INTRODUCTION
The South-East Asia Region of WHO which covers 11 countries with a combined population of over 1.5 billion carries the heaviest burden of TB among all WHO Regions. The majority of TB patients are in the age group of 15-54 year, men and women at their most productive period. This adds to the implications of this disease not only on health but also on social and economic development in the Region. Figure 1 shows the burden of TB in the WHO-SEA Region.

In consultation with national tuberculosis control programmes and other technical and implementing partners in countries, WHO has designed a Regional Strategic Plan for TB Control (2006-15). This plan describes the future directions and focus of work for TB control in the South-East Asia Region. The targets and strategies in this document are consistent with the new global stop TB strategy and the Global Plan 2006-2015, but focus on priorities most relevant to this Region and build on what has been achieved during the previous 5-year plan period 2000-2005. A range of interventions is proposed. These are aimed at accelerating progress in the context of evolving challenges, and the requirements of national programmes in effectively meeting these challenges. Developing these further will require flexibility and adaptation to suit the varying country contexts the tuberculosis burden and specific situations in Member Countries in the Region.

PROGRESS TOWARDS TB CONTROL
Considerable progress has been made since the internationally-recommended DOTS strategy was adopted for TB control by all WHO Member Countries in the early 1990s. Rapid DOTS expansion has continued to take place in all countries so that by the end of 2005, over 97% of the population in the Region lived in areas where TB diagnostic and treatment services under DOTS had been made available. Overall treatment success rates have consistently remained over 85% while case-detection rates have steadily increased to over 60% in 2004. Nearly 15 million patients were registered for treatment under DOTS programmes between 1997 and 2004 with...
over 85% treatment success rate, averting nearly 5 million deaths. Due to quality expansion of TB control services, nearly 2 million TB patients are being registered for treatment every year in the Region. For the first time in decades, a demonstrable impact on the burden of the disease is being seen, with both India and Indonesia showing a decrease in the prevalence of TB.

This progress is attributed to wider coverage, intensified efforts to improve the quality of services and growing partnerships with other providers particularly nongovernmental organizations (NGOs), the private health sector, medical teaching institutions and large public employment sectors. Collaboration with NGOs is growing; for example, over 90% of DOTS services in Bangladesh are undertaken by NGOs under memoranda of understanding with the Government. Partnerships with private providers are being scaled up in India, Indonesia, Myanmar and Nepal and similar initiatives have commenced in Bangladesh and Thailand. In areas where public-private partnerships have been established, case-notification rates have increased, on an average by 24%. Medical schools in Bangladesh, India, Indonesia, Nepal, Thailand and Sri Lanka have been involved in their respective national programmes; more than 200 medical colleges in India have established DOTS centres in their practice areas. TB services are also beginning to be provided in workplaces, for example, in factories in Bangladesh and India, in tea estates in Sri Lanka, and by the Railways in Myanmar, among many others.

Collaborative interventions for HIV-related TB are being established jointly by national TB and HIV/AIDS control programmes in India, Indonesia, Myanmar and Thailand. Thailand, with the highest number of people with HIV-TB co-infection, has taken a lead and is providing comprehensive services in the entire country.

Financial resources for TB control have been augmented and the overall resource gap in the Region is currently estimated at under 10%, based on commitments from Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM) and support being provided through bilateral agreements with donors and development partners in several Member Countries.

ISSUES AND CHALLENGES

While good progress has been made towards reaching the World Health Assembly treatment success and case detection targets set in 2000, many challenges will need to be effectively addressed in order to meet the Stop TB Partnership targets linked to the Millennium Development Goals (MDGs) and set to be achieved by 2015.

A major challenge is to find and register all cases that have not so far been diagnosed or registered for treatment under national TB programmes and collaborating sectors despite full coverage of services, while at the same time continuing to sustain the quality of implementation.

Issues like HIV-associated TB and anti-TB drug resistance have threatened to reverse hard-won gains in TB control.
National TB and HIV/AIDS control programmes will need to work very closely to accelerate efforts to address the needs of the increasing numbers of patients dually affected. While the quality DOTS services must be sustained to halt and reverse the development of further resistance, national TB programmes must, at the same time, begin to extend diagnosis and treatment to TB patients who already have multidrug resistant TB (MDR-TB).

Inter-sectoral collaborative interventions both public and private, are presently insufficient to make a significant impact on case-detection and treatment success rates at the national level. Ensuring the quality of services within the programme as well as through these collaborative interventions as they expand beyond initial pilots will require considerable inputs.

Community awareness and utilization of available services and civil society involvement in TB control continue to be inadequate. NTPs need equally to ensure equitable access to services for all TB patients particularly the poor and the marginalized, in urban slums and shanty towns, remote border areas or among displaced communities, if transmission and thereby the incidence of TB is to be reduced. Advocacy, communication and social mobilization efforts (ACSM) have not been satisfactorily addressed by most national TB programmes. High profile, well designed and sustained ACSM campaigns are required to have a substantial impact.

Primary health care systems in countries are overstretched. Most suffer from inadequate infrastructure and a lack of sufficient numbers of adequately skilled staff to provide essential services including those for TB. In addition, poor preparation for health sector reform has led to prolonged and difficult transition periods for traditionally vertical TB control programmes in some countries. Steps must therefore be taken concurrently to enhance the performance of TB programmes in the context of health systems development through effective integration and streamlining of TB services within primary health care services. Several key elements of the DOTS strategy, such as ensuring commitment and resources, quality and accountability, have much to contribute to strengthening primary health care systems, while TB services will benefit from innovative approaches of related programmes.

Last but not least, adequate resources must be secured to ensure the required technical capacity and infrastructure to sustain current implementation, introduce additional interventions and then sustain these in the longer term.

GOAL AND OBJECTIVES

The overall goal for TB control is to reduce morbidity, mortality and transmission of TB until it is no longer a public health problem in the Region.

The objectives for tuberculosis control in all Member Countries in the Region are to sustain or surpass the 70% case-detection and 85% treatment success rates among TB cases set by the World Health Assembly in 2000 in order to then halve the TB death rate and prevalence by 2015 towards halting and beginning to reverse
the incidence of TB as implicitly stated under the Millennium Development Goals set for 2015.

**Box: Millennium Development Goal, Target and Indicators related to TB Control**

<table>
<thead>
<tr>
<th>Goal 6</th>
<th>To combat HIV, malaria and other diseases</th>
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<tr>
<td>Target 8</td>
<td>To have halted by 2015, and begun to reverse the spread (incidence) of malaria and other major diseases</td>
</tr>
<tr>
<td>Indicator 23</td>
<td>Prevalence and death rates associated with tuberculosis</td>
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<tr>
<td>Indicator 24</td>
<td>Proportion of tuberculosis cases detected and cured under DOTS</td>
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**STRATEGIES AND INTERVENTIONS**

The interventions proposed towards achieving the set targets and the overall goal for TB control are grouped under the following four key strategies:

1) Sustaining and enhancing DOTS to reach all TB patients, improve case detection and treatment success;

2) Establishing interventions to address HIV associated TB and drug resistant TB;

3) Forging partnerships to ensure equitable access to an essential standard of care to all TB patients, and

4) Contributing to health systems strengthening.

The key expected results, linked to the above-mentioned strategies, are:

1) Implementation of TB control policies, strategies, plans and interventions towards reaching the MDGs, based on the expanded DOTS framework;

2) Development and implementation of policies and strategies to effectively address TB/HIV and multi-drug resistance;

3) Engagement of a wide range of partners including policy makers, development and technical partners at global, regional and national levels, public and private providers, nongovernmental organizations, and civil society to ensure equitable access to care to all TB patients;

4) Strengthened health systems for equitable access to quality health care, including for TB, through the development of human and other key resources, improved service provision, financing, stewardship and responsiveness.

**COORDINATION AND COLLABORATION**

The WHO regional and country offices will continue to assist Member Countries in achieving global targets through policy and strategy development, assist with planning, coordination, information exchange, implementation and monitoring, human resource development, resource mobilization and operational research. The support provided by long-term international staff posted at the WHO country offices and the network of national professional officers and national consultants working
at the field level in countries will continue. This technical support is expected to be further augmented under the ISAC (Intensified Support and Action for Countries) initiative launched in 2004. The establishment of mechanisms for collaboration between WHO country offices also allows for staff to assist national programmes in other countries within the Region. In the endeavour to support countries to achieve successful collaboration, WHO regional and country offices will work closely with other stakeholders for better implementation of inter-country and country activities.

The Regional Technical Advisory Group on TB comprising of experts in the field of tuberculosis, programme staff, WHO and partner agencies in the Region, will continue to advise on strategic approaches and interventions for TB control in the Region.

The annual meetings of the National Tuberculosis Programme Managers reviews progress and provides an opportunity for sharing experiences and jointly planning interventions or adopting innovative approaches based on country experiences for better TB control in the Region.

The designated WHO Collaborating Centres and supranational reference laboratories will continue to support national programmes in sustaining the quality of implementation of services including laboratory services through capacity building, monitoring and the development of newer approaches and interventions through operations research.

In addition, the technical unit at the Regional Office for South-East Asia will continue to collaborate with several governmental and nongovernmental agencies within and outside the Region and with other technical units within WHO focusing on integrated disease control, laboratory services and quality assurance, communicable disease surveillance and response, health promotion and research among others to promote and provide intensified support for TB control in the Region.

The Regional Stop TB Partnerships founded in 2003 and coordinated through the WHO Regional Office for South-East Asia serves as a platform for greater coordination to optimize the use of available resources and individual partners' contributions and to advocate for greater commitment and resources from both external and domestic sources.

**BUDGET**

The total estimated cost for all planned TB control activities in the South-East Asia Region from 2006-2015 is US$ 5.5 billion. This includes the costs for technical assistance to National Tuberculosis Programmes as well as the operational costs of delivering all planned interventions in countries during the period. Almost 70% of this will go to maintaining and expanding regular TB control services, 12% will be used for the management of various forms of multidrug and extreme drug resistance; and 20% of the budget will be spent for addressing TB/HIV.

**SUMMARY**

DOTS has expanded rapidly in the South-
East Asia Region over the period of the Partnership’s first Global Plan (2001-2005), with almost 100% geographical coverage achieved in 2005. All countries have made impressive progress in improving coverage and quality. This progress has been made possible through strong political commitment and large investments in TB control for improved infrastructure, reliable drug supply, increased staffing, improved laboratory services, and intensified training and supervision.

Accomplishing the objectives outlined in this document will require sustaining the progress in all countries and particularly in the five high burden countries for achieving major regional and global impact. National TB programmes will need to be supported to maintain or surpass the 70% case detection and 85% treatment success rates. The achievement of the TB-related targets linked to the MDGs will also depend on how effectively initiatives such as DOTS-Plus, PPM DOTS and interventions for TB/HIV among others, are implemented. National governments and development partners must fulfill their commitments to mobilizing and sustaining adequate resources to support the full range of activities envisaged.

The benefits of full and effective implementation of all the planned interventions would be substantial. These will result in 20 to 25 million TB cases being treated in DOTS programmes and more than 150 000 drug-resistant cases receiving treatment through DOTS-Plus during the period 2006-2015. In addition, at least 250 000 HIV-infected TB patients may also receive anti-retroviral therapy. As a consequence, the prevalence of TB is expected to fall below 175/100 000 and the number of TB deaths is expected to fall to between 100 000 and 150 000 per year. There would also be substantial economic benefits given that TB disproportionately affects adults in their most productive years. Considering these aspects, it is expected that the TB incidence will decline significantly during this period so that the Millennium Development Goals would be met by or ahead of 2015.