIDS related deaths. SAARC Region has an estimated 2.28 million People Living with HIV and India alone bears an estimated 2.1 million of that number in year 2016. HIV epidemic in the SAARC Region is a collection of different epidemics in the Member States with their own characteristics and dynamics.

3. Tuberculosis in SAARC Region:

The estimated population of SAARC region in the year 2016 was 1.76 billion which is 24% of the global population. In 2016, there were 3.7 million estimated incidences of TB cases, which carried 36% of global burden of TB diseases. The estimated deaths due to TB in the region was 0.5 million, which is 31% of global deaths due to TB. India, Pakistan and Bangladesh out of eight Member States in the SAARC Region are high TB and MDR-TB burden countries among 30 high burden countries. India alone accounts for 31% of the world’s global TB deaths.

A total 2.6 million TB cases were notified in 2016 in the SAARC region. It shows that 77% treatment success rate among 2.4 million total new and relapse cases. A remarkable progress has been made for DOTS since its inception in 1993 in this SAARC Region. All Member States started DOTS strategy for TB control in 1997. Its coverage within the SAARC region has steadily increased since 2000. Population coverage in 1997 was 11%. Since then it has increased and reached 99% in 2006 and from 2007 it is 100%. The treatment success rate for new smear positive cases is 77% in the SAARC Region. Regarding the treatment success rate WHO target was achieved in 2005.

The SAARC region in 2016 had 1,06,918 total number of an estimated MDR/RR-TB cases among notified pulmonary TB cases. Laboratory confirmed cases in the same year were 43,243 MDR/RR-TB cases and 3003 XDR-TB cases. However, 37,322 MDR/RR-TB and 2576 XDR-TB patients started the treatment. In 2016, the region had 40255 TB patients with known HIV status.
and among them 39,506 (98%) were on Antiretroviral Therapy (ART). India accounts to 39,815 TB patients with known HIV status and among them 98% patients are on ART. However Afghanistan and Maldives have provided 100% ART to TB patients with known HIV status in this region. Around 29% Children (age<5) household contact of bacteriological-confirmed TB cases are on Isoniazid treatment in the SAARC

4. HIV/AIDS in SAARC Region:

HIV/AIDS continues to be a major public health problem in the SAARC Region. All eight Member States of the SAARC region are designated as low prevalence countries. On the basis of latest available information this region is home for an estimated number of 2.28 million HIV infected people and 0.07 million AIDS deaths in 2016. Three countries namely India, Nepal and Pakistan account for majority of the regional burden. The first HIV infected persons were diagnosed in 1986 in India and Pakistan. By 1993, all SAARC Member States had reported the existence of HIV infection in their countries.

The overall adult HIV prevalence in SAARC region remains below 1%. However, there are important variations existing between countries. Of the estimated number of 2.28 million PLHIV in SAARC region, 2.1 million are living in India. Progressing towards 90-90-90 targets in the SAARC Region, there are 49% of people living with HIV knew their status and from them 53% of people who knew their status are on ART. 80% of people on ART achieved viral suppression in the year 2016. Country wise estimated size of populations in key populations for HIV has shown that India accounted for highest in size of populations among sex worker (SW), and people who inject drugs and prisoners. However, Pakistan accounted for highest in size of populations among men who have sex with men (MSM) and transgender.

Elimination of mother to child transmission of HIV in the SAARC Region, there are 37,500 pregnant women needing ARV for PMTCT. About one million people are receiving ART in year 2016 and 80,200 deaths were averted due to ART in 2015. Nepal has covered 64% of ART which is the highest among the SAARC member states.

5. TB & HIV/AIDS Co-infection in SAARC Region:

In 2016, the region has 40255 TB Patients with known HIV status, among them 39506 (98%) were on antiretroviral therapy. India accounts 39815 TB patients
with known HIV status, 98% patients were on ART, however, Afghanistan and Maldives had provided 100% ART to TB patients with known HIV status in the region. In the SAARC region, 29% Children (age <5) house hold contacts of bacteriologically-confirmed TB cases on isoniazid treatment.

HIV epidemic in SAARC region is also a collection of diverse epidemics in countries, provinces and districts. HIV/AIDS continues to be a major public health problem in the SAARC region. All eight member states of the SAARC region are designated as low prevalence countries. In 2016, this region is the home for an estimated number of 2.28 million HIV infected people and 0.07 million AIDS deaths. There are estimated 0.1 million new HIV infected in 2016 (all ages) and 0.07 million AIDS related deaths in this region. Three countries namely India, Nepal and Pakistan account for majority of the regional burden. The first HIV infected persons were diagnosed in 1986 in India and Pakistan. By 1993, all SAARC Member States had reported the existence of HIV infection in their countries.

6. Progress of TB Control in SAARC Region:

Reduction in TB incidence, prevalence and deaths is an important goal to the National TB Control Programmes of the SAARC Member States. Increasing of case detection rate is also an important for national programmes, because large numbers of cases are missing or being treating in private sectors.

During the implementation of first SAARC Regional Strategy for Control/Elimination of TB (2013–2017), the progress of National TB Control Programmes of the member states are desirable. The national programmes of Bhutan, India and Maldives have already fixed their national targets to eliminate TB from the country by 2023, 2020 and 2025 respectively and remaining member states also way to eliminate before the global target.
### Table 1: Key Indicators of TB Prevention and Control in SAARC Member Countries, 2016

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Afghanistan</th>
<th>Bangladesh</th>
<th>Bhutan</th>
<th>India</th>
<th>Maldives</th>
<th>Nepal</th>
<th>Pakistan</th>
<th>Sri Lanka</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population (’000)</td>
<td>35000</td>
<td>163000</td>
<td>802</td>
<td>1324000</td>
<td>379</td>
<td>29000</td>
<td>193000</td>
<td>21000</td>
</tr>
<tr>
<td>Deaths (ex HIV)</td>
<td>11000</td>
<td>66000</td>
<td>160</td>
<td>423000</td>
<td>17</td>
<td>6500</td>
<td>44000</td>
<td>1200</td>
</tr>
<tr>
<td>Mortality Rate per 100,000</td>
<td>33</td>
<td>40</td>
<td>20</td>
<td>32</td>
<td>3.9</td>
<td>22</td>
<td>23</td>
<td>6</td>
</tr>
<tr>
<td>Incidence (Cases)</td>
<td>65000</td>
<td>360000</td>
<td>1400</td>
<td>2790000</td>
<td>210</td>
<td>45000</td>
<td>518000</td>
<td>13000</td>
</tr>
<tr>
<td>Incidence Rate</td>
<td>189</td>
<td>221</td>
<td>178</td>
<td>211</td>
<td>49</td>
<td>154</td>
<td>268</td>
<td>65</td>
</tr>
<tr>
<td>Notified New and Relapse Cases</td>
<td>43046</td>
<td>223921</td>
<td>1145</td>
<td>1936158</td>
<td>169</td>
<td>32056</td>
<td>366061</td>
<td>8886</td>
</tr>
<tr>
<td>Smear +ve among new pulmonary cases (%)</td>
<td>41954</td>
<td>222248</td>
<td>1139</td>
<td>1763876</td>
<td>169</td>
<td>31371</td>
<td>356390</td>
<td>8664</td>
</tr>
<tr>
<td>Treatment success rate</td>
<td>88</td>
<td>93</td>
<td>92</td>
<td>72</td>
<td>83</td>
<td>92</td>
<td>93</td>
<td>85</td>
</tr>
<tr>
<td>Estimated cases of MDR TB</td>
<td>1600</td>
<td>5300</td>
<td>70</td>
<td>84000</td>
<td>1</td>
<td>900</td>
<td>15000</td>
<td>47</td>
</tr>
<tr>
<td>Total Confirmed cases of MDR TB</td>
<td>1472</td>
<td>969</td>
<td>55</td>
<td>37258</td>
<td>1</td>
<td>430</td>
<td>3331</td>
<td>23</td>
</tr>
<tr>
<td>% of Notified Tested for MDR-TB</td>
<td>4.1</td>
<td>1.6</td>
<td>11</td>
<td>2.8</td>
<td>1.7</td>
<td>2.5</td>
<td>4.2</td>
<td>0.54</td>
</tr>
</tbody>
</table>

Source: SAARC Epidemiological Response on Tuberculosis 2017
Table 2: Estimates of TB disease incidence, prevalence and mortality in the SAARC Region, 2016

<table>
<thead>
<tr>
<th>Country</th>
<th>Population ('000)</th>
<th>Estimated Incidence</th>
<th>Estimated Incidence</th>
<th>Death Rate per 100000 pop. All forms of TB</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All types (Number)</td>
<td>Rate per 100000 pop.</td>
<td>New Sputum Smear +ve (Number)</td>
</tr>
<tr>
<td>Afghanistan</td>
<td>35000</td>
<td>65000</td>
<td>189</td>
<td>41954</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>163000</td>
<td>360000</td>
<td>221</td>
<td>222248</td>
</tr>
<tr>
<td>Bhutan</td>
<td>802</td>
<td>1400</td>
<td>178</td>
<td>1139</td>
</tr>
<tr>
<td>India</td>
<td>1324000</td>
<td>2790000</td>
<td>211</td>
<td>1763876</td>
</tr>
<tr>
<td>Maldives</td>
<td>379</td>
<td>210</td>
<td>49</td>
<td>169</td>
</tr>
<tr>
<td>Nepal</td>
<td>29000</td>
<td>45000</td>
<td>154</td>
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<tr>
<td>Pakistan</td>
<td>193000</td>
<td>518000</td>
<td>268</td>
<td>356390</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>21000</td>
<td>13000</td>
<td>65</td>
<td>8664</td>
</tr>
<tr>
<td>Total</td>
<td>1766181</td>
<td>3793000</td>
<td>215</td>
<td>2425811</td>
</tr>
</tbody>
</table>

Source: SAARC Epidemiological Response on Tuberculosis 2017
END TB Strategy at a Glance

VISION:

A world free of TB
Zero deaths, disease and suffering due to TB

GOAL:

End the Global TB Epidemic

MILESTONES FOR 2025:

- 75% reduction in TB deaths (compared with 2015)
- 50% reduction in TB incidence rate (less than 55 TB cases per 100,000 population)
- No affected families facing catastrophic costs due to TB

TARGETS FOR 2035:

- 95% reduction in TB deaths (compared with 2015)
- 90% reduction in TB incidence rate (less than 10 TB cases per 100,000 population)
- No affected families facing catastrophic costs due to TB

PRINCIPLES:

- Government stewardship and accountability, with monitoring and evaluation
- Strong coalition with civil society organizations and communities
- Protection and promotion of human rights, ethics and equity
- Adaptation of the strategy and targets at country level, with global collaboration
AFGHANISTAN

Vision:
A TB-free country, with elimination of the disease as a public health problem by 2030 (revised).

Goal:
To reduce TB mortality by 5% at the end of 2017 compared to 2012

Objectives:

• To increase the case notification of all TB cases at least 2% by year one & at least 5% per year form year 2–5 of the strategic plan and to at least maintain treatment success rate 90% by 2017
• To detect and treat at least 50% of estimated MDR-TB cases by 2017

Key Strategies:

• Enhancing political commitment and DOTS expansion
• Strengthen human resource development
• Strengthening surveillance, monitoring & evaluation
• Drug supply management system
• Strengthening laboratory network
• Address TB/HIV, MDR-TB, child TB and the needs of poor and vulnerable population (IDPs, prisoner, refugee...etc)
• Engage all care providers
• Empower people with TB and communities through partnership
• Enable and promote research
BANGLADESH

National Tuberculosis Program (NTP) aims to strengthen the effort of TB Control through effective partnership, mobilizing resources and ensuring quality diagnostic treatment services under Stop TB Strategy strives to make services equally available to all people in Bangladesh irrespective of age, sex, religion, ethnicity, social status and race.

Vision:
Elimination of Tuberculosis as a public problem from Bangladesh by 2030 (revised).

Goal:
To achieve the vision, the programme has adopted the “Universal Access” for quality diagnosis and treatment for all TB patients in the community thus,

- Reaching the target of halving TB death and prevalence and thereby achieving the Millennium Development Goals set by 2015 and sustain beyond
- Eliminate TB as a public health problem by 2030

Key Strategies:
- Pursue quality DOTS expansion and enhancement
- Establishing interventions to Address HIV-Associate TB (TB/HIV) and Drug-Resistant TB
- Contributing to health system strengthening
- Forging partnership to ensure equitable access to an international standard of care to all TB patient
- Engage people with TB, and affected communities
- Promote operational research
BHUTAN

Vision:
Zero deaths, diseases and suffering due to tuberculosis

Goal:
To reduce TB and DR-TB burden until it no longer poses a public health problem in Bhutan by 2020

Objectives:
• To increase case notification rate of at least 90% among estimated TB and MDR-TB cases
• To maintain treatment success rate of at least 90% among drug-susceptible TB and at least 75% among drug-resistant TB cases
• To improve TB/HIV co-infection case detection and register at least 100% of estimated co-infected individuals from 2020 onwards
• To strengthen programmatic management of Tuberculosis at all levels

Strategies and Intervention:
• To detect at least 90% of all forms of TB including childhood TB from 2020 onwards
• To ensure universal access to rapid diagnostics for all TB cases and DST for all bacteriology confirmed cases by 2020
• To maintain treatment success rate of at least 90% among drug-susceptible TB and at least 75% among drug-resistant TB cases
• To cut chain of TB transmission through adequate infection control in all treating facilities by 2020 and treat LTBI
• Strengthen collaboration between TB and HIV programme management
Vision:
TB-Free India with zero deaths, disease and poverty due to tuberculosis

Goal:
To achieve a rapid decline in burden of TB, morbidity and mortality while working towards elimination of TB in India by 2025.

Strategic pillars: “Detect – Treat- Prevent- Build” (DTPB)

Detect: Find all DS-TB and DR-TB cases with an emphasis on reaching TB patients seeking care from private providers and undiagnosed TB in high-risk populations.

Treat: Initiate and sustain all patients on appropriate anti-TB treatment wherever they seek care, with patient friendly systems and social support.

Prevent: Prevent the emergence of TB in susceptible populations

Build: Build and strengthen enabling policies, empowered institutions and human resources with enhanced capacities.
MALDIVES

Vision:
Zero deaths, diseases and suffering due to tuberculosis

Goal:
• Eliminate TB as a public health problem by 2020
• Decrease the prevalence of TB by 25% by 2019, based on a re-calculation of existing prevalence to be conducted in 2014
• Indicator: Due to uncertainties around current estimates of prevalence described above, the NSP proposes to conduct a recalculation of TB burden figures for the Maldives through an expert assessment. Since the conduct of prevalence survey does not appear feasible, the use of an indirect method, such as that described in WHO’s global TB report 2013, is anticipated. The assessment was initially conducted in 2014, and repeated in 2019 to determine impact.

Objectives:
• Ensure availability of quality-assured TB services, in line with current international standards and provided by qualified personnel, at 100% of all MOH facilities by 2016
• Detect 80% of incident cases (based on a recalculation of incident cases to be performed in 2014) by 2016, and 90% by 2018; successfully treat 85% of detected cases by 2016 and 90% by 2018
• Provide diagnostic services for MDR-TB for 50% of MDR-TB-suspects by 2016, and 100% of suspects by 2018; successfully treat 70% of detected MDR-TB cases by 2018
• Provide effective ACSM activities to ensure that 50% of the population has adequate knowledge about TB and a positive attitude towards NTP services by 2016, and 100% of the population by 2018

Strategies and Intervention
• Ensure availability of quality-assured TB services, in line with current international standards and provided by qualified personnel, at 100% of all MOH facilities by 2016
• Detect 80% of incident cases (based on a recalculation of incident cases to be performed in 2014) by 2016, and 90% by 2018; successfully treat 85% of detected cases by 2016 and 90% by 2018

• Provide diagnostic services for MDR-TB for 50% of MDR-TB-suspects by 2016, and 100% of suspects by 2018; successfully treat 70% of detected MDR-TB cases by 2018

• Provide effective ACSM activities to ensure that 50% of the population has adequate knowledge about TB and a positive attitude towards NTP services by 2016, and 100% of the population by 2018
NEPAL

Vision:
Nepal has set an ambitious vision of ending TB in Nepal by 2030 (revised) in accordance with the National Health Policy 2014 and under the strategic direction of the worldwide initiative to end TB – the End TB Strategy.

Goal:
To decrease the TB Incidence Rate by 20%, from 2015 to 2021 i.e. to identify additional 20,000 new TB cases by next 5 years.

Objectives:

Objective 1: To increase case notification through improved health facility-based diagnosis; increase diagnosis among children (from 6% at baseline, to 10% of total cases by 2021); examination of household contacts and expanded diagnosis among vulnerable groups within the health service, such as PLHIV (from 179 cases at baseline to over 1,100 cases in 2020/21), and those with diabetes mellitus (DM).

Objective 2: To maintain the treatment success rate of 90% for all forms of TB (except drug resistant TB) by 2021

Objective 3: To provide DR TB diagnose services to 50% of the presumptive MDR TB patients by 2018 and 100% by 2021 and to successfully treat at least 75% of those diagnosed.

Objective 4: To expand case finding by engaging providers for TB care from the public sector (beyond MoH), medical colleges, NGO sector, and private sector through results based financing (PPM) schemes, with formal engagements (signed MoUs) to notify TB cases

Objective 5: To gradually scale up Community System Strengthening Program (CSS) at 60% of the local administrative units by 2018 and to 100% of the administrative units by 2021. It will help in creating a patient friendly ambience in the health facilities, advocacy for TB patients regarding their rights which will, in turn, contribute to the diagnosis and management of TB cases.

Objective 6: To contribute to health system strengthening through HR
management and capacity development, financial management, infrastructure, procurement and supply management in TB

**Objective 7:** To develop comprehensive Monitoring and Evaluation system

**Objective 8:** To develop plans so that NTP can function even at times of crises like natural disasters or public health emergencies
PAKISTAN

Vision:
TB Free Pakistan
To ensure universal access to quality diagnosis and treatment for people with TB.

Goal:
To reduce 50%, the prevalence of TB by 2025 in comparison to 2012.

Objectives:

i) To increase the number of notified TB cases from 298,981 in 2013 to at least 420,000 by 2020 while maintaining the treatment success rate above 90%;

ii) To reduce, by at least 5% per year by 2020, the prevalence of MDR-TB among TB patients who have never received any TB treatment.

iii) Strengthen programmatic and operational management capacity of the TB Control Program while enhancing public sector support for TB control by 2020;

Strategies and Intervention

• To reduce, by at least 5% per year from 2018 onwards, the prevalence of MDR-TB among new pulmonary TB patients (who have never received any TB treatment);

• To optimize and sustain the programmatic deliverables (technical and managerial) at operational level by 2018.
SRI LANKA

Vision:
Zero deaths, diseases and suffering due to tuberculosis

Goal:
Decrease the prevalence of TB by 10% by 2020 based on WHO estimated of TB for 2014

Objectives:
Pillar 1: Integrated, patient-centered care and prevention

- To improve the TB control by detecting at least 80% of incident TB cases (all forms) by 2017 and 90% of incident cases by 2020
- To improve the outcome of enrolled TB patients by achieving 90% treatment success rate of all forms of MDR-TB patients and to maintain at least 75% of treatment success rate among MDR-TB cases by 2017

Pillar 2: Bold policies and supportive systems

- To integrate TB control activities into the general healthcare system by establishing TB diagnostic and treatment services in 40% of all hospitals up to the level of Divisional Hospitals Type B or above by 2017 and in 80% by 2020
- To improve the accessibility to TB treatment and care by engaging 30% of all private health care providers (hospitals and General Practitioners) in TB control by 2017 and 50% by 2020
- Ensure that quality TB services in line with current international standards are provided by qualified and regularly supervised personnel at 100% of all implementation sites by 2017

Pillar 3: Intensified research and innovation

- Implementation of Xpert MTB/RIF as an innovative method for the diagnosis of smear-negative cases
- Implementation of Xpert MTB/RIF as an innovative method for the diagnosis of drug resistance cases
- Establishment of an operational research committee and implementation of an annual grant program
NEW CHALLENGES AND ISSUES IN TB CONTROL IN SAARC REGION

A significant progress has been made towards achieving the goals of SAARC Regional Strategy for Control/Elimination of TB (2013-2017) and still the TB control programs in SAARC member countries are faced with several challenges and issues, summarized below:

Sub-optimal performance of TB Control Program

Despite the fact that the incidence of TB has shown declining trends, yet it is the cause of high disease burden and mortality. While the coverage with DOTS was 100 percent in the region, the case detection rates varied and treatment success rates varies in some district/provinces in SAARC Member States.

Poor access and inequities

There were wide social disparities among poor and disadvantaged section of the society. There were wide inequities in case detection, coverage with DOTS and continuation of treatment among disadvantaged and marginalized population in rural and tribal areas. These inequities exist in vulnerable population of women and children, especially those poor. Expansion to the more inaccessible areas poses a challenge. Ensuring quality DOTS services to marginalized groups such as migrant and tribal populations remains challenging.

Co-Infection with HIV

Co-Infection of TB with HIV has emerged as an important issue, although the prevalence of HIV less than 1% in the member states in the region. Less than 50% TB patients were tested for HIV. There was increasing number of TB patients that acquired HIV infection that would affect adversely the treatment outcomes of DOTS.

Drug Resistance

Drug resistance to TB has emerged regionally and poses a serious threat to achievement of national and regional targets. The MDR TB surveillance is grossly inadequate in the member countries. The major constraint in diagnosis and treatment of MDR TB is the lack of laboratory facilities for diagnosis and treatment.
**Latent TB**

Latent tuberculosis infection (LTBI), defined as a state of persistent immune response to prior-acquired Mycobacterium tuberculosis antigens without evidence of clinically manifested active TB, affects about one-third of the world’s population. Addressing the Latent TB under the national programme is also important issue to really eradicate TB.

**Pediatric TB**

There is a challenging outbreak of screening childhood TB specially below 6 years of age due to sputum negative cases, minimal records of child diagnosed through private sector, no contact screening methods for index case, less clinical signs and symptoms makes the clinical diagnosis difficult, prophylactic treatment of childhood tuberculosis, multidrug resistance TB cases etc.

**TB Co-Morbidity**

The TB Diabetes is also the challenges of the National TB control Programms specially in urban areas of the Member states to response to TB Diabetes Co morbidity.

**Migration**

Domestic and International frequent travel of people by different causes like travel, business, labour are also major problem in urban and slums.

**Resources**

Financial and human resource are still constraints of lack of HRD planning, lack of adequate budget and numbers of staff at state level, rapid turnover of staff at all levels, untrained staff, staff not being posted at the required stations, and a lack of complete information on availability and training status of staff. In some of member states external funding are major and involvement of private sectors in TB control Programmes.

**Monitoring and Evaluation**

Lack of insufficient M & E activities in some of the member states the regular monitoring and evaluation is very important for regular feedbacks of gapes and lapse and timely address in routine manner.
Logistics and drug supply

Timely procurement, distribution and supply of drugs, equipment and other supply is one of the major constraints. These relate to an unpredictable lead time for procurement, slow decentralization of distribution systems, and inability to maintain adequate buffer stocks. Ensuring secure anti-tubercular drugs requires streamlining of procurement procedures. Internal and external quality assurance of drugs needs to be strengthened, while simultaneously strengthening logistics to ensure uninterrupted supplies of drugs and equipment to all treatment centers.

Operational Research

There is a paucity of operational research in the region to identify local problems and solutions in order to improve access and availability of the diagnostic and treatment services, test alternate interventions and socio-cultural behavior in TB control programs.
SAARC REGIONAL STRATEGY FOR ELIMINATION OF TB IN THE SAARC MEMBER STATES

Vision:
TB Free SAARC Region with zero deaths, disease, and suffering due to TB

Goal:
To achieve the decline in burden of TB, morbidity and mortality while working towards Elimination of TB in the SAARC Region by 2027.

Objectives:
Objectives of the SAARC Regional Strategy (2018-2023) are as under;

1. To diagnosed TB patients early. This include universal drug-susceptibility testing, and systematic screening of contacts and high-risk groups
2. To provide optimal treatment for all people with TB including drug-resistant TB, and patient support
3. To enhance TB/HIV Collaborative activities and proper management of co-morbidities like DM.
4. To provide preventive treatment of persons at high risk (e.g. Children and HIV positive people living with TB patients)
5. To intensified research and innovation related to TB
6. To reduce the human suffering and socioeconomic burden associated with TB. This includes Social protection, poverty alleviation and actions on other determinants of TB like malnutrition, indoor air pollution etc
7. To strengthen the engagement of communities, civil society organizations, and public and private care providers.
8. To enhance political commitment with adequate resources for TB care and prevention
GUARDING PRINCIPLES & SAARC TB ELIMINATION STRATEGY

• Government stewardship and accountability, with monitoring and evaluation

• Strong coalition with civil society organizations and communities

Working in partnership with all stakeholders will be at the core of the TB Control Strategies in the SAARC Region. The stakeholders would include governments, private sector, non-governmental organization and civil society, researchers, academia, policy-makers, professional bodies, national and international development agencies.

• Protection and Promotion of Human Rights, Ethics and Equity

Strategy would be based on the core values of equity, fairness and integrity, and promoting the utilization of scientific evidence and respect for gender and human rights. The TB elimination strategy would endeavor to ensure equity in access, availability and utilization of the quality TB Control services for all sections of the populations including poor and marginalized, special populations such tribal, people living in slums, and distant and inaccessible rural areas and terrains.

• High Impact Interventions

High priority to research and innovation that have the greatest potential to improve and enhance performance and impact in reducing inequities, high cure rates, and contribute to achieving the End TB targets in the Region.

• Commitment to High Quality Diagnostic

Commitment to high quality diagnostic will be done through SAARC Supra National Regional Laboratory and National TB reference laboratory and treatment services will be an integral part of the strategy.

TARGETS FOR SAARC REGION

SAARC Region Targets for the scale-up of interventions for TB care and control set in line with the Global Plan to End TB
• By 2025: Reduction in number of deaths to 75%, compared with their levels in 2015

• By 2025: Reduction in TB incidence rate to 50%, compared with their level in 2015

• By 2025: Reduction of catastrophic cost due to TB to the TB-affected families to 0%

• By 2027: Elimination of TB epidemic from the SAARC Region

**STRATEGIC INTERVENTIONS/GUIDING PRINCIPLES**

**Objective 1: To diagnosed TB patients early. This includes universal drug-susceptibility testing, and systematic screening of contacts and high-risk groups.**

Every effort should be given to find all Drug Sensitive TB and Drug Resistant TB cases with an emphasis on reaching TB patients seeking care from private providers and undiagnosed TB cases in high-risk populations. Under diagnosis and many missing cases are the major problems facing in all member states in SAARC region in controlling TB. All member states should scale up free, high sensitivity diagnostic tests and algorithms, effective and innovative approaches for private provider engagement, universal testing for drug-resistant TB and systematic screening of high risk populations like children and People living with HIV/AIDS etc. SAARC regional Supra national Laboratory will be utilized for capacity development of laboratory personals, quality assurance and conduct regionally relevant researches/surveys like multi-country drug resistance surveys etc.

**Enhance Case Detection**

The program will focus on increasing case detection through improved quality of microscopy. Early case detection, active identification and tracking of suspected cases seeking treatment at the health facilities through the health care providers and technicians and regular follow up with the defaulters. Several Member States have adopted mobile camps approach in delivery of health care to inaccessible, difficult and distant areas in their respective countries. Diagnosis and treatment of TB may be included in the package of services and the mobile vans are equipped with facilities for sputum microscopy to expand the reach of DOTS and enhance case detection and treatment activities.
In addition, following activities will be suggested to enhance case detection of local communities and community based organization will be involved in creating awareness and mobilizing local population to come to the mobile camps. Training of health and paramedical workers in primary and secondary level health care in identification, diagnosis, treatment and follow up will be emphasized for improving performance and effectiveness of DOTS.

- To use high efficiency diagnostic tools for early and accurate diagnosis of TB and MDR-TB
- Ensuring notification through laboratories from the private sector and link to laboratory surveillance
- Provision of Digital X-Ray preferably enabled with Computer Aided Diagnosis (CAD) and tele-radiology services across the health sector
- Universal DST to at least Rifampicin for all diagnosed TB patients
- Large scale IEC through print and electronic mass media and local channels about the campaign
- Identify and mapping high risk / vulnerable population
- Increase Private Health Provider Engagement
- Conduct orientation of private practitioners in TB control and their role
- All key providers including private doctors, chemists and laboratories will be mapped.
- Sensitization and motivation of private providers
- In association with recognized institutes like medical faculties will develop various training courses for self-learning or certification of providers as a part of capacity building and recognition of private providers.
- Considering the large number of non allopathic health care providers, efficient symptom identification and referral system will be established to enable early diagnosis. Existing referral linkages will be strengthened and some new linkages will be established based on provider mapping.
- Private Providers will be provided incentives to promote TB case notification, ensure treatment adherence and treatment completion.
- Provide Free drugs and diagnostic tests to TB patients in private sector
• Patients support services i.e. adherence support, drug susceptibility testing, co-morbidity detection, ensure treatment outcomes, infection prevention measures would be extended to patients in private sector.

• TB notification regulation will be strengthened with sufficient legal backing on violation of not notifying a TB patient.

• Decentralized drug resistant TB services

• Strengthening of Health care providers within public sectors (Outside Ministry of Health for TB case notification

• Capacity development of health care providers in the health systems in diagnosis and treatment of TB.

• Organize programs for creating awareness among people about signs and symptoms of TB and availability services

• Active screening of TB Suspects especially in vulnerable groups

**Objective 2: To provide optimal treatment for all people with TB including drug-resistant TB, and patient support**

Initiate and sustain all patients on appropriate anti-TB treatment wherever they seek care, with patient friendly systems and social support.

**Activities**

• Ensure daily regimen for DS-TB cases and rapid scale-up of short-course regimens for drug-resistant TB and DST guided treatment approaches in all SAARC Member states

• TB causes catastrophic economic effects on both the individual suffering the disease and their households. Majority of people in SAARC member states are under the poverty line. The urban poor are increasing day by day. Most of the TB patients come from the poor society. People cannot afford the travel cost and other expenses from their earnings. Hence, elimination of catastrophic costs by linkages of eligible TB patients with social welfare schemes including nutritional support is paramount important. It is necessary to provide free TB drugs for all TB cases in all SAARC Member states. In addition, to sustain TB treatment for longer period, patient-friendly adherence monitoring and social support should be provided to all eligible patients.
• Ensure effective drug supply and management:

• Ensure stocks of anti-tuberculosis drugs including second line drugs by individual patient for at least three months in all Member States.

• Training of health staff in need estimation and requisition for drugs.

• Establishment of quality assurance system for anti-tubercular drugs at all levels.

**Objective 3: To enhance TB/HIV Collaborative activities and proper management of co-morbidities like DM.**

The emergence of HIV epidemic globally and in the South East Asia Region has caused major challenges to TB Control program. The annual risk of developing TB in HIV positive people ranges from 5–15%. HIV increases the rate of recurrent Tuberculosis. Increasing TB cases in HIV cases caused an increased risk to TB transmission to the general community. STAC has developed a separate strategy for TB and HIV collaborative interventions. The core strategy for collaborative TB and HIV activities would promote and establish effective mechanism between the TB control program and HIV control program in the SAARC countries for effective coordination and synergistic actions. The main objective of collaborative activities is to decrease the burden of HIV in TB patients and TB in PLHA (including four “I”s). The main strategies of the collaborative activities in SAARC TB/HIV Co-infection strategy will include:

• Promotion of political and administrative commitment to TB and HIV collaborative action at the national and sub-national levels, mainly through advocacy.

• Support and strengthening HIV surveillance among TB patients, and TB surveillance among PLHA at National/Sub-National level.

• Support Regional and National capacity building including training and research.

• Strengthening monitoring and evaluation of collaborative TB and HIV control activities
Strategic Interventions

1. Strategies for reducing the burden of TB among People living with HIV/AIDS
   a. Intensified case finding activities in HIV care settings
   b. TB prevention among PLHIV: Isoniazid Preventive Therapy (IPT) Strategy for prevention of TB among PLHIV, to be implemented
   c. Early initiation of ART

2. Strategies for reducing the impact of HIV among TB patients
   a. Scale up Provider Initiated HIV testing and Counseling (PITC) among presumptive TB cases
   b. Early initiation of ART among HIV infected TB patients
   c. Nutritional support for TB and HIV patients:
   d. Strengthening social support and institutional support for co-infected patients
   e. Private sector engagement in TB HIV Collaborative activities

3. Co-morbidities associated with TB
   a. Development and Implementation of SAARC regional collaborative framework for TB associated with Diabetes, Tobacco use and Alcohol consumption
   b. This framework should identify the co-morbidities among TB patients and implement necessary interventions to control the burden of TB associated with other co-morbidities
   c. Strengthening of screening of TB among DM patients and vice versa in all SAARC member states.
   d. To conduct SAARC regional expert group meeting on tobacco control.

Objective 4: To provide Preventive treatment of persons at high risk (e.g. Children and HIV positive people living with TB patients)

Scale up air-borne infection (AIC) control measures at health care facilities
i. Developing time bound action plan to implement AIC measures at all Centres and updating Infection control Guideline produced by STAC
ii. Capacity building of health care workers in SAARC region on AIC guidelines

iii. Health care workers surveillance for TB and appropriate airborne infection control measures at all centers.

iv. Treatment for latent TB infection in contacts of bacteriologically-confirmed cases

TB infection is the source for developing TB disease and continued transmission. The lifetime risk of reactivation of LTBI in healthy HIV-uninfected individuals is 10%, with 5% developing TB disease during the first 2 to 5 years after infection. The risk of reactivation is greatly increased in the context of immunosuppression, primarily due to HIV infection. ART reduces the risk of TB by approximately two thirds. Child contacts (immune system is not develop properly) living in TB-affected households are particularly vulnerable populations for progression to TB and severe disease forms such as milliary and meningeal TB

The selection of the risk group that will be prioritized for screening, investigation to rule out TB and treatment is as follows:

a. People living with HIV

b. Child PTB contacts

c. Patients with silicosis

d. All patients where clinically indicated (high risk) for e.g. pts in immunosuppressant’s

e. High risk adult contacts

f. Address social determinants of TB through intersectoral approach

**Objective 5: To intensified research and innovation related to TB**

Discovery, development and rapid uptake of new tools and research to optimize implementation and impact and promote innovation

a. Allocate sufficient funds for operations research

b. Conduct program-based operational research

c. Develop agenda for operational research in TB Control in the SAARC Region

d. Organize training program in planning, designing, implementation, monitoring and evaluation of operational research
e. Invite proposals from the Member States and Institutions for Multi-country
Operational Research

The main aim of elimination of TB strategy is to intensified research and
innovation. The 2027 is the target of SAARC regional strategy for elimination of
TB in SAARC member states. Such reductions can only be achieved if there is a
major technological breakthrough. A substantial increase in investment in TB
research and development will be needed to achieve such a breakthrough. For
this, the development of new TB diagnostics, drugs and vaccines is necessary.
Multispectral and multidisciplinary research in optimizing the implementation
and impact of available tools and approaches also plays an important role
to address the local barriers; and catalyzing research through advocacy,
knowledge sharing, research prioritization, and support to member states
networks for research and capacity building.

Capacity building for tuberculosis control can be done through operational
research training. This can be done on the basis of standardized modules which
include the technical and management components of the program. Special
areas like pediatric TB, Drug resistant TB and TB with co-morbidities, extra-
pulmonary and other serious forms of TB are covered in the modules. The main
aim of the operational research is to improve the quality, effectiveness, efficiency
and accessibility of the control efforts. It is usually concerned with the day- today
operation of programs and intends to provide managers, administrators, and
policy makers with the information that they need to improve service delivery
activities and plan future ones. It helps to seek practical solutions and suitable
alternatives to unsatisfactory operating methods.

Objective 6: To reduce the human suffering and socioeconomic burden
associated with TB

This includes Social protection, poverty alleviation and actions on other
determinants of TB like malnutrition, indoor air pollution etc

TB causes catastrophic economic effects on both the individual suffering the
disease and their households. All SAARC Member states provides free diagnosis
and treatment to patients but many patients experience associated health care
costs, including payment for supplementary drugs and extra diagnostic tests,
as well as considerable non-medical costs, including expenditures for transport
and accommodation. A good patient support plan is imperative for treatment
success and will be developed at the time of initiation of treatment. All SAARC
Member states must prepare country specific plan for good patient support. The
primary objectives of the support systems are to increase treatment adherence and to eliminate catastrophic expenditure by TB patients.

**Addressing social determinants of TB**

This includes nutritional support to TB patients and families, financial incentives to patients and providers, health system strengthening, and linking patients with existing social and financial support systems of the government. Addressing poverty, malnutrition, urbanization, indoor air pollution, etc. Health department alone cannot provide these facilities. It require inter departmental/ ministerial coordinated activities and the all national TB programmers in SAARC region will proactively facilitate this coordination.

**Objective 7: To strengthen the engagement of communities, civil society organizations, and public and private care providers**

**Activities**

- Implement framework and guidelines for public-private mix which was developed by STAC
- Develop guidelines and training programs for NGO and Civil Society
- Develop guidelines and programs for industrial interface under Corporate Social Responsibility (CSR)
- Develop Guidelines and training module of practitioners of indigenous systems of medicine in IEC, support case detection and referral, and act as DOTS provider
- Engage professional bodies and associations for commitment to TB Control activities
- Engage medical colleges, nursing and paramedical schools and colleges, rehabilitation centers etc in TB Control activities
- Engage health care providers within public sectors (Outside Ministry of Health e.g. ministries like defense, railways, home ministry etc. have their own medical services set up)

The importance of community engagement in contributing to TB prevention, diagnosis and treatment, especially where people with TB have poor access to formal health services is well recognized. Awareness and community empowerment for TB covers a wide range of activities that contribute to the
detection, referral and treatment of people with drug-susceptible, drug-resistant and HIV-associated TB. Despite the best efforts of health systems, about one third of people who develop TB globally are still either not diagnosed, or their cases are not reported. World Health Organization in 2012 launched an innovative approach called ENGAGE-TB to better identify and treat people with TB, by involving non-governmental organizations (NGOs) and other civil society organizations (CSOs). These communities included different community-based organizations who were working in primary health care, HIV, maternal and child health, education, agriculture and livelihood initiatives. The difficulty in accessing health facilities is one of the reasons why people with TB may not be diagnosed, and can also have a negative impact on treatment adherence. The access to health care can be affected by social and political factors such as stigma and discrimination, and the availability of cross-border services for migrants, and economic barriers such as the cost of transport.

**Objective 8: To enhance political commitment with adequate resources for TB care and prevention**

Ensuring political commitment for TB control will be an important strategic direction. Political commitment and administrative support have played a crucial role in the success of the TB control programs in the SAARC Member States. The financial requirements have been increasing to effectively operate the TB control programs and expand DOTS to the unreached, special populations such as women and pediatric age group, geriatric groups, and migrant populations.

SAARC TB and HIV/AIDS Centre and along with NTPs will work on mobilizing political and support for the TB control program, especially for raising budget provisions and legislative measures to ban the over-the-counter sale of anti-tubercular drugs. Ministries of Health in the Member States will be persuaded to declare TB as a nationally notifiable disease.

**Strategic Intervention:**

- Prepare framework and guidelines for political commitment
- Organize orientation programs for parliamentarians at the national level in the Member States within the NTP
- Inclusion of TB Agenda in Health Ministers meeting of SAARC Member States for commitment of domestic financial resources towards self-reliance
- Commitment to address cross-border issues between and among the Member States
**ACTION PLAN**

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| c. Co-morbidities associated with TB | • Development and Implementation of SAARC regional collaborative framework for TB associated with Diabetes, Tobacco use and Alcohol consumption  
• This framework should identify the co-morbidities among TB patients and implement necessary interventions to control the burden of TB associated with other co-morbidities  
• Strengthening of screening of TB among DM patients and vice versa in all SAARC member states.  
• To conduct SAARC regional expert group meeting on tobacco control. | | |
| To provide Preventive treatment of persons at high risk (e.g. Children and HIV positive people living with TB patients) | a. Scale up air-borne infection (AIC) control measures at health care facilities | • Developing time bound action plan to implement AIC measures at all Centers and updating Infection control Guideline produced by STAC  
• Capacity building of health care workers in SAARC region on AIC guidelines  
• Health care workers surveillance for TB and appropriate airborne infection control measures at all centers.  
• Treatment for latent TB infection in contacts of bacteriologically-confirmed cases | | |
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| b. Risk group that will be prioritized for screening, investigation to rule out TB and treatment | • People living with HIV  
• Child PTB contacts  
• Patients with silicosis  
• All patients where clinically indicated (high risk) for e.g. pts in immunosuppressant’s  
• High risk adult contacts  
• Address social determinants of TB through intersectoral approach | | |
| **To intensified research and innovation related to TB** | Discovery, development and rapid uptake of new tools and research to optimize implementation and impact and promote innovation | • Allocate sufficient funds for operations research  
• Conduct program-based operational research  
• Develop agenda for operational research in TB Control in the SAARC Region  
• Organize training program in planning, designing, implementation, monitoring and evaluation of operational research  
• Invite proposals from the Member States and Institutions for Multi-country Operational Research | | |
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| To reduce the human suffering and socioeconomic burden associated with TB. This includes Social protection, poverty alleviation and actions on other determinants of TB like malnutrition, indoor air pollution | • Nutritional support to TB patients and families  
• Financial incentives to patients and providers  
• Health system strengthening, linking social and financial support systems of the government  
• Addressing poverty, malnutrition, urbanization, indoor air pollution | | |
| Addressing social determinants of TB | | | |
| To strengthen the engagement of communities, civil society organizations, and public and private care providers | Activities | | |
| Implement framework and guidelines for public-private mix which was developed by STAC  
Develop guidelines and training programs for NGO and Civil Society  
Develop guidelines and programs for industrial interface under Corporate Social Responsibility (CSR)  
Develop Guidelines and training module of practitioners of indigenous systems of medicine in IEC, support case detection and referral, and act as DOTS provider  
Engage professional bodies and associations for commitment to TB Control activities  
Engage medical colleges, nursing and paramedical schools and colleges, rehabilitation centers etc in TB Control activities  
Engage health care providers within public sectors (Outside Ministry of Health e.g. ministries like defense, railways, home ministry etc. have their own medical services set up) | | | |
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<td><strong>To enhance political commitment with adequate resources for TB care and prevention</strong></td>
<td>• Prepare framework and guidelines for political Commitment</td>
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<td>Ensure political commitment for TB Control</td>
<td>• Organize orientation programs for parliamentarians at the national level in the Member States within the NTP</td>
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<td>• Commitment to address cross border issues between and among the Member States</td>
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<td><strong>Advocacy, Communication and Social Mobilization</strong></td>
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<td><strong>Political Commitment and Support</strong></td>
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<td>• Multi-country Operational Research in access, availability and quality of TB Control.</td>
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**NOTE:** The Member States will adapt SAARC Strategy to their country specific strategies. The Member States will develop monitoring indicators specific to their country program and activities to monitor the progress of implementation of the Action Plan.
References

3. National Strategic Plan to end TB: 2017–2023, National Tuberculosis Control Programme, Department of Public Health, Bhutan
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14. TB India 2017, Revised National TB Control Programme Annual report status 2017
15. Vision on Control of TB and HIV/ AIDS in SAARC Region, SAARC TB and HIV/AIDS Centre (STAC) 2011