7.5 South-East Asian Region: summary of planned activities, impact and costs

Achievements

DOTS expanded rapidly in the South-East Asian Region over the period of the Partnership's first Global Plan (2001–2005), and 100% geographical coverage was achieved in 2005. All the Region's TB high-burden countries (Bangladesh, India, Indonesia, Myanmar and Thailand) have made impressive progress in improving coverage and quality. Case detection increased from a mere 18% in 2000 to 45% in 2003 and is expected to reach about 65% by the end of 2005, against the World Health Assembly and Stop TB Partnership's 2005 target of 70%. The treatment success rate in the region is already 85.3%, meeting the 2005 target of 85%. This progress has been made possible through strong political commitment and large investments in improved infrastructure, reliable drug supply, increased staffing, improved laboratory services, and intensified training and supervision.

Increasingly, TB programmes in the Region have reached out to a wide range of public and private health care providers in order to increase access to quality services. Community involvement is already a prominent feature in several TB programmes in the Region. NGOs with roots in the local community are playing leading roles in several places. Community volunteers are widely used to supervise treatment.

The WHO's Regional Strategic Plan on HIV/TB recommends key strategies and interventions for reducing HIV/TB-associated morbidity and mortality through enhanced collaboration between national TB and AIDS programmes. Thailand has established comprehensive joint TB/HIV services throughout the country. India, Indonesia, and Myanmar have established formal collaboration between their national TB programmes and national AIDS programmes and have identified collaborative TB/HIV interventions and activities, while three countries (India, Myanmar and Thailand) are planning to carry out HIV surveillance among TB patients.

DOTS-Plus pilot projects are being implemented in India and Nepal. India has a national plan for drug resistance surveillance as well as a plan for pilot-testing and implementing DOTS-Plus. Currently, the capacity for culture and drug susceptibility testing is very limited in the Region, though Bangladesh, Indonesia and Myanmar are also planning to scale up quality-assured culture, DST and DOTS-Plus with resources from the GFATM.

Challenges

Over the Plan period of 2006–2015, strong political commitment needs to be maintained and the current level of funding increased in order to continue to improve access to quality TB services. With an estimated 35% of cases still not being reached through existing DOTS services, significant and sustained efforts will be needed to continue the current positive trends. Most countries in the Region have a very diversified health care system, with a number of public and private health care providers still not linked to the DOTS programmes. A major challenge for the future is to involve a critical mass of these providers in extending quality-assured DOTS services in both urban and rural areas.

The South-East Asian Region is the Region second-hardest hit by the HIV-epidemic, after sub-Saharan Africa. More than 6 million people were estimated to be living with HIV in December 2004. The extent of the epidemic of TB/HIV coinfection in the Region will depend on the future course of the HIV epidemic, as well as on efforts to control TB. Estimated HIV prevalence among TB patients ranges from 0.1% in Bangladesh, through 4.6% in India, to 8.7% in Thailand. Data from a region of Thailand with low HIV prevalence illustrate that the uptake of HIV counselling and testing is low among TB patients, a challenge that will need to be addressed as HIV counselling and testing facilities become more readily accessible.

Coverage of drug resistance surveillance is low in the Region, mainly because of limited data from Bangladesh, India and Indonesia, making it difficult to assess the regional MDR-TB situation. Available data show that, while the levels of MDR-TB among previously untreated cases may be below 3%, the large numbers of TB cases translate into a significant burden of MDR-TB in South-East Asia. It is estimated that 25% of all MDR-TB cases worldwide are in India alone. Most national TB programmes in the Region do not at present diagnose and treat MDR-TB patients, though many other public and private providers do, using second-line drugs, which are widely available.

Priority activities 2006–2015

First and foremost, attention will need to be focused on sustaining commitment and resources for TB control, particularly sustaining adequate human resource capabilities to deliver quality DOTS services. Second, to increase the reach of DOTS, scaling up the participation of other sectors – particularly the large and vibrant private sector in the Region – will be critical. Expanding the public-private mix for DOTS will be especially important in the rapidly growing urban areas, where TB control struggles to cope with a complex range of health providers as well as a diverse mix of TB patients, including slum-dwellers and migrants.

Community outreach activities, as well as education, information and communications campaigns empowering communities to develop their own strategies, will be important if quality services are to be provided for the poor and the marginalized in remote rural and cross-border areas, and among displaced communities. Decentralizing services and involving all health and social workers at the grass-roots level should help reduce barriers to access for women and children.

The Region also needs to focus on the growing problem of drug resistance. Improving the quality of DOTS services made available by all health care providers will halt and reverse the development of drug resistance. DST should be scaled up to cover 20% of new TB patients and 100% of previously treated TB patients in 2015. DOTS-Plus population coverage should expand to 50% by 2010 and 100% by 2015.

Surveillance of HIV among TB patients needs to be established in countries with a high burden of HIV-related TB. Collaborative TB/HIV activities will be expanded to all populations with a high burden of HIV-related TB by the end of 2009. PAL initiatives will be scaled up, with a main focus on urban areas.

Expected effects and costs

Through the intensified efforts outlined above, case detection is expected to increase to 79% by 2010 and 84% by 2015. Treatment success rate is already at the 2005 target level of 85% and is expected to increase to between 85%-90% by 2010 and then remain at this level (noting that 87% is used as the treatment success rate in the scenario calculations). As a consequence, the expected decline in incidence, prevalence and death rates would mean that the Partnership's targets would be met ahead of the target date of 2015 in the South-East Asian Region.

The projected rapid decline in incidence and new cases under the scenario shown in the figures is based on the assumption that all countries and particularly the five high-burden countries in the Region will continue to maintain or surpass the 70% case detection and 85% treatment success rates. These rates of decline will also depend on how effectively initiatives such as DOTS-Plus, PPM-DOTS and interventions for TB-HIV among others, are implemented to counterbalance the effect of HIV and the emergence of MDR-TB in countries in the Region.

During the period of the Plan (2006–2015), it is estimated that at least 16 million people will be treated in DOTS programmes and more than 145 000 in DOTS-Plus. In addition, 306 000 TB patients will be enrolled on antiretroviral therapy. The combined effect of all interventions will be to prevent about 5 million deaths, in comparison with a situation in which no DOTS programmes are implemented, or about 460 000 deaths in comparison with a situation in which TB control efforts are sustained at 2005 levels. With the implementation of sound TB control, the estimated proportion of re-treatment cases should decrease from 25% in 2005 to 12% in 2015.

The total estimated cost of DOTS expansion, DOTS-Plus and TB/HIV control activities in the South-East Asian region from 2006 to 2015 is US$5.5 billion.

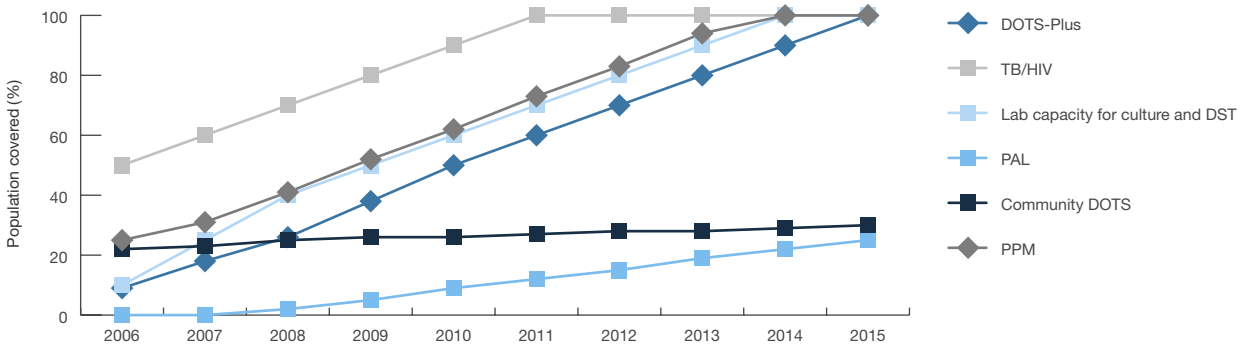
TABLE 14: COST OF PLANNED TB CONTROL ACTIVITIES, SOUTH-EAST ASIAN REGION 2006–2015

Planned activities	US$ millions
DOTS expansion and quality	3,778 (68%)
DOTS-Plus	678 (12%)
TB/HIV collaborative activities	1,112 (20%)
TOTAL	5,569 (100%)

SUMMARY CHARTS FOR SOUTH-EAST ASIAN REGION

FIGURE 27: PLANNED SCALE UP OF ACTIVITIES 2006-2015

South-East Asian Region



N.B. Population coverage is the percentage of the population that lives in an area where the activity is implemented. For TB/HIV collaborative activities the percentage refers to the proportion of the eligible population, i.e. the population living in areas with an HIV prevalence above 1%. For DOTS-Plus, it is the percentage of detected MDR-TB cases that are enrolled in DOTS-Plus programmes.

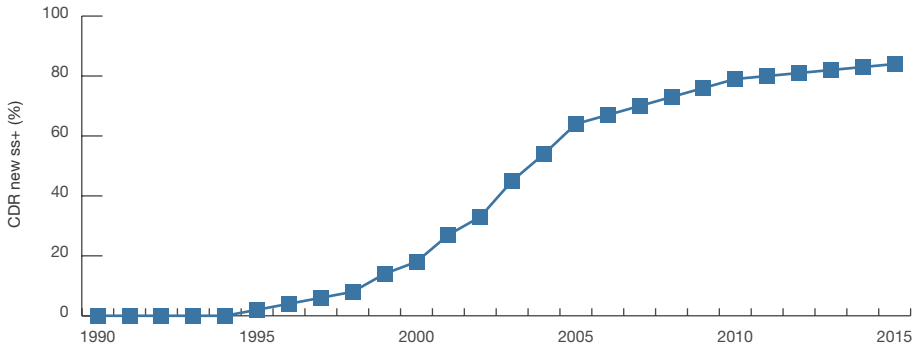
TABLE 15: MILESTONES RELATED TO IMPLEMENTATION OF DOTS EXPANSION, DOTS-PLUS AND TB/HIV ACTIVITIES (a)

South-East Asian Region	2006 (b)	2010 (b)	2015 (b)
DOTS EXPANSION			
DOTS coverage	100%	100%	100%
Total number of new ss+ patients treated in DOTS programmes (thousands)	790 (1178)	742 (939)	562 (668)
Case detection rate new ss+ (%)	67%	79%	84%
Treatment success rate new ss+ (%)	85%	87%	87%
Total number of new ss-/extra-pulmonary patients treated in DOTS programmes (thousands)	1,012 (1,507)	953 (1,209)	737 (880)
Percentage of new ss-/extra-pulmonary patients treated in DOTS programmes	67%	79%	84%
DOTS-Plus			
Total number of detected MDR-TB patients treated in DOTS-Plus programmes (thousands)	2.0 (22)	14 (34)	26 (26)
Percentage of detected MDR-TB cases treated in DOTS-Plus programmes	9%	43%	100%
MDR-TB treatment success rate (%)	71%	73%	75%
Percentage of culture positive cases that are re-treatment cases	24%	19%	12%
TB/HIV			
Total number of PLWHA attending HIV services screened for TB (thousands)	307 (550)	692 (749)	877 (877)
Percentage of PLWHA attending HIV services screened for TB (c)	56%	92%	100%
Total number of newly diagnosed and eligible PLWHA offered IPT (thousands)	59 (1,049)	157 (1,244)	199 (1,421)
Percentage of PLWHA offered IPT	6%	13%	14%
Total number of TB patients in DOTS programmes HIV tested and counselled (thousands)	528 (1,243)	895 (1,170)	762 (896)
Percentage of TB patients treated in DOTS programmes HIV tested and counselled	43%	77%	85%
Total number of TB patients (HIV positive and eligible) in DOTS programmes enrolled on ART (thousands)	21 (47)	31 (51)	33 (55)
Percentage of TB patients (HIV positive and eligible) in DOTS programmes enrolled on ART	45%	55%	59%

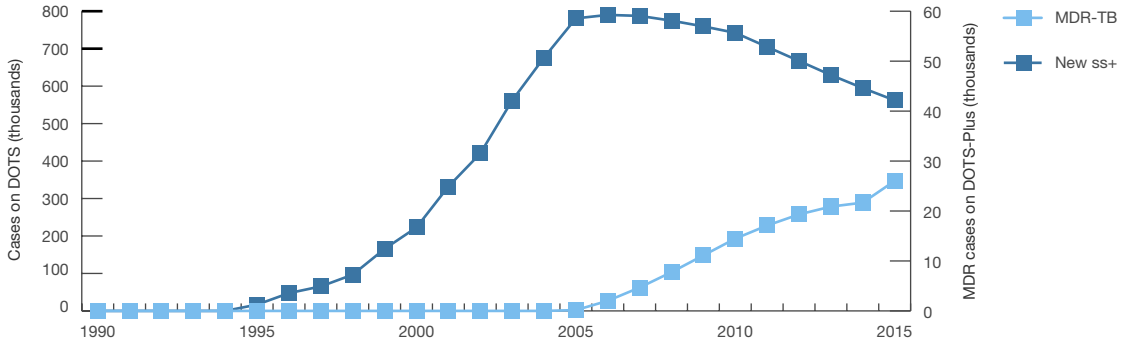
(a) The percentages are not always exactly the numerator devided by the denominator due to rounding errors.
(b) Numbers in parentheses indicate the denominator. For DOTS Expansion it is new TB cases.
For DOTS-Plus it is the total number of detected MDR-TB cases.
For PLWHA screened for TB it is the total number of PLWHA attending HIV services. For PLWHA offered IPT it is the total number of PLWHA.
For TB patients HIV tested and counselled it is the total number of TB patients treated under DOTS in areas covered by TB/HIV collaborative activities.
For TB patients enrolled on ART it is the total number of HIV positive TB patients in DOTS programmes that are eligible for ART in areas covered by TB/HIV collaborative activities.
(c) HIV services include testing and counselling and HIV treatment and care services.

FIGURE 28: ESTIMATED IMPACT AND COSTS OF PLANNED INTENSIFIED ACTIVITIES 2006–2015

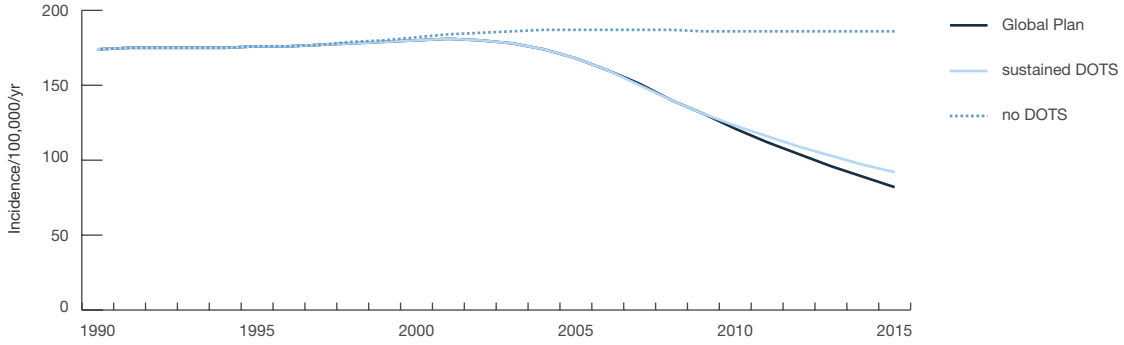
South-East Asian Region: **Case detection rate, new ss+ cases**



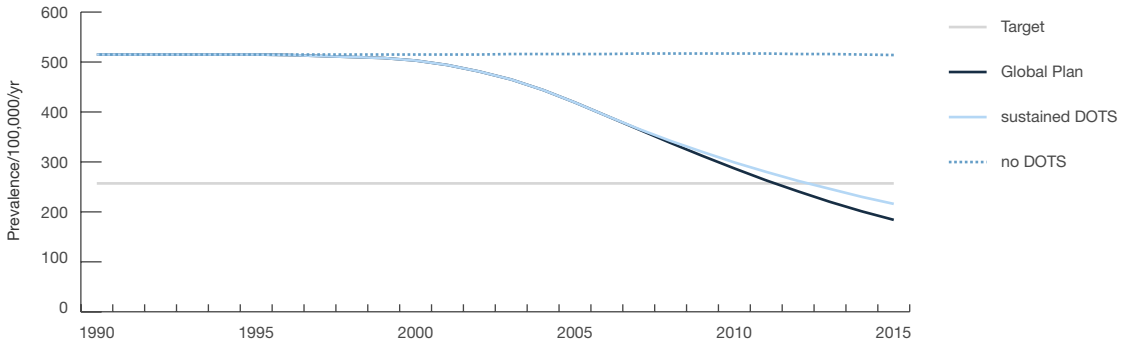
South-East Asian Region: **Number of cases treated under DOTS/DOTS-Plus**



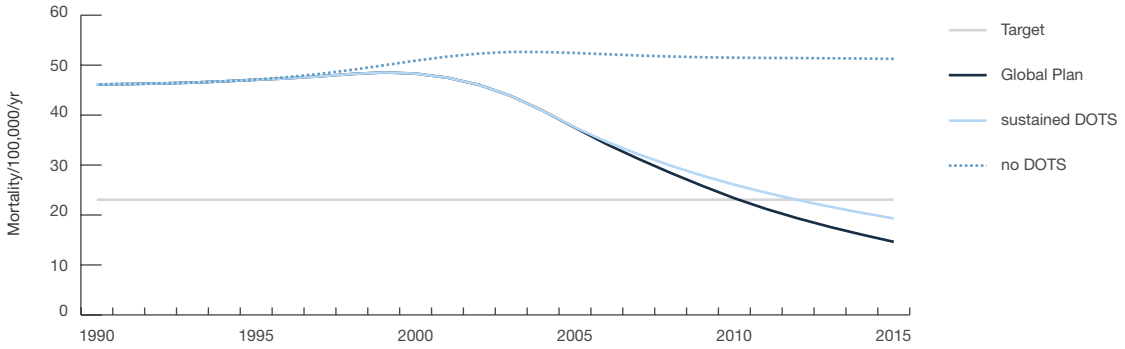
South-East Asian Region: **Incidence**



South-East Asian Region: **Prevalence**



South-East Asian Region: **Mortality**



South-East Asian Region: **Total costs**