Third Technical Advisory Group (TAG) Meeting

to Stop TB
in the Western Pacific Region

Osaka, Japan
17-19 February 2002
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WORLD HEALTH ORGANIZATION
Western Pacific Regional Office
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SUMMARY

CONCLUSIONS AND KEY RECOMMENDATIONS OF THE TAG

PROGRESS AND STATUS OF THE STOP TB SPECIAL PROJECT IN THE WESTERN PACIFIC REGION

TUBERCULOSIS STAGNATION IN INTERMEDIATE-BURDEN COUNTRIES (IBC)

ACCELERATING THE DIRECTLY OBSERVED TREATMENT, SHORT-COURSE (DOTS) STRATEGY IN HIGH-BURDEN COUNTRIES (HBC)

TUBERCULOSIS/HIV PLANS AND ACTIVITIES

CONCLUSIONS AND KEY RECOMMENDATIONS OF THE ICC

1. INTRODUCTION

1.1 OBJECTIVES

1.2 ORGANIZATION

1.3 OPENING CEREMONY

2. PROCEEDINGS

2.1 GLOBAL DOTS EXPANSION AND STOP TB PARTNERSHIP

2.2 REGIONAL STOP TB SPECIAL PROJECT PROGRESS REPORT

2.2.1 EPIDEMIOLOGICAL SITUATION AND DOTS IMPLEMENTATION

2.2.2 REGIONAL-LEVEL PROGRESS

2.2.3 COUNTRY-LEVEL PROGRESS

2.2.4 ISSUES AND CHALLENGES

2.2.5 REGIONAL RESOURCES

2.3 STAGNATION OF TB IN INTERMEDIATE-BURDEN COUNTRIES

2.3.1 EPIDEMIOLOGICAL ANALYSIS

2.3.2 TECHNICAL DISCUSSION ON INTERMEDIATE-BURDEN COUNTRIES

2.4 ACCELERATING DOTS IN HIGH-BURDEN COUNTRIES

2.4.1 SITUATION OF DOTS IMPLEMENTATION

2.4.2 CHALLENGES FOR ACCELERATING DOTS

2.4.3 PARTNERS' SUPPORT FOR ACCELERATING DOTS

2.4.4 HIGH-BURDEN COUNTRIES TUBERCULOSIS MANAGERS' WORKSHOP ON DOTS EXPANSION

2.5 TUBERCULOSIS/HIV REGIONAL STRATEGY
3. **CONCLUSIONS AND RECOMMENDATIONS OF THE MEETING**

3.1 **TAG CONCLUSIONS AND RECOMMENDATIONS**

A. **PROGRESS AND STATUS OF STOP TB SPECIAL PROJECT IN THE WESTERN PACIFIC REGION**

B. **TUBERCULOSIS STAGNATION IN INTERMEDIATE-BURDEN COUNTRIES**

C. **ACCELERATING DOTS IN HIGH-BURDEN COUNTRIES**

D. **TUBERCULOSIS/HIV PLANS AND ACTIVITIES**

3.2 **REGIONAL ICC CONCLUSIONS AND RECOMMENDATIONS**

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**ANNEX 1**

**THIRD TECHNICAL ADVISORY GROUP (TAG) MEETING TO STOP TB IN THE WESTERN PACIFIC REGION, 17-19 FEBRUARY 2002, OSAKA, JAPAN:**

**TIMETABLE**

**ANNEX 2**

**LIST OF TECHNICAL ADVISORY GROUP MEMBERS, PARTICIPANTS, CONSULTANTS, RESOURCE PERSONS, REPRESENTATIVES OF PARTNER AGENCIES AND SECRETARIAT**

**ANNEX 3**

**OPENING REMARKS OF THE REGIONAL DIRECTOR AT THE THIRD TECHNICAL ADVISORY GROUP (TAG) MEETING, 17-19 FEBRUARY, 2002, OSAKA, JAPAN**

**ANNEX 4**

**HBC COUNTRY PROFILES**
SUMMARY

Following the declaration of a tuberculosis crisis in the WHO Western Pacific Region in 1999, the Regional Committee (WHO's governing body in the Region) endorsed the establishment of a Special Project to Stop TB. At its first meeting in February 2001, the Stop TB Technical Advisory Group (TAG) approved the five-year "Regional Strategic Plan to Stop TB in the Western Pacific". The second meeting of the TAG, held in Beijing in June 2001, on the theme "responding to country needs", focused on reviewing five-year country plans from the seven high-tuberculosis-burden countries, as well as the 2001-2002 Western Pacific Regional Strategic Plan. It recommended that the third meeting of the TAG, while continuing to review progress in the high-burden countries, should examine the issue of possible stagnation in tuberculosis decline in the intermediate-burden countries.

At the third TAG meeting, held in Osaka, Japan, from 17 to 19 February 2002, the Western Pacific Regional Stop TB Special Project reported successful progress in these activities and presented its 2002-2003 strategic plan. The Regional Interagency Coordination Committee (ICC) participated in the plenary sessions of the TAG meeting and conducted a parallel meeting during the second day.

The objectives of the third TAG meeting were:

1. to review and discuss the epidemiological situation and control status of tuberculosis in the intermediate-tuberculosis-burden countries;
2. to provide recommendations on tuberculosis control in the intermediate-tuberculosis-burden countries.
3. to follow up the implementation of the tuberculosis control plan in the high-tuberculosis-burden countries;
4. to review the progress of the Western Pacific Regional Office Stop TB action plan and provide recommendations for the future direction of Stop TB in the Region; and
5. to strengthen Stop TB partnerships in the Region.

The meeting was attended by 69 participants and observers, including nine TAG members, 21 national tuberculosis programme (NTP) managers and staff from 14 countries in the Region, 20 representatives from international, governmental and nongovernmental organizations, and 16 WHO staff representing Headquarters and the Western Pacific Regional Office.
CONCLUSIONS AND KEY RECOMMENDATIONS OF THE TAG
(SEE SECTION 3.1 FOR FULL DETAILS):

PROGRESS AND STATUS OF THE STOP TB SPECIAL PROJECT IN THE WESTERN PACIFIC REGION

CONCLUSIONS:
The TAG commends Member States, partners and the WHO Western Pacific Regional Office on their recent progress and supports the strategic plan for 2002-2003 as practical and sound. However, the global community needs to step up efforts and support to achieve the global targets, and, despite the commendable progress made, additional financial support is required.

RECOMMENDATIONS FOR THE WESTERN PACIFIC REGIONAL OFFICE:
1. The Western Pacific Regional Office should exert its full efforts for the effective and timely implementation of the strategic plan for 2002-2003.
2. Last year's recommendations should be fully implemented.

TUBERCULOSIS STAGNATION IN INTERMEDIATE-BURDEN COUNTRIES (IBC)

CONCLUSIONS:
The TAG concludes that, with the exception of one country, tuberculosis decline has stagnated in the six other IBC. It supports the analysis of the Western Pacific Regional Office regarding the major factors contributing to the stagnation, noting that, apart from ageing, the contributing factors are country-specific. Data on treatment outcomes of notified cases are not always routinely available and their quality varies widely. There is a need for further country-specific analysis of factors responsible for stagnation of tuberculosis decline, to facilitate refinement of appropriate strategies in each country to address it. BCG revaccination is not an effective strategy.

RECOMMENDATIONS FOR THE WESTERN PACIFIC REGIONAL OFFICE:
1. The Western Pacific Regional Office should encourage the commissioning of independent national programme reviews for each IBC, which could assist in further identification of contributing factors.
2. The Western Pacific Regional Office should undertake a process to generate consensus on the definition of tuberculosis and surveillance and

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1 The IBC include: Brunei Darussalam; Hong Kong, China; Japan; the Republic of Korea; Macao, China; Malaysia; and Singapore.
control nomenclature specific to IBC, together with countries in the elimination phase (Australia and New Zealand).

3. The Western Pacific Regional Office should consider establishing a systematic approach to the introduction of culture of specimens among IBC.

4. Once a contributing factor is identified, the Western Pacific Regional Office should support the development of intervention options, presenting an analysis of the various advantages and disadvantages and their suitability for various countries. This should be made available to countries to enable them to choose and develop an appropriate mix of strategies, given their context.

RECOMMENDATIONS FOR COUNTRIES:

1. Further research and analysis of factors contributing to stagnation in tuberculosis decline should be conducted on a country-by-country basis. Enhanced surveillance in the form of special studies may be appropriate to further define operational contributions to stagnation.

2. Countries should undertake or strengthen cohort analysis of treatment outcomes of notified cases, to track trends and enable timely intervention.

3. Countries are advised to use laboratory data, where available and reliable, for verification or confirmation of notification data and improvement of tuberculosis diagnosis.

4. In evaluating tuberculosis statistics, immigrants and foreign-born persons should be included.

5. Countries are urged to review existing programme practices, with special reference to surveillance, and to identify and implement an appropriate mix of strategies, based on their own specific context, to address stagnation in tuberculosis decline.

6. Countries should review the status of BCG revaccination and take appropriate action.

ACCELERATING THE DIRECTLY OBSERVED TREATMENT, SHORT-COURSE (DOTS) STRATEGY IN HIGH-BURDEN COUNTRIES (HBC)

CONCLUSIONS:

The TAG commends all seven HBC for having completed the finalization of their five-year budgeted action plans. However, the national tuberculosis programmes still need strong support from governments and partners. Identifiable funding gaps remain after considering projected contributions. Countries are encouraged to take advantage of the opportunities and potential benefits opened up by health sector
reforms. Stronger advocacy is also required. The Global Fund to Fight AIDS, TB and Malaria (GFATM) has the potential to help close the funding gap.

RECOMMENDATIONS FOR PARTNERS:

1. Partners have an important role to play and the TAG urges their continued financial commitment to support country-specific needs, which will remain critical.
2. The TAG recommends strengthened coordination among partners at all levels.

RECOMMENDATIONS FOR THE WHO WESTERN PACIFIC REGIONAL OFFICE:

1. The Western Pacific Regional Office should identify actions required by each stakeholder (countries, partners and WHO) to accelerate DOTS in the HBC.
2. The Western Pacific Regional Office should organize a meeting of NTP managers to step up implementation.
3. Since effective monitoring and supervision will be critical for accelerating DOTS implementation in the Region, the Western Pacific Regional Office should support countries in undertaking an annual review of the implementation status of tuberculosis control, beginning with an external evaluation.
4. The Western Pacific Regional Office should strengthen support for emerging issues, including multidrug-resistant (MDR) tuberculosis and Public Private Mixed DOTS (PPMD).
5. On request, the Western Pacific Regional Office should assist countries in making submissions to the GFATM.

RECOMMENDATIONS FOR COUNTRIES:

1. The TAG urges countries to step up efforts to achieve the goal of DOTS for all by 2005.
2. Countries should strengthen efforts to set up national ICCs and ensure that they become fully operational by June 2002.
3. Countries should strengthen central technical capacity for monitoring and supervision.
4. Tuberculosis technical coordinators, who are identifiable, responsible and accountable for all aspects of DOTS implementation, should be appointed at all levels of the health service.
5. When countries make a submission for funding to the GFATM, they should do so on the basis of already developed five-year budgeted national tuberculosis plans, supported by the TAG.
6. Countries should have ongoing commitment to improving the efficiency and effectiveness of resources at the periphery.
TUBERCULOSIS/HIV PLANS AND ACTIVITIES

CONCLUSIONS:

TAG members congratulate the Western Pacific Regional Office on the collaboration between its HIV and Tuberculosis units in developing the Regional Tuberculosis/HIV Framework, and support the Framework.

RECOMMENDATIONS FOR THE WHO WESTERN PACIFIC REGIONAL OFFICE:

1. TAG members urge the Western Pacific Regional Office to finalize the Regional Tuberculosis/HIV Framework and make it available to countries as a basis for phased implementation of tuberculosis/HIV activities.
2. The Western Pacific Regional Office should continue organizing joint regional meetings of HIV and tuberculosis managers.
3. The Western Pacific Regional Office should provide technical support to countries to develop national strategic plans for tuberculosis/HIV activities, based on the Regional Tuberculosis/HIV Framework.
4. The Western Pacific Regional Office should provide technical assistance for tuberculosis/HIV surveillance and interventions.

RECOMMENDATIONS FOR COUNTRIES:

1. The TAG encourages countries to strengthen coordination between tuberculosis and HIV programmes and tuberculosis/HIV surveillance and interventions.
2. Countries should ensure complementarity between tuberculosis and HIV/AIDS programmes' strengths and weaknesses.

CONCLUSIONS AND KEY RECOMMENDATIONS OF THE ICC (SEE SECTION 3.2 FOR FULL DETAILS):

CONCLUSIONS:

The ICC appreciates the progress in improving country-level coordination through national ICCs. Most agencies anticipate continued support at current or greater levels. The Stop TB Special Project still faces challenges in addressing national implementation shortfalls and weak human resource and programme management capacity.
RECOMMENDATIONS:

1. The ICC recommends that it should continue to receive feedback from national tuberculosis programme managers, through WHO, on constraints in DOTS implementation.
   Focus: WHO, in collaboration with Member States and areas

2. A document on the roles and expected outcomes of the Regional ICC should be developed and distributed to partner agencies and national tuberculosis programmes.
   Focus: WHO, in consultation with partners

3. National ICCs should receive strong leadership from Government, and departments other than Health should also be represented.
   Focus: Member States and areas

4. The ICC commends WHO on preparing financial and budgetary information for implementation of the national five-year plans of action and recommends that this information be available to partner agencies before Regional ICC meetings.
   Focus: WHO

5. The ICC suggests that it should receive information on the priority given to tuberculosis within the overall health system.
   Focus: Member States and areas, coordinated through WHO

6. The roles of national and regional ICCs are different, with more specific information discussed at the national level. However, some partners are not represented on all national ICCs. Therefore, the ICC suggests that a report on the activities of national ICCs in the Region should be given to the Regional ICC members prior to their meetings. This would lead to improved financial monitoring and coordination.
   Focus: Member States and areas, coordinated through WHO

7. It is recommended that more effort should be made at the national level to coordinate between the public and private sector in DOTS implementation, including through national ICCs in some countries.
   Focus: Member States and areas

8. The ICC recommends that more time should be allocated for internal discussions within the Regional ICC in future meetings.
   Focus: WHO
1. INTRODUCTION

Following the declaration of a tuberculosis crisis in the Western Pacific Region in 1999, the Regional Committee (WHO's governing body in the Region) endorsed the establishment of a Special Project to Stop TB. At its first meeting in February 2001, the Stop TB Technical Advisory Group (TAG) approved the five-year “Regional Strategic Plan to Stop TB in the Western Pacific”. The second meeting of the TAG, held in Beijing in June 2001, on the theme “responding to country needs”, focused on reviewing five-year country plans from the seven high-tuberculosis-burden countries, as well as the 2001-2002 Western Pacific Regional Strategic Plan. It recommended that the third meeting of the TAG, while continuing to review progress in the high-burden countries (HBC), should examine the issue of possible stagnation in tuberculosis decline in the intermediate-burden countries (IBC).

At the third TAG meeting, held in Osaka, Japan, from 17 to 19 February 2002, the Regional Stop TB Special Project reported successful progress in these activities and presented its 2002-2003 strategic plan. The Regional Interagency Coordination Committee (ICC) participated in the plenary sessions of the TAG meeting and conducted a parallel meeting during the second day.

In preparation for the meeting, the WHO Western Pacific Regional Office worked closely with countries to conduct epidemiological analyses of the tuberculosis prevention and control situation in the seven intermediate-burden countries (Brunei Darussalam; Hong Kong, China; Japan; the Republic of Korea; Macao, China; Malaysia; and Singapore). These epidemiological country profiles were presented at the meeting. The technical discussions during the meeting focused on issues relevant to possible stagnation, including the experience of Europe and the United States of America, ageing, BCG, defaulter tracing, information systems and screening. To support rapid expansion of the directly observed treatment, short-course (DOTS) strategy, as well as implementation of country plans in the high-burden countries, the meeting followed up on progress made on five-year plans for the seven high-burden countries (Cambodia; China; the Lao People's Democratic Republic; Mongolia; Papua New Guinea; the Philippines; and Viet Nam). Sessions were held to examine successes and discuss key constraints, including the financing gap, partner coordination, human resources, drug supply, laboratory networks and programme management. In addition, the TAG considered the achievements and future plans of the Western Pacific Regional Office in the context of an appropriate response to country needs. Through the Regional ICC, the meeting further developed regional partnerships for DOTS expansion.
1.1 Objectives

The objectives of the third TAG meeting were:

1. to review and discuss the epidemiological situation and control status of tuberculosis in the intermediate-tuberculosis-burden countries;
2. to provide recommendations on tuberculosis control in the intermediate-tuberculosis-burden countries;
3. to follow up the implementation of the tuberculosis control plan in the high-tuberculosis-burden countries;
4. to review the progress of Western Pacific Regional Stop TB action plan and provide recommendations for the future direction of Stop TB in the Region; and
5. to strengthen Stop TB partnerships in the Region.

1.2 Organization

The meeting was attended by 69 participants and observers, including nine TAG members, 21 NTP managers and staff from 14 countries in the Region, 20 representatives from international, governmental and nongovernmental organizations and 16 WHO staff, representing Headquarters and the Western Pacific Regional Office.

Annex 1 shows the timetable of the meeting and Annex 2 contains the list of participants.

1.3 Opening ceremony

Dr Shigeru Omi, WHO Regional Director for the Western Pacific, officially opened the Third Technical Advisory Group Meeting (TAG) to Stop TB in the Western Pacific Region. He said that, since tuberculosis was closely linked to poverty, achieving WHO's goal of reducing the tuberculosis burden by half by 2010 would make a major contribution towards poverty alleviation in the Region. Reflecting on progress since the endorsement of the Regional Strategy to Stop TB by the First TB TAG, Dr Omi stressed that reaching the 2010 target would require stepping up efforts to achieve 100% DOTS coverage in the Region by 2005. He said that he appreciated the major contribution made by TAG members towards addressing the tuberculosis challenge. Dr Omi noted that, during the last decade, tuberculosis prevalence had stopped declining in several more developed countries in the Region. While ageing populations were a major cause of stagnating tuberculosis rates, there were other possible factors, such as mobile populations, HIV/AIDS, homelessness and drug use.
Dr Omi concluded by expressing his gratitude to the Government of Japan for hosting the important meeting and to all representatives of partner organizations and institutes present, for their participation.

The following is a list of TAG members, indicating office-bearers appointed for the meeting (for full details, see Annex 2: List of participants):

Dr Nils Billo
Dr Jaap Broekmans (Vice-Chairperson)
Dr Michael Iademarco (Rapporteur)
Dr Sang Jae Kim
Dr Ren Minghui
Dr Toru Mori (Chairperson)
Dr Hiroko Nakatani
Prof Ian Riley
Dr Alberto G. Romualdez Jr. (Vice-Chairperson)
2. PROCEEDINGS

2.1 GLOBAL DOTS EXPANSION AND STOP TB PARTNERSHIP

Dr J.W. Lee, Director, Stop TB, Communicable Diseases Cluster, WHO Headquarters, provided an overview of the global tuberculosis situation and presented the Stop TB partnership response. Dr Leopold Blanc, Medical Officer in Tuberculosis Strategy and Operations, WHO Headquarters, made a presentation on the Global DOTS Expansion Plan Working Group.

During 2000, the number of countries implementing the DOTS strategy increased by 21, bringing the total to 148 out of 210 countries, with a DOTS population coverage of 55%. The DOTS treatment success rate was 80%. However, the current rate of increase in cases enrolled in DOTS programmes is too slow; at this pace, the target of 70% case detection will not be achieved. Viet Nam is the only HBC to have reached the targets for case detection and cure. Several countries are experiencing increases in tuberculosis/HIV prevalence. Key constraints for DOTS expansion include: weak political commitment, scarce financial resources, lack of skilled human resources, health system weaknesses and interrupted drug supplies. An estimated US $1 billion a year is necessary to expand DOTS in the HBCs, of which almost 70% is currently provided through country budgets. The current funding gap is about US $300-400 million a year.

During the last two years, the Stop TB partnership has endorsed and launched the Global Plan to Stop TB, the Stop TB Partnership Framework, and the Global DOTS Expansion Plan and has made the Global TB Drug Facility operational. A new TB/HIV Strategic Framework was developed and several countries launched DOTS-Plus projects, benefiting from the 90% price reduction for 2nd-line drugs.

The Stop TB DOTS Expansion Working Group met for the second time in Paris, France, on 31 October 2001, bringing together the 22 highest-burden countries and partners to review progress and identify future actions. The Global DOTS Expansion Plan, a mid-term global strategic plan to accelerate DOTS expansion, promotes the development of medium-term country plans and the establishment of coalitions of government and partners. National medium-term plans are now available or under development in all HBCs.

During 2002, countries have agreed to complete costs estimates for tuberculosis control, establish interagency coordination mechanisms where needed, assess training needs, collaborate with HIV/AIDS programmes and assess the need to address multidrug-resistant (MDR) tuberculosis. Priority issues for technical partners include training, strengthening country capacity to address health system changes, and identifying approaches to increase case detection and involve private...
practitioners. Financial partners will need to mobilize resources, support the Global Drug Facility (GDF) and the GEATM. WHO has been requested to prepare cost estimates for high-burden countries, develop financial monitoring systems, develop consensus on "beyond DOTS" activities, and coordinate partnerships.

2.2 REGIONAL STOP TB SPECIAL PROJECT PROGRESS REPORT

Dr Dong-Il Ahn, Regional Advisor for the Stop TB Special Project, Western Pacific Regional Office, presented the progress of the Stop TB Special Project, referring specifically to progress on recommendations of the second TAG meeting. Most recommendations have either been implemented or are currently under implementation. The main components of the report include the epidemiological situation, the Stop TB Special Project, partnership building and regional resources, and issues and challenges, including political commitment, securing quality tuberculosis drugs, monitoring and surveillance, and capacity building for DOTS management, as described below.

2.2.1 EPIDEMIOLOGICAL SITUATION AND DOTS IMPLEMENTATION

For 2000, a total of 804,579 cases (all types) and 384,755 cases (smear-positive) were notified. Regional case notification rates per 100,000 population were 49 (all types) and 23 (smear-positive), with no significant change from the previous year. Notification rates of tuberculosis cases from for the seven HBC and seven IBC in the Region in 2000 are summarized in Table 1. The proportion of newly detected patients enrolled in DOTS increased from 78% of new smear-positive cases in 1999 to 85% in 2000. The regional cure and success rates in DOTS areas were 91% and 96%, respectively, well above WHO's 85% target.

2.2.2 REGIONAL-LEVEL PROGRESS

During the seven-month period since the second TAG meeting, steady progress has been made to establish a firm foundation for rapidly accelerating DOTS and responding to emerging issues, such as tuberculosis/AIDS.

Political commitment and regional partnership

The 52nd session of the Western Pacific Regional Committee, in September 2001, generated increased political support for tuberculosis prevention and control. Recognizing the links between tuberculosis and poverty, and tuberculosis prevention and control as part of a poverty reduction strategy, the Regional Committee welcomed the development of five-year (2001-2005) Stop TB national plans in the seven HBC, supported by the Stop TB TAG at its second meeting, and urged accelerated DOTS implementation as a cost-effective strategy. The Regional Committee passed a Resolution urging the Western Pacific Regional Office to develop a regional strategy to address tuberculosis/AIDS co-infection and to further support the conduct of prevalence surveys in HBC.
Table 1: Latest Notification of Tuberculosis, selected countries, 2000

<table>
<thead>
<tr>
<th>Countries</th>
<th>Pop. (x 1000)</th>
<th>Case notification, 1995 - 1999</th>
<th>Case notification, 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>All Cases Number*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>1995</td>
<td>1996</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a</td>
<td>D</td>
</tr>
<tr>
<td>High-burden countries:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cambodia</td>
<td>12 014</td>
<td>14 603</td>
<td>14 857</td>
</tr>
<tr>
<td>China</td>
<td>1 236 722</td>
<td>356 364</td>
<td>414 480</td>
</tr>
<tr>
<td>Lao PDR</td>
<td>5 287</td>
<td>630</td>
<td>1 440</td>
</tr>
<tr>
<td>Mongolia</td>
<td>2 380</td>
<td>2 780</td>
<td>3 457</td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>5 131</td>
<td>8 041</td>
<td>5 087</td>
</tr>
<tr>
<td>Philippines</td>
<td>76 348</td>
<td>119 186</td>
<td>165 453</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>76 900</td>
<td>55 739</td>
<td>74 111</td>
</tr>
<tr>
<td>Sub-total</td>
<td>1 414 782</td>
<td>507 543</td>
<td>679 465</td>
</tr>
<tr>
<td>Intermediate-burden countries</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Brunei Darussalam</td>
<td>338</td>
<td>140</td>
<td>149</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>6 796</td>
<td>6 212</td>
<td>6 501</td>
</tr>
<tr>
<td>Japan</td>
<td>126 320</td>
<td>43 078</td>
<td>42 142</td>
</tr>
<tr>
<td>Macao</td>
<td>438</td>
<td>402</td>
<td>570</td>
</tr>
<tr>
<td>Malaysia</td>
<td>22 203</td>
<td>11 778</td>
<td>12 691</td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>47 733</td>
<td>42 117</td>
<td>39 315</td>
</tr>
<tr>
<td>Singapore</td>
<td>3 263</td>
<td>1 889</td>
<td>1 951</td>
</tr>
<tr>
<td>Sub-total</td>
<td>267 691</td>
<td>105 476</td>
<td>163 290</td>
</tr>
<tr>
<td>Western Pacific TOTAL</td>
<td>1 648 250</td>
<td>751 951</td>
<td>942 833</td>
</tr>
</tbody>
</table>

* data updated in the 2000 country report
** all types includes new smear-positive, relapse, smear-negative and extrapulmonary tuberculosis cases
*** no tuberculosis data are available.

The WHO Western Pacific Regional Office actively participated in the Global Stop TB Partners’ Forum, along with the WHO Representatives of HBC in the Region. The Regional Office participated in two meetings related to the newly established Global Fund for HIV/AIDS, TB and Malaria (GFATM), one in Bangkok in November 2001 and the other in Beijing in February 2002. Following the establishment of the GFATM, WHO is expected to provide technical assistance to countries on request.

Tuberculosis/HIV

Twelve countries and areas reported HIV and tuberculosis data. HIV seroprevalence in newly detected tuberculosis cases was 7.9% in Cambodia, 4.9% in Malaysia and 3% in Fiji. The Western Pacific Regional Office organized a three-day meeting of tuberculosis and HIV/AIDS programme managers in the Region, in Melbourne,
Australia on 2-4 October 2001, to review the situation; exchange experiences; identify priorities; and recommend mechanisms for collaboration between national STI/HIV and tuberculosis programmes. A regional framework developed for the Melbourne meeting formed the basis for the draft Regional Tuberculosis/HIV Framework, presented at the third TAG meeting. The meeting recommended the identification of areas of common interest (e.g., care and management guidelines; advocacy packages) and the preparation of joint plans of work. Continuing its active participation in the Global Working Group on TB Among HIV-infected Populations, the Western Pacific Regional Office participated in a meeting of the Scientific Panel of the Working Group in September 2001. The Panel has developed guidelines for phased implementation of collaborative tuberculosis/HIV activities.

Multidrug-resistant tuberculosis

The mean prevalence of MDR tuberculosis was 2.6% among new cases, ranging from 0.1% to 5.3%. It was found to be at a serious level—6.3% to 9.1%—in some provinces of China when MDR-tuberculosis in retreatment cases was included. Twelve out of 37 countries and areas in the Region joined WHO and the International Union Against Tuberculosis and Lung Diseases (IUATLD) global project on anti-tuberculosis drug resistance surveillance and 10 countries completed at least the first survey on drug resistance between 1995 and 2001. Since 2000, the Western Pacific Regional Office has provided technical input for a DOTS-Plus pilot project in the Makati Medical Center (MMC), Manila, the Philippines, in collaboration with the Green Light Committee. In 2000-2001, 129 patients were enrolled in the programme at MMC.

Public-private mix DOTS

Although DOTS coverage has reached 100% throughout the public sector in the Philippines, surveys show that about 40% of patients are not under treatment and, among those who are under treatment, about half are with private physicians and traditional healers. With DOTS treatment success rates close to the target of 85%, the Government of the Philippines considers it the right time to engage the private sector. In the fourth quarter of 2001, the United States Agency for International Development (USAID) and the WHO Western Pacific Regional Office jointly reviewed the role of the private sector in tuberculosis control in the Philippines and developed a strategic plan for management of tuberculosis through the public-private collaboration mechanism for DOTS implementation.

Tuberculosis and health sector reform

WHO Headquarters is developing guidelines for country situational analyses on tuberculosis management and health sector reform. Country-specific analysis of
tuberculosis and health sector reform is being undertaken in Cambodia and the Philippines. To strengthen the capacity of health professionals in the Region, the Western Pacific Regional Office is developing a module on poverty and gender concerns in tuberculosis prevention and control as part of a toolkit to promote the integration of poverty and gender issues into health professional educational curricula.

Capacity building

The Western Pacific Regional Office organized or collaborated in various training courses to strengthen capacity in national tuberculosis programmes across the Region. These included an IUATLD-Viet Nam Ministry of Health course in Hanoi in August 2001; a Pacific tuberculosis training course in Suva, Fiji, in November 2001; and a drug supply management course conducted jointly by Management Sciences for Health (MSH) and the International Dispensary Association in the Netherlands in September 2001.

2.2.3 COUNTRY-LEVEL PROGRESS

Since the inception of the Stop TB Special project, there has been a steady increase in the number of countries and areas in the Region that are implementing DOTS (see Figure 1).

![Figure 1: Accelerating DOTS in the Western Pacific Region](image)

In the seven HBC in the Region (Cambodia, China, the Lao People's Democratic Republic, Mongolia, Papua New Guinea, the Philippines and Viet Nam), WHO has worked to take forward the five-year national Stop TB plans endorsed at the last TAG meeting. These budgeted plans have been finalized and will facilitate DOTS expansion across the Region by 2005. Among high-burden countries, the Philippines in particular approached 100% DOTS coverage by the end of 2001.
In the seven IBC (Brunei Darussalam; Hong Kong, China; Japan; the Republic of Korea; Macao, China; Malaysia; and Singapore), the Western Pacific Regional Office provided technical support, in collaboration with the Research Institute for Tuberculosis (RIT) Japan and the Royal Netherlands Tuberculosis Association (KNCV) Netherlands, for country-specific analysis of the possible stagnation in tuberculosis decline. This analysis was presented at the third TAG meeting.

WHO's technical support activities in the Pacific island countries focused on capacity building, through the first Pacific training, conducted in collaboration with the Secretariat of the Pacific Community and the Centers for Disease Control (CDC), United States of America.

2.2.4 ISSUES AND CHALLENGES

Accelerating DOTS expansion

After a foundational phase of activities between 1991 and 2000, tuberculosis control has moved into an acceleration phase with the launching of the Stop TB Special Project (2001-2005). The time has now come for a determined effort to accelerate DOTS. This will require redoubling of efforts by all stakeholders and establishment of strong national Stop TB teams with adequate programme management capacity at all levels, in coordination with health sector reform activities.

Responding to emerging issues

There is a need to expand surveillance to better understand multi-drug resistance (MDR) in the Region. Lessons learned from the pilot DOTS-Plus project in the Philippines will enable WHO to provide suitable technical inputs for extension of the approach elsewhere. Tackling the expected rise in HIV/tuberculosis co-infection in the Region requires strengthened coordination between HIV and tuberculosis control at country level. Conducting national tuberculosis prevalence surveys can help monitor progress. There is a need for strengthened capacity in countries to collect good quality tuberculosis notification and vital registration data. In some countries in the Region, rapid expansion of the private sector has necessitated increased public-private sector collaboration in the delivery of tuberculosis care. The regional tuberculosis laboratory network requires strengthening and improved quality control procedures.
2.2.5 REGIONAL RESOURCES

Human resources

With the support of various partners, including the Australian Agency for International Development (AusAID), the Japanese Government and USAID, the first phase, building WHO capacity, has been completed. Funding was secured for all 10 regional and country level positions under the Stop TB Special Project. The Project is now looking ahead to a second phase of securing needed human resources, to strengthen the ability to provide timely advice and technical assistance and ensure a smooth “take-off” for DOTS acceleration.

Financial resources

With generous support from partners, financial resources for the Project have increased significantly, enabling rapid implementation of activities at both regional and country levels. The total budget sources for the Stop TB Special Project (Regional Office) in 2000-01 amount to approximately US$ 5.6 million. Figure 2 shows the budget breakdown for activities at the Regional Office level, 2000-01. A total of 44% of the budget is directed towards country level activities, through country support (28%) and allocation to country-based staff (16%).

For the five-year period 2001-2005, the projected cost of accelerating DOTS and ensuring “DOTS for all” by 2005 in the seven HBC is US$ 665 million (see Figure 3). With governments’ funding for tuberculosis control totalling almost US$ 380 million (52%) and external assistance commitments amounting to almost US$ 25 million, there remains a funding gap of approximately US$ 260 million (40%). Although the prices of tuberculosis drugs have been declining, funding for
drug supplies accounts for about 15% of the total budget gap. Significant gaps also exist in the area of programme management, affecting monitoring and supervision.

**Figure 3:**

*Breakdown of funding requirement for high-burden countries, 2001-2005*

<table>
<thead>
<tr>
<th>Source of Funding</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>National budget (excl. Loan)</td>
<td>57%</td>
</tr>
<tr>
<td>Loan</td>
<td>0.2%</td>
</tr>
<tr>
<td>External Assistance (committed)</td>
<td>3.5%</td>
</tr>
<tr>
<td>Funding Gap</td>
<td>40%</td>
</tr>
</tbody>
</table>

Total: $665 million

2.3 Stagnation of TB in Intermediate-Burden Countries

2.3.1 Epidemiological Analysis

In following up recommendations of the second TAG meeting, WHO commissioned an epidemiological analysis of the tuberculosis situation in the seven IBC in the Region, in collaboration with RIT, Japan (Dr Takashi Yoshiyama and Dr Norio Yamada), KNCV, Netherlands (Dr Martinus Borgdorff) and the Royal Tropical Institute (KIT), the Netherlands (Dr Maarten van Cleeff). The review aimed to answer the following questions for each of the countries/areas included, namely, Brunei Darussalam; Hong Kong, China; Japan; the Republic of Korea; Macao, China; Malaysia; and Singapore:

1. Is stagnation of tuberculosis decline observed?
2. If so, what are the possible contributing factors?

Dr Martien Borgdorff of KNCV presented the findings of the review. The trends of crude notification rates in these countries/areas are shown in Figure 4. Defining stagnation as a slow-down or reversal of the annual decline of the crude notification rate, Dr Borgdorff hypothesized that such stagnation might be expected in countries that had experienced long-term declines in tuberculosis incidence and in annual risk of tuberculosis infection, for the following two reasons:

**Reactivation disease:** Tuberculosis occurring more than five years after the most recent (re-) infection is called reactivation disease. Once the risk of infection is extremely low (e.g. <10/100 000) most disease is likely to be reactivation disease. This effect may be called "ageing of the epidemic". This effect cannot be adjusted for in the analysis through standardization by age. Reactivation disease does not depend on current risk of infection and is believed to decline very little over time.
Countries that have experienced reducing risk of infection and increasing life expectancy may thus expect a slowing down of tuberculosis decline. Factors that might increase the risk of reactivation disease in those infected are medical conditions, such as lung cancer, diabetes (seen mainly at somewhat older ages), and HIV infection (seen mainly among young adults).
Ongoing transmission: Increased transmission may result from increased duration of the infectious period of source cases (either due to delays in case detection or due to low cure rates); from “importation” of tuberculosis (either through immigrants or by residents travelling to high-prevalence countries); and from high-risk settings such as hospitals, homeless shelters, refugee camps and prisons.

The review suggests that, over the past decade, stagnation of the decline of tuberculosis has occurred in all the countries included, with the exception of the Republic of Korea. The data supporting this conclusion are summarized below.

<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>468</td>
<td>145</td>
<td>106</td>
<td>56</td>
<td>91</td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>404</td>
<td>255</td>
<td>159</td>
<td>114</td>
<td>112*</td>
</tr>
<tr>
<td>Japan</td>
<td>172</td>
<td>61</td>
<td>42</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>236</td>
<td>149</td>
<td>52*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macao, China</td>
<td>411</td>
<td>110</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>83</td>
<td>61</td>
<td>65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>307</td>
<td>159</td>
<td>106</td>
<td>51</td>
<td></td>
</tr>
</tbody>
</table>

* 1999 figures

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brunei Darussalam</td>
<td>-11%</td>
<td>-3%</td>
<td>-6%</td>
<td>5%</td>
</tr>
<tr>
<td>Hong Kong, China</td>
<td>-4%</td>
<td>-5%</td>
<td>-3%</td>
<td>0%</td>
</tr>
<tr>
<td>Japan</td>
<td>-10%</td>
<td>-4%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td>Republic of Korea</td>
<td>-4%</td>
<td>-1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Macao, China</td>
<td>-1.1%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Malaysia</td>
<td>-3%</td>
<td>1%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>-6%</td>
<td>-4%</td>
<td>-7%</td>
<td>-1%</td>
</tr>
</tbody>
</table>

However, the causes of this stagnation vary between countries. In most of the concerned countries and areas, ageing of the population and the epidemic appears to be a major contributing factor. However, depending on the local situation, other factors, such as migration and HIV, do play an important role.

Analysis of data from the different countries and areas leads to the following preliminary conclusions:

In Hong Kong, Japan, and Singapore, stagnation is mainly due to ageing of the tuberculosis epidemic and ageing of the population. Moreover, some risk groups seem to emerge, such as the urban poor, including the homeless. Population movements may have some importance, such as migrant workers in Singapore and travel in and out of mainland China into Hong Kong. If most disease among the
elderly were attributable to reactivation of latent infection, the risk of reactivation disease is much higher in these populations than in the Netherlands and the United Kingdom, which suggests the need for further research.

In Malaysia, different patterns are observed. Stagnation is observed in West Malaysia, but is not pronounced in East Malaysia. Some changes in notification rates may be due to variations in the proportion of cases treated by the private sector or to improved notification associated with improved NTP performance. However, increasing tuberculosis notification rates in the 25-44 age group, and the relatively high case fatality rates in this age group, suggest that tuberculosis is increasing at least in part due to the spread of HIV infection in this population. Although the proportion of cases among immigrants increased up to 1997 and probably contributed to stagnation of the notification rate, this cannot explain the most recent increases.

In Brunei Darussalam, changes in diagnostic practices and/or notifications, as well as ageing of the tuberculosis epidemic, appear most important, but transmission from migrant workers seems to play a role. Ageing of the population appears unimportant. On Macao, limited data were available. The general pattern may resemble that of Brunei Darussalam. To analyse the situation properly, information on place of birth and residential status is required. Information on the socioeconomic background of patients would also be helpful in identifying risk groups.

The Republic of Korea shows no stagnation of decline. However, some stagnation due to ageing of the epidemic may be expected within the next 20 years, as the annual risk of infection has declined to approximately 0.5% and therefore has limited scope for further decline. The ageing of the population may also become increasingly important. At present, less than 5% of the total population is aged 65 years or more.

In the discussions that followed Dr Borgdorff's presentation, participants agreed that there appeared to be stagnation in the rate of tuberculosis decline in all the IBC, except the Republic of Korea. Further analysis was felt to be necessary to determine the specific causes of stagnation in each country.

### 2.3.2 TECHNICAL DISCUSSION ON INTERMEDIATE-BURDEN COUNTRIES

A session was devoted to discussing various technical issues of relevance in the IBC. Presentations were made on each of the six identified technical issues (the experience of the United States and Europe; prevention, tuberculosis surveillance, ageing, screening, and defaulter tracing), followed by country presentations and discussions. Dr Pieter van Maaren, Medical Officer, Stop TB, WHO Western Pacific Regional Office, presented a summary of the discussion, as below.

As regards the experience in the United States and Europe, an extensive information system contributed to the Netherlands reaching the tuberculosis elimination phase.
They also adopted the use of fingerprinting for outbreak management. Similarly, in the United States, surveillance contributed to a rapid decline after a surge in the early 1990s. This included reporting, not only of cases, but also of suspected cases. This experience shows that the use of laboratory data is critical.

On prevention, there seems to be evidence of the protective value of BCG in childhood. However, the protective value of revaccination is limited. Singapore stopped revaccination in 2001.

As regards tuberculosis surveillance, there is a pressing need for standardization of tuberculosis data management. The use of laboratory data is recommended. The example of Malaysia is relevant: they have recently revised their tuberculosis information system to bring it in line with WHO guidelines. However, the current information systems in the IBC in the Region make it difficult to conduct a cohort analysis of outcomes.

On ageing, the central question is whether there is still ongoing transmission among the elderly. Surveillance and contact investigation are critical in answering this question. The literature on tuberculosis and ageing is mostly from Japan, where tuberculosis is largely a problem of the elderly. There is an ongoing discussion on preventive therapy. There is, however, a need for improvement of tuberculosis treatment (DOTS) and for the prevention of nosocomial infections.

With respect to screening, case finding should include active measures, with targeted interventions in selected groups. There is also a need for evidence on cost-effectiveness. In Hong Kong, China, contact examination is ongoing. The mean interval between detection of contact and index case is one month.

Defaulter tracing can be critical, although prevention of defaulting is a better strategy than tracing of defaulters. In this respect, motivating health care workers has been observed to have a greater impact than motivating patients. In the Republic of Korea, health workers have even been able to retrieve defaulters from the private sector.

In the discussions, participants agreed that, except in the case of BCG and defaulter tracing or screening, there appeared to be no clear consensus on possible interventions to tackle the issues.

### 2.4 Accelerating DOTS in High-Burden Countries

#### 2.4.1 Situation of DOTS Implementation

The seven HBC in the Region each prepared a poster presentation summarizing progress in DOTS implementation and expansion.

Cambodia: A new national tuberculosis centre has been constructed and a national policy and strategy for tuberculosis control has been developed. An ICC has been set-up. DOTS expansion has been developed to the health centre and community
levels. A quality control system for sputum smear examination and a tuberculosis screening clinic has been set-up for people living with HIV/AIDS (PHA).

China: In China, 64% of the population now has access to DOTS and the estimated smear-positive case detection rate under DOTS is 34%. The Government has developed a 10-year plan (2001–10) with the aim of expanding DOTS nationwide. The Central Government provides US$ 4.8 million per year for tuberculosis control, with support also received from a grant from the Government of Japan and the World Bank/Department of International Development of the United Kingdom (DFID). Challenges include sustaining DOTS, ensuring adequate human resources and securing funding for DOTS expansion. The aim in 2002 is to expand to 70% of the population.

The Lao People's Democratic Republic: Challenges for DOTS expansion include strengthening of central management in the face of restructuring. At the peripheral level, there is a need to further expand DOTS access to the village level. The Ministry of Health also plans to expand partner agency coordination and submit a proposal to the GFATM on tuberculosis. In 2002, continued support for the NTP will continue to be received from the Damien Foundation, Belgium.

Mongolia: 100% DOTS coverage has been achieved, with a 68.3% DOTS case detection rate and an 87% treatment success rate. A five-year development plan for the NTP has been established, and is awaiting government approval. A Steering Committee on Tuberculosis/HIV has been established. Drug supply to the end of 2002 has been ensured through the cooperation of the Danish Agency for Development Assistance (DANIDA). A main challenge now is to sustain the quality of DOTS and ensure continued drug supplies. Human resource development is also needed, and supervision and monitoring require development.

Papua New Guinea: Tuberculosis is a major health problem and areas under DOTS have shown improved tuberculosis control compared with other areas. Only a small proportion of the country is covered by DOTS. A Tuberculosis Plan of Action, 2000–05, has been developed as part of the National Health Plan, 2001–10. Partner agency coordination has improved.

The Philippines: The Five-year DOTS Expansion Plan has resulted in increased DOTS coverage to 97%, with an 86% success rate, from 1997–2001. The second phase (2001–05) of the plan has faced challenges in the face of health sector reform. The Philippine Coalition against Tuberculosis (PhilCAT) has coordinated with the Department of Health to develop a mechanism for public-private collaboration and set up a pilot project for public-private mix DOTS, in collaboration with WHO and CDC.

Vietnam: Vietnam has a 90% cure rate and an 80% case detection rate. Recent achievements include a five-year action plan, a stable drug supply, and integration of tuberculosis control and primary health care in prisons and remote and highland
areas. The country faces challenges such as reaching remote populations, tackling HIV in selected areas and dealing with the growing private sector, especially in cities. Current financing is from the Government of Viet Nam, the World Bank, KNCV, the Medical Committee Netherlands Viet Nam (MCNV), the Government of the Netherlands and CDC.

2.4.2 CHALLENGES FOR ACCELERATING DOTS

The second session on high-burden countries started with country presentations on the situation and key constraints to DOTS expansion in each. Countries were requested to prioritize three identified constraints from a list of six. The country presentations were followed by presentations from key donors on their response to the situation in the HBC, including a presentation on the GFATM. Dr Daniel Chin, Medical Officer, Tuberculosis, Office of the WHO Representative in China, summarized the discussions from this session.

An overview of the country presentations is available in Table 2 below. Six of the seven HBC identified programme management as a key constraint, stressing the need to maintain the quality of DOTS during expansion. Countries feel that supervision and monitoring of the programme is insufficient. The main reasons for this include: limited managerial capacity, especially at central level; decentralization of health services; difficult geographical terrain; and lack of transportation. Improved tuberculosis surveillance is needed. DOTS expansion in hard-to-reach areas and populations (e.g., persons living in remote areas, intravenous drug users, homeless persons and migrants) remains a challenge. In discussions on programme management, participants emphasized the need to tackle the issue of health sector reform and decentralization; the need to maintain a strong central tuberculosis unit; the need to identify a person accountable for the tuberculosis programme at all levels; the need to identify key tasks for DOTS and hold the programme accountable for carrying them out, regardless of the structure; the need to identify other resources for DOTS during health sector reform; and the need for training for programme managers (both high-level and at lower levels).

Six of the seven HBC also identified human resources as a key constraint, emphasizing the need to increase staffing, especially at central level; to provide more training, especially for programme managers; and to improve staff motivation, in view of low wages. It is recognized that strengthening is essential to ensure the quality of DOTS during expansion. There is also a need to better understand the ability of the peripheral system to carry out DOTS (in light of weaker capacity at the peripheral level to implement DOTS).
<table>
<thead>
<tr>
<th>Country</th>
<th>Financial gap</th>
<th>Human resources</th>
<th>Program management</th>
<th>Drug supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambodia</td>
<td>20-40% over five years</td>
<td>More capacity building and staff motivation</td>
<td>Need to increase access to tuberculosis services (through general health services, IEC, active case-finding); DOTS in difficult areas</td>
<td></td>
</tr>
<tr>
<td>China</td>
<td>45% funding gap over five years (but only 22%, once WB/DFID loan project approved)</td>
<td>Need to increase staffing at all levels; improve capacity of staff, including training of programme managers</td>
<td>Need to improve tuberculosis surveillance, programme assessment, QC programme, and supervision (including need for vehicles)</td>
<td></td>
</tr>
<tr>
<td>Lao People's Democratic Republic</td>
<td>42% funding gap over five years</td>
<td>Staff need to be trained to manage programme</td>
<td>Need to decentralize programme to village level; need for increased supervision; need for increased managerial capacity at central level</td>
<td></td>
</tr>
<tr>
<td>Mongolia</td>
<td>10% funding gap (present to 2005)</td>
<td>Increased % of doctors, nurses, midwives need to be trained; high staff turnover a problem</td>
<td>Funding for drugs is unreliable</td>
<td></td>
</tr>
<tr>
<td>Papua New Guinea</td>
<td>Funding gap of 21% over five year</td>
<td>Need to strengthen central tuberculosis unit leadership and staffing; increased training of lower-level staff</td>
<td>Need to improve management capacity of central tuberculosis unit; need to improve coordination, monitoring and supervision; geographic areas diverse</td>
<td></td>
</tr>
<tr>
<td>The Philippines</td>
<td></td>
<td>Need to increase staffing at all levels; retraining of staff</td>
<td>Need to maintain quality of DOTS during expansion; insufficient supervision and monitoring; need to improve timeliness and completeness of reporting system</td>
<td></td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Funding gap of 49% over five years (present to 2006)</td>
<td>Limited managerial capacity of staff at all levels; delays in procurement; difficult to provide DOTS to IVDU, homeless and migrant population</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
All seven HBC mentioned financial constraints, but only six identified them as a key constraint. During discussions, countries mentioned the need to better understand how countries put together their requirements and gap, and the need to better understand differences between countries. Drug supply is a key constraint for Mongolia and the Philippines, whereas Viet Nam considers the lack of a good laboratory network as a key constraint.

2.4.3 PARTNERS' SUPPORT FOR ACCELERATING DOTS

Following the country presentations and discussions, selected partners made presentations about their ongoing and planned future support for the WHO Western Pacific Regional Office Stop TB Project.

AusAID: Funding is provided through bilateral, regional and multilateral areas of AusAID. Last year, AusAID provided US$ 675 000 for tuberculosis control, and US$ 250 000 for tuberculosis/HIV co-infection activities. Most funding was used to provide support for WHO posts. Funds are also provided for development of the sectorwide approach and the laboratory network. Proposals for the coming year have only just been received by WHO and are currently being assessed. AusAID is committed to continuing support for the posts already funded.

The Canadian International Development Agency (CIDA): The "Program against hunger, malnutrition and disease" is responsible for most of the funding allocated by CIDA for tuberculosis. Globally, CIDA funding for tuberculosis increased markedly to US$ 16 million last year, and it is expected that this will be maintained next year. Key partners include WHO, the Global Drug Facility (GDF), KNCV, and World Vision. CIDA is committed to supporting cost-effective DOTS programmes in developing countries. One tool used is the "cost for treatment success" and this analysis is done in collaboration with WHO. CIDA encourages countries to review proposal guidelines and templates under the GFATM, which is a source of funds for tuberculosis control.

Damien Foundation Belgium (DFB): DFB supports leprosy and tuberculosis control programmes. In the WHO Western Pacific Region, tuberculosis programmes are supported in China and the Lao People's Democratic Republic, at an overall cost of US$1 million. In the coming year this may increase to US$1.5 million. Support is focused on training, case finding and supervision at every level. There is concentration on training in the periphery.

Japan International Cooperation Agency (JICA): The Philippines and Cambodia have major programmes for expansion of DOTS, funded by JICA. Over US$ 20 million was provided globally in the last year. The Government of Japan has established the Okinawa Infectious Diseases Initiative, which includes tuberculosis control. JICA will continue full support for tuberculosis control in the Region. Priority areas include institution building and strengthening mechanisms between central agencies and the peripheral institutions. Human resource development,
inser vice training, strengthening curative services, ensuring drug supply and combating emerging issues, such as tuberculosis/HIV co-infection, are also priorities. Extension of the support to the Cambodian NTP is currently under consideration. An evaluation of the Philippine JICA tuberculosis project will take place in March. Support for consultancies and training in Japan is given to Papua New Guinea.

Medicos del Mundo: Medicos del Mundo focuses on infectious diseases and works in the Philippines and Viet Nam. The organization has provided binocular microscopes and supports supervision, monitoring and DOTS training in seven provinces. A research and training centre has been established in Manila. Partner coordination in the Philippines is organized through the “PACT” meetings. There is a plan to monitor MDR tuberculosis and setup HIV testing in tuberculosis patients. A pilot project for tuberculosis in children will also be set up. A survey on knowledge of and attitudes towards tuberculosis has been undertaken in Manila.

USAID: Over the past four years, USAID has funded tuberculosis control in Cambodia, allocating US $2.2 million and especially targeting DOTS expansion in disadvantaged areas of Phnom Penh. USAID has also allocated US$2 million for the Philippines over the past four years, focusing on national DOTS expansion, models for tuberculosis treatment in the private sector, MDR tuberculosis and assistance to the Makati Medical Center. In Viet Nam funding has been approximately US $340 000, primarily for management training, operations research and information systems. USAID has also allocated US $850 000 for the WHO Western Pacific Region Stop TB Project. It is expected that funding will be maintained or even increased in the coming year.

World Bank: Tuberculosis control is a corporate priority for the World Bank. Over US$ 450 million will have been allocated globally for cumulative commitments to tuberculosis control by the end of this fiscal year. The World Bank was one of the founding partners of the Stop TB partnership. World Bank funds are directed to Cambodia (disease control and health), China (infectious and epidemic disease control, basic health services) and Viet Nam (national health support). Several projects are in the pipeline in Cambodia, China, the Lao People’s Democratic Republic, the Philippines and Viet Nam.

Global Fund to Fight AIDS, TB and Malaria (GFATM): Dr Ren Minghui presented an overview of current developments on the GFATM and the Asia Pacific Biregional Workshop on GFATM, held in Beijing, China, from 7-9 February 2002. The deadline for the first call for proposals was March 2002. The workshop suggested that the Asia-Pacific region should not be neglected by the Global Fund. The workshop also recommended that country coordinating mechanisms should hold wider consultations at local level. The workshop recommended that WHO should provide technical support for proper implementation and monitoring of funded
projects. Concern was expressed about mechanisms for ensuring support through the Asia-Pacific Region.

2.4.4 HIGH-BURDEN COUNTRIES TUBERCULOSIS MANAGERS' WORKSHOP ON DOTS EXPANSION

National tuberculosis programme managers from high-prevalence countries participated in a workshop on DOTS expansion. Participants considered the following questions:

- to what extent do current operational indicators that measure programme performance reflect real DOTS coverage; and
- what can be done to improve the monitoring of programme performance?

In a lively discussion, it became clear that, in the countries concerned, different indicators are used to measure DOTS coverage. The manner in which DOTS is implemented varies between countries, depending on the level of health service implementation. Thus, comparing DOTS coverage between countries, or even within countries, can sometimes be difficult. For example, coverage through hospital-based DOTS has a different meaning from coverage through community-based DOTS. Similarly, DOTS coverage by province or district is not the same as DOTS coverage by microscopy or treatment unit. Participants agreed on the need to standardize the method of measuring DOTS coverage. Furthermore, participants agreed that, rather than assessing DOTS coverage, it is necessary to monitor the quality of DOTS implementation.

2.5 TUBERCULOSIS/HIV REGIONAL STRATEGY

Dr Masami Fujita, Medical Officer, Sexually Transmitted Infections including HIV/AIDS, WHO Western Pacific Regional Office and Dr Pieter van Maaren, Medical Officer, Stop TB, WHO Western Pacific Regional Office made presentations during a session on tuberculosis/HIV. The draft Regional Tuberculosis/HIV Framework was presented, followed by background information on the interactions between tuberculosis and HIV, as well as recent developments at the global level.

The regional situation is characterized by high a tuberculosis burden and various stages of HIV epidemic, with a rapid increase in HIV, relatively strong health infrastructure, and governments playing major roles in tuberculosis and AIDS programmes. Within that context, the Framework aims to facilitate collaboration between tuberculosis and AIDS programmes, focusing on interfaces, rather than creating new tuberculosis/HIV programmes.

The objectives of the Regional Tuberculosis/HIV Framework are to provide information on the implications of tuberculosis/HIV for national tuberculosis and AIDS programmes and to guide countries in identifying areas for collaboration between the two programmes. Major components of the Framework include tuberculosis/HIV surveillance, case finding and referral as entry points, and interventions at the interface between the two programmes.
In the discussion, several issues related to voluntary counselling and HIV testing (VCT) were raised, including confidentiality of VCT, particularly in tuberculosis clinics, additional workload of VCT for tuberculosis and AIDS services, and legal aspects of VCT in the workplace. Also discussed were preventive therapy with Isoniazid (INH), inclusion of antiretroviral (ARV) in the Framework, supply and availability of HIV test kits and risk of tuberculosis transmission to PHA when they are referred to tuberculosis clinics for diagnosis. It was suggested that features of the Regional Tuberculosis/HIV Framework should be indicated in comparison with the global guidelines.

2.6 WESTERN PACIFIC REGIONAL OFFICE STRATEGIC PLAN 2002-2003

Dr Takeshi Kasai, Medical Officer, Stop TB, WHO Western Pacific Regional Office, presented the Regional Office's strategic plan for 2002-2003. After a foundational phase of activities between 1999 and 2001, the Western Pacific Regional Office has moved into an acceleration phase with the launching of the Stop TB Special Project (2001-05). The challenge is large, but with stronger partnerships, improved management capacity, and better surveillance and monitoring, the goal is attainable.

An important strategy for monitoring DOTS implementation in HBC is to undertake in-depth external country reviews that will identify issues and constraints hampering effective implementation and recommend ways to overcome them. The Western Pacific Regional Office will field annual supervision missions to follow up on the recommendations and strengthen country capacity at central level. Another method will be the establishment of annual NTP managers' meetings, rotating among the HBC and providing a forum for discussing common issues and exchanging experiences.

Emerging regional challenges include tuberculosis/HIV, the need to strengthen laboratory networks and public-private mix DOTS. The Regional Tuberculosis/HIV Framework will form the basis for the Western Pacific Regional Office's collaboration with WHO's South-East Asia Regional Office in the area of tuberculosis/HIV management. The Western Pacific Regional Office will establish a formal laboratory network throughout the Region to assist in drug-resistance surveillance, ensure quality assurance and undertake regional adaptation of global quality assurance guidelines. Initiatives for private sector involvement are planned in the Philippines and Viet Nam.

To accelerate DOTS implementation, the Western Pacific Regional Office will sustain strong political commitment through the annual meeting of its Regional Committee (next in September 2002). It will support the activation of all national ICCs and coordinate donor and partner inputs, linking them to country needs. The Regional Office will provide strong technical support to establish good quality drug management systems at the country level, particularly on issues such as strengthening drug supply systems, promoting fixed dose combinations and regularly reviewing drug needs. Monitoring and supervision will be strengthened through external evaluation and detailed country monitoring and supervision plans.
The Western Pacific Regional Office will support surveillance on prevalence and drug resistance. Capacity building will remain an important area for assistance.

Staffing requirements to implement the strategic plan are shown in Table 3.

**Table 3. WHO Stop TB staffing requirements at country and regional levels**

**1st Phase (1999-2001)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Total staff required</th>
<th>Funding secured</th>
<th>Positions filled</th>
<th>Source of funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional office (Manila)</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>WHO, Govt. of Japan, USAID</td>
</tr>
<tr>
<td>Country offices: China,</td>
<td>5</td>
<td>5</td>
<td>2 (3 to be filled by 2nd quarter 2002)</td>
<td>AusAID, Govt. of Japan</td>
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<tr>
<td>Pacific Islands, Philippines, Papua New Guinea, Vietnam</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>10</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

**2nd Phase (2002-2003)**

<table>
<thead>
<tr>
<th>Location</th>
<th>Total staff required (incl. 1st phase)</th>
<th>Funding secured (incl. 1st phase)</th>
<th>Positions filled</th>
<th>Source of funds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional office (Manila)</td>
<td>8</td>
<td>5</td>
<td>3</td>
<td>WHO, Govt. of Japan, USAID</td>
</tr>
<tr>
<td>Country offices</td>
<td>9</td>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>10</td>
<td>7</td>
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</table>

Figure 5 shows the breakdown of the budget for Stop TB activities at the WHO Western Pacific Regional Office level for 2002-2003. The total amount required for these activities is US$ 8.2 million.

**FIGURE 5:**

- Surveillance
- Country Support
- Staff Country Base
- Political commitment and partnership development
- Strategy development and coordination
- Staff Regional Office base

Total: $8.2 million
To achieve the priority activities highlighted in the 2002-2003 plan, the Stop TB unit will require more funding than is presently available. An overview of the funding gap for the plan is shown in Figure 6.

![Pie chart showing budget available and gap]

Total Requirement: $8.2 million; Gap: $2.57 million

2.7 REGIONAL INTERAGENCY COORDINATING COMMITTEE SESSION

The Regional Interagency Coordinating Committee (ICC) met to discuss and coordinate the partnership response to the Stop TB Special Project. This was the third meeting of the ICC. The overall aim of the third meeting of the ICC was to continue to determine mechanisms to respond to country needs through partnership. Partners represented included AusAID, CIDA, the Damien Foundation Belgium, JICA, Medicos del Mundo, USAID and the World Bank. The following ICC members were appointed to serve as officers for the meeting:

Chair: Mr Christopher Lovelace, World Bank
Vice-Chair: Dr Naoyuki Kobayashi, JICA
Rapporteur: Dr Kylie Monro, AusAID

Most of the key partners who participated in the session have made strong commitments to supporting tuberculosis control efforts, globally, regionally and at country level (for more details, see summary in section 2.4.3 of this report). Following on from the discussions during the session on high-burden countries, participants reviewed ongoing and planned future support for tuberculosis prevention and control activities in the Region. The key conclusions and recommendations of the regional ICC are available in section 3.2 of this report.
3. CONCLUSIONS AND RECOMMENDATIONS OF THE MEETING

3.1 TAG CONCLUSIONS AND RECOMMENDATIONS

A. PROGRESS AND STATUS OF STOP TB SPECIAL PROJECT IN THE WESTERN PACIFIC REGION

Conclusions:

1. TAG members support the progress made under the Stop TB Special Project and commends Member States, partners, and the Western Pacific Regional Office on their successful achievements and collaboration.
2. The TAG recognizes that the global community will need to step up their efforts and support to achieve the global targets.
3. TAG members support the strategic plan for 2002-2003 as practical and sound.
4. Notwithstanding the commendable progress since the start of the Stop TB Special Project, the result of strong regional partnerships forged by the Western Pacific Regional Office, the TAG recognizes that additional financial support is required to implement the action plan.

Recommendations for the Western Pacific Regional Office:

1. TAG members advise the Western Pacific Regional Office to exert its full efforts for the effective and timely implementation of the strategic plan for 2002-2003.
2. The TAG suggests that last year’s recommendations should be fully implemented.

B. TUBERCULOSIS STAGNATION IN INTERMEDIATE-BURDEN COUNTRIES

Conclusions:

1. TAG members conclude that, with the exception of the Republic of Korea, tuberculosis decline has stagnated in the intermediate-burden countries.
2. TAG members support the Western Pacific Regional Office’s analysis regarding the major factors contributing to the stagnation, noting that, apart from ageing, the contributing factors are country-specific particularly with respect to transmission, which is susceptible to control.
3. Data on treatment outcomes of tuberculosis notified cases are not available on a routine basis in every country. There is also wide variation in the quality of available data. Available data require further analysis.
4. Outside the WHO DOTS framework, the meaning of surveillance and control terminology is inconsistently used.
5. The TAG confirms the need for further country-specific analysis of factors responsible for stagnation of tuberculosis decline, to facilitate refinement of appropriate strategies in each country to address the stagnation.

6. It has been confirmed that BCG revaccination is not an effective strategy.

Recommendations for the Western Pacific Regional Office:

1. The Western Pacific Regional Office should encourage the commissioning of independent national programme reviews of each intermediate-burden country, which could contribute to further identification of contributing factors.

2. The TAG suggests that the Western Pacific Regional Office should undertake a process to generate consensus on the definition of tuberculosis and surveillance and control nomenclature specific to intermediate-burden countries, together with countries in the elimination phase (Australia and New Zealand).

3. The Western Pacific Regional Office should consider establishing a systematic approach to the introduction of culture of specimens among intermediate-burden countries.

4. Once a contributing factor is identified, the Western Pacific Regional Office should support the development of intervention options, presenting an analysis of the various advantages and disadvantages and their suitability for various countries. This should be made available to countries to enable them to choose and develop an appropriate mix of strategies, given their own specific context.

Recommendations for countries:

1. Further research and analysis of factors contributing to stagnation in tuberculosis decline should be conducted on a country-by-country basis, as needed, particularly with regard to the fraction of incidence that is susceptible to control. The TAG suggests that enhanced surveillance in the form of special studies may be appropriate in intermediate-burden countries to further define operational contributions to stagnation.

2. The TAG suggests that countries should undertake or strengthen cohort analysis of treatment outcome of notified cases, to track trends and enable timely intervention.

3. Countries are advised to use laboratory data (including culture of specimens, as appropriate), where such data are available and reliable, for verification or confirmation of notification data and improvement of tuberculosis diagnosis.

4. In the evaluation of national tuberculosis statistics, cases among immigrants and foreign-born persons should be included.

5. The TAG urges countries to review existing programme practices, with special reference to surveillance, and to identify and implement an
appropriate mix of strategies, based on their own specific context, to address stagnation in tuberculosis decline.

6. Countries should review the status of BCG revaccination and take appropriate action.

C. ACCELERATING DOTS IN HIGH-BURDEN COUNTRIES

Conclusions:

1. The TAG commends all seven high-burden countries for having completed the finalization of their five-year budgeted action plans.

2. The TAG observes that partner support has been achieved for the progress of DOTS expansion in high-burden countries. However, the national tuberculosis programmes in high-burden countries still require strong support from governments and partners.

3. The TAG expresses concern about the four-fold increase for the period 1992-1999 in Papua New Guinea.

4. The TAG notes the low case detection rates in Cambodia, China and the Lao People’s Democratic Republic.

5. The TAG confirms the major constraints identified, including the financial gap (especially for tuberculosis drug supply), human resources capacity at all levels of the health service, and programme management, with special consideration of supervision and monitoring.

6. The TAG notes that identifiable funding gaps remain, after considering projected country, partner and WHO contributions.

7. Countries are encouraged to take advantage of the opportunities and potential benefits opened up by health sector reforms. Proposed actions include expanded training programmes for general managers and others (with international support) and obtaining the cooperation and collaboration of the private sector and academia.

8. Stronger advocacy is required, not only at national but also at local levels, aimed at the general public, health professionals, political leaders and funding agencies, including national and community organizations. This should include a realistic appraisal of the labour-intensive nature of tuberculosis surveillance and control, as well as information, education and communication (IEC) activities.

9. The Global Fund to Fight AIDS, TB and Malaria (GFATM) has the potential to contribute to closing the funding gap. Some Member States have prepared applications based on internal plans.

Recommendations for partners:

1. Partners have an important role to play and the TAG urges their continued financial commitment to support country-specific needs,
which will remain critical to the successful achievement of Stop TB goals by 2005.

2. The TAG recommends strengthened coordination among partners at all levels (global, regional and country).

Recommendations for the Western Pacific Regional Office:

1. The Western Pacific Regional Office should identify what actions are required on the part of each of the stakeholders (countries, partners and WHO) to accelerate DOTS in the high-burden countries.

2. The Western Pacific Regional Office should organize a meeting of NTP managers to step up implementation of the strategic plan.

3. Since effective monitoring and supervision will be critical for accelerating DOTS implementation in the Region, the Western Pacific Regional Office should support countries in undertaking an annual review of the implementation status of tuberculosis control, beginning with an external evaluation.

4. The Western Pacific Regional Office should strengthen its technical support for emerging issues, including MDR tuberculosis and PPMD.

5. Upon request, the Western Pacific Regional Office should assist countries in making submissions to the GFATM for the current and succeeding rounds of funding, and consider its future involvement in monitoring and evaluation.

Recommendations for countries:

1. The TAG urges countries to step up their efforts in implementing tuberculosis control activities to achieve the stated goal of DOTS for all by 2005.

2. Countries should strengthen their efforts to set up national ICCs and ensure that they become fully operational by June 2002.

3. TAG members encourage countries to strengthen central technical capacity for monitoring and supervision of DOTS to levels appropriate to the stage of development of the DOTS programme and the structure and organization of the health services.

4. Tuberculosis technical coordinators, either part-time or full-time, who are identifiable, responsible and accountable for all aspects of DOTS implementation, should be appointed at all levels of the health service.

5. When countries make a submission for funding to the GFATM, they should do so on the basis of already developed five-year budgeted national tuberculosis plans, supported by the TAG.

6. Countries should have an ongoing commitment to improving the efficiency and effectiveness of resources at the periphery, including coverage of quality diagnostic services.
D. TUBERCULOSIS/HIV PLANS AND ACTIVITIES

Conclusions:

1. TAG members congratulate the WHO Western Pacific Regional Office on the collaboration between its HIV and tuberculosis units in developing the Regional Tuberculosis/HIV Framework and support the Framework.

Recommendations for the Western Pacific Regional Office:

1. TAG members urge the Western Pacific Regional Office to finalize the Regional Tuberculosis/HIV Framework and make it available to countries as a basis for phased implementation of tuberculosis/HIV activities.
2. TAG members suggest that the Western Pacific Regional Office should continue organizing joint meetings of HIV and tuberculosis managers at the regional level.
3. TAG members suggest that the Western Pacific Regional Office should provide technical support to countries to develop national strategic plans for tuberculosis/HIV activities, based on the Regional Tuberculosis/HIV Framework. This planning should be incorporated into existing tuberculosis and HIV plans.
4. The TAG advises that the Western Pacific Regional Office should provide technical assistance to countries for tuberculosis/HIV surveillance and interventions.

Recommendations for countries:

1. The TAG encourages countries to establish or strengthen a national coordination mechanism between tuberculosis and HIV programmes and to strengthen tuberculosis/HIV surveillance and interventions, with technical support from the Western Pacific Regional Office as required.
2. The TAG advises countries to ensure complementarity between their respective tuberculosis and HIV/AIDS programmes' strengths and weaknesses.

3.2 REGIONAL ICC CONCLUSIONS AND RECOMMENDATIONS

Conclusions:

1. The ICC appreciates the progress made to improve coordination between partners and Member States and areas in the Region for DOTS implementation and expansion through the national interagency coordinating committees.
2. Partner agencies recognize the importance of the Stop TB Special Project and most anticipate continued support at current or greater levels.
3. The ICC notes that the Stop TB Special Project still faces challenges in addressing national shortfalls for implementation of country plans of
action and development of human resource capacity and programme management.

4. The ICC notes the discussion by the TAG on improving the quality of DOTS implementation in some areas.

5. The ICC commends the cooperation of WHO in assisting countries that have requested support in developing proposals to the Global Fund to fight AIDS, TB and Malaria (GFATM).

Recommendations:

1. The ICC recommends that it should continue to receive feedback from national tuberculosis programme managers, through WHO, on constraints in DOTS implementation.
   Focus: WHO, in collaboration with Member States and areas

2. A document on the roles and expected outcomes of the Regional ICC should be developed and distributed to partner agencies and national tuberculosis programmes.
   Focus: WHO, in consultation with partners

3. National ICCs should receive strong leadership from government, and departments other than health should also be represented.
   Focus: Member States and areas

4. The ICC commends WHO on preparing financial and budgetary information for implementation of the national five-year plans of action and recommends that this information should be made available to partner agencies before Regional ICC meetings.
   Focus: WHO

5. The ICC suggests that it should receive information on the priority given to tuberculosis within the overall health system.
   Focus: Member States and areas, coordinated through WHO

6. The roles of national and regional ICCs are different, with more specific information discussed at the national level. However, some partners are not represented on all national ICCs. Therefore, the ICC suggests that a report on the activities of national ICCs in the Region should be given to the Regional ICC members prior to their meetings. This would lead to improved financial monitoring and coordination.
   Focus: Member States and areas, coordinated through WHO

7. It is recommended that more effort should be made at the national level to coordinate between the public and private sector in DOTS implementation, including through national ICCs in some countries.
   Focus: Member States and areas

8. The ICC recommends that more time should be allocated for internal discussions within the Regional ICC in future meetings.
   Focus: WHO
# Third Technical Advisory Group (TAG) Meeting to Stop TB in the Western Pacific Region

**17-19 February 2002, Osaka, Japan**

## Timetable

<table>
<thead>
<tr>
<th>Time</th>
<th>Sunday, 17 February</th>
<th>Monday, 18 February</th>
<th>Tuesday, 19 February</th>
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<tbody>
<tr>
<td>0800</td>
<td>Registration</td>
<td>(7) Summary of poster session (35 min)</td>
<td>(19) High burden country report and discussion</td>
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<tr>
<td>0830-0930</td>
<td>(1) Opening ceremony</td>
<td>(8) Global DOTS Expansion Plan Working Group (10 min)</td>
<td>(20) Intermediate burden country report and discussion</td>
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<td></td>
<td>Opening remarks by Dr Shigeru Omi, Regional Director of WHO/WPRO</td>
<td>(9) TB/HIV – presentation of regional strategy (30 min)</td>
<td>(21) Review of conclusions and recommendations of TAG members</td>
</tr>
<tr>
<td>1000-1200</td>
<td>PHOTO SESSION/COFFEE BREAK</td>
<td>(10) WPRO strategic plan 2002-2003 (15 min)</td>
<td>(22) Briefing of Urban TB Summit</td>
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<tr>
<td>1330-1500</td>
<td>(5) Country presentations and Epidemiology in intermediate burden countries</td>
<td>(11) “Accelerating DOTS” in high burden countries: NTP managers and Partners</td>
<td>(23) ICC report and conclusions</td>
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<td>a. Country presentations</td>
<td>(24) Closing ceremony</td>
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<td>- financial gap</td>
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<td></td>
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<td>- partner coordination</td>
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<td>- human resources</td>
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<td>- drug supply</td>
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<td>- laboratory network</td>
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<td>- programme management</td>
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<td>b. Partners support: Current and future plans at country and regional levels</td>
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<tr>
<td>1530-1630</td>
<td>COFFEE BREAK</td>
<td>(12) Intermediate burden countries (IBC) technical discussion:</td>
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<tr>
<td>1830</td>
<td>WPRO Reception</td>
<td>a. Europe experience</td>
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<td>b. US experience</td>
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<td>c. BCG</td>
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<td></td>
<td>d. Information system</td>
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<tr>
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<td>(13) “Accelerating DOTS” (cont.)</td>
<td></td>
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<td>b. Partners support: (cont.)</td>
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<td></td>
<td></td>
<td>c. Consensus on country/partner commitments</td>
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<td>(14) Global Funds to Fight AIDS, TB and Malaria (GFATM)</td>
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<td>(15) IBC technical discussion: (cont.)</td>
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<td>a. Ageing</td>
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<td>b. Screening</td>
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<td>c. Defaulters tracing</td>
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<td>(16) Partners meeting (ICC)</td>
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<td>(17) HBC meeting</td>
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<td>(18) TAG Members Meeting</td>
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</table>
ANNEX 2

LIST OF TECHNICAL ADVISORY GROUP MEMBERS, PARTICIPANTS, CONSULTANTS, RESOURCE PERSONS, REPRESENTATIVES OF PARTNER AGENCIES AND SECRETARIAT

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OPENING REMARKS OF THE REGIONAL DIRECTOR AT THE THIRD TECHNICAL ADVISORY GROUP (TAG) MEETING
17-19 FEBRUARY, 2002
OSAKA, JAPAN

Distinguished guests, His excellency, the Vice Minister of Health of Japan, TAG members, ladies and gentlemen:

One third of the global TB burden is borne by the Western Pacific Region. A staggering 1 000 people, most of them in their most productive years, die of TB every day. Their death leaves many families struggling to make ends meet, clearly illustrating how closely TB is linked to poverty. The declaration of a TB crisis in 1999 by the Regional Committee for the Western Pacific, and the subsequent establishment of the Stop TB special project were essential steps towards WHO's goal of reducing the TB burden in the Region by half by 2010. If this can be achieved, more than one million lives may be saved. By reducing the TB burden, the special project will also make a major contribution towards the alleviation of poverty in the Region.

Two years have passed since the endorsement of the Regional Strategy to Stop TB by the First TB TAG. Much has happened since. WHO, in close collaboration with Member States and various partners, has been able to establish a strong foundation for the project. Seven high burden countries in the Region now have comprehensive and budgeted five-year plans aimed at stemming the alarming rise of TB in their countries. The second TAG meeting in Beijing last year endorsed these plans as technically sound and strong support was obtained from our partners in the Region.

From a global perspective, the Western Pacific Region is effectively the first to make TB control a priority with well-defined goals and objectives. The response of countries and the generous support by our partners is very encouraging. Other Regions have now joined our initiative.

It is clear that reaching the 2010 target will require stepping up the efforts to achieving 100% DOTS coverage in the Region by 2005. Plans need to be translated into actions, and massive resources are required.

Building on the foundation of the Stop TB special project, WHO urges countries and partners to increase allocations for TB control. The recently established Global Fund to fight AIDS, Tuberculosis and Malaria is a welcome mechanism for countries to accelerate their TB control activities, and so contribute to poverty reduction.

I want to express my appreciation to you, the TAG members. For the third successive year, I believe you will make a major contribution to alleviating the TB problem in our Region. This meeting will discuss the progress made since the previous meeting in Beijing, and make recommendations for countries, and for WHO and its partners, on how to go the extra mile to accelerate the implementation of the WHO recommended DOTS strategy.
Ladies and Gentlemen, TB is not just a problem of the developing countries in our Region. During the last decade, the prevalence stopped declining in several of the more developed countries in the Region. Some of the more affluent countries and areas in the Region, such as Japan, Hong Kong (China) and Singapore, are faced with far higher rates of TB than countries in Europe with similar levels of development. In Japan, for example, Osaka has a TB rate that is higher than that in many of the countries in the Region with a high overall burden of tuberculosis. By hosting this important meeting, Osaka is clearly demonstrating its commitment to addressing the problem of TB.

While ageing populations are a major cause of stagnating TB rates, there are other factors, such as mobile populations, HIV/AIDS, homelessness and drug use. I know that you will be discussing these and I look forward to hearing your suggestions on how we can address these different issues.

It is my sincere hope that all countries, irrespective of the magnitude of their TB burden, and their partners will agree on how we can accelerate the expansion of the DOTS strategy across the Region by 2005.

I want to conclude by expressing my gratitude to the Government of Japan for hosting this important meeting. I would also like to thank the Australian Agency for International Development; the Canadian International Development Agency; the Department for International Development of the UK; the Japan International Cooperation Agency; the United States Agency for International Development; the World Bank, and our other partners for coming to this meeting in support of TB control in the Region.

I wish everyone a productive and successful meeting and hope that through this meeting, our already strong political commitment and partnership will be further strengthened at all levels to fight tuberculosis and poverty in the Western Pacific.

Thank you.
Annex 4

HBC Country Profiles

Country Profile: Cambodia

Map of Cambodia

Tuberculosis Situation in 2000

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>12,014,343</td>
</tr>
<tr>
<td>New pulmonary smear positive</td>
<td>14,823</td>
</tr>
<tr>
<td>New pulmonary smear negative</td>
<td>1,112</td>
</tr>
<tr>
<td>New extra-pulmonary</td>
<td>2,144</td>
</tr>
<tr>
<td>Relapse smear-positive</td>
<td>815</td>
</tr>
<tr>
<td>Failure smear-positive</td>
<td>52</td>
</tr>
<tr>
<td>Treatment after default smear-positive</td>
<td>64</td>
</tr>
<tr>
<td>Total</td>
<td>19,010</td>
</tr>
</tbody>
</table>

Programme Achievements

Year 2000
- Nearly 20,000 total new cases
- Notification rate of smear positive (new & relapse) 130 / 100,000 pop.
- Detection rate of smear (+) cases is 54%
- Cure rate 89%
- TT Success rate 93%

Case notification from 1994 to 2000

Treatment Outcomes

Plan of DOTS Expansion, NTP Cambodia

100% Coverage by the End of 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Health Center</th>
<th>Former District Hospital</th>
<th>Referral Hospital</th>
<th>Central Hospital</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td>455</td>
<td>235</td>
<td>47</td>
<td>585</td>
</tr>
<tr>
<td>2001</td>
<td>462</td>
<td>242</td>
<td>48</td>
<td>589</td>
</tr>
<tr>
<td>2002</td>
<td>466</td>
<td>242</td>
<td>50</td>
<td>588</td>
</tr>
<tr>
<td>2003</td>
<td>472</td>
<td>245</td>
<td>53</td>
<td>589</td>
</tr>
<tr>
<td>2004</td>
<td>473</td>
<td>246</td>
<td>54</td>
<td>589</td>
</tr>
<tr>
<td>2005</td>
<td>475</td>
<td>246</td>
<td>55</td>
<td>589</td>
</tr>
</tbody>
</table>

DOTS in Health Center was implemented in 1996 in 3 HCs as a pilot programme. In 2000, 4 Operational Health Districts with 60 Health Centers were fully covered with DOTS. All 73 Operational Districts with 940 HCs/FDH will be covered by the end of 2005.

Priority Action

- Capacity building and staff motivation
- Improve laboratory capacity and network
- Resources mobilization and co-ordination
- Sustainable financing
- Partnership as a core in achieving objectives
**TRENDS OF CASE DETECTION AND CURE RATES**

![Graph showing trends of case detection and cure rates from 1994 to 2000.]

**MAJOR CHALLENGES**
- Irregularity of funding release
- Staff capacity and motivation
- Roles and functions of various units/staff at all levels
- Resources implication in expanding DOTS to HC
- Early detection & TB/HIV
- Involvement community/IEC activities
- Private sector involvement
- Ensuring free-of-charge services: contributing to addressing poverty

**COUNTRY PROFILE: CHINA**

**MAP OF THE PEOPLE'S REPUBLIC OF CHINA**

**TB SITUATION IN 2000**
- Population at the end of 2000: 1,295,330,000
- Number of all TB cases notification in 2000: 479,007
- Number of new sputum smear-positive pulmonary TB in 2000: 233,430

**FINANCIAL REQUIREMENT (2002−2006)**
- Miscellaneous: 3%
- Programme Management: 24%
- Activities to Increase Case-Detection and Cure Rate: 7%
- Training: 8%
- Diagnosis: 7%
- Drug Supply: 12%
- Staffing: 38%

**FINANCIAL GAP (2002−2006)**
- Funding Gap: 45%
- External Assistance (Committed): 1%
- National Budget Available: 54%

*If the WB/DFID loan will be gained, the funding gap will reduce to 22%.*
**CHALLENGES FACED BY THE NTP**

- Sustainability of DOTS expansion achieved to date cannot be ensured
- Insufficient human resource to expand DOTS at each level, especially TB programme managers
- Insufficient funding to fully expand DOTS
- Cooperation needed between TB control institutions and other health care providers and institutions
- New challenges: TB among mobile population, emergence of drug-resistant TB, and TB/HIV co-epidemic

**COUNTRY PROFILE: LAO PDR**

**DOTS COVERAGE 1995–2001**

- 14 provinces/18
- 82 districts/143
- 3 788 720 of population 72%
- Sm+ treated SCC 95%

**PROGRAM MANAGEMENT**

- Need for a single national TB surveillance system
- Need for ongoing assessment of program performance using the key indicators
- Need for supervision of program at each level
- Need for quality control mechanisms, e.g. sputum microscopy
- Sufficient vehicles for conducting supervision of program

**HUMAN RESOURCES**

- Insufficient staff to expand DOTS at each level, especially TB programme managers
- Need for training of TB programme managers
- Insufficient capacity, especially to carry out assessment to the monitoring of local program, TB surveillance, IEC, social assessment and operational research
- Need for training the new staff

**SOURCES OF FINANCING LAO PDR NTP 2001–2005**

- Financing Gap 42%
- WHO 1%
- External Donors 29%
- Government (Salaries) 28%
**TB Control Status 1995–2001**

- **New + per 100,000**
- **Case detection rate per 100,000**
- **DOTS completion rate for sm+ cases**

**Treatment Outcome 1999**

- Cured
- Treatment Completed
- Failed
- Died
- Defaulted
- Transfer Out

**Projected TB Case Detection Lao PDR 2001–2005**

**Breakdown of Budget Requirements Lao PDR NTP 2001–**

- **Increasing Case Detection and Cure 9%**
- **Programme Management 46%**
- **Drug Supply 12%**
- **Training 6%**
- **Diagnosis 5%**

**Issues and Constraints**

- Socioeconomic
- Geography
- Human resources
- Administration
- Delays in funds reduced
- Restructuring has still not been solved
- Private sector involvement
- HIV / AIDS

**Training Courses Planned by the Lao NTP 2001–2005**

<table>
<thead>
<tr>
<th>Year</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial training (number of courses)</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>DOTS Implementing (number of trainees)</td>
<td>21</td>
<td>57</td>
<td>42</td>
<td>33</td>
</tr>
<tr>
<td>Refresher course (number of trainees)</td>
<td>108</td>
<td>123</td>
<td>90</td>
<td>153</td>
</tr>
<tr>
<td>(2 days) for districts (number of trainees)</td>
<td>10</td>
<td>20</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Time of provincial evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lab-technician training (number of courses)</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(6 days) in Vientiane, (number of trainees)</td>
<td>10</td>
<td>10</td>
<td>10</td>
<td>10</td>
</tr>
</tbody>
</table>
COUNTRY PROFILE: MONGOLIA

**TB Burden**
- **Case notification**: 14.3 per 10,000 pop (2001)
- **Estimated incidence**: 5000 per year (WHO)
- **Case detection rate**: 68.3%
- **DOTS coverage**: 100% (since 1999)
- **DOTS enrolment rate**: 0.0
- **Treatment success rate**: 87.0% (2001)
- **MDR rate (primary)**: 1.0% (2000)

**Drug Supply**
- **Fixed dose blister pack usage**
  \[(\text{H}_{12s}+\text{R}_{22s}) \times 2+\text{Z}_{100s}+\text{E}_{100s}\]
  (WOLFS pharmaceuticals, Belgium)
- **Measures to ensure drug quality**
  (We have drug control system)
- **Key constraints/challenges**
  (Funding is not reliable)

**TB Notification Rates per 100,000 Pop**

**Program Management**
- The NTP follows the WHO recommended guidelines on recording and reporting.
- Treatment is monitored by sputum smear microscopy at regular intervals.
- The Central Unit has 6 supervisors. Each of them is responsible for 3 aimags and 1 district of UB.
- The supervisors have to visit their allocated aimags quarterly.
- TB Reference Laboratory (NCCD) organizes registry and quality control of peripheral laboratories.

**Laboratory Network**
- The intermediate level TB laboratories send monthly slides collection for blind re-examination to the TB Reference Laboratory in the NCCD (all smear positive slides and 10% of the smear negative slides).
- The slides are forwarded to the Reference Laboratory in Ulaanbaatar by mail and returned to them with the checked results.
- Main constraints: transportation costs of slides and reagents.
**Human Resources Issues**

<table>
<thead>
<tr>
<th>Category</th>
<th># per 100,000 pop.</th>
<th>% trained in DOTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>250</td>
<td>50%</td>
</tr>
<tr>
<td>Nurses and Midwives</td>
<td>540</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Conclusions**

- Priorities:
  - Improvement in DOTS (involvement of bag feldshers, family doctors & establishment of proper monitoring system)
  - MDR TB control in prisoners
  - Improvement of hygiene conditions in the detention facilities
- Role of country NTP:
  - Leadership
  - Fund-raising & coordination of funding partners (internal & external)
- Role of partners:
  - Support in financing & advocacy

**Country Profile: Papua New Guinea**

**Development Plan for DOTS Expansion**

- Plan developed in April 2001
- Presented during 2nd TAG meeting (Beijing, June 2001)
- Modifications in October 2001

**Actions Taken to Facilitate DOTS Expansion since Beijing (1)**

**Political commitment and partnerships**

- Church run health facilities at par with government run facilities;
- TB is key programme in PNG Health Alliance, grouping the PNG Chamber of Mines & Petroleum, PNG Department of Health, WHO and Mining and Petroleum Projects;
- Involvement of corporate sector in their areas: Kamusi Logging Ltd., Ok-Tedi Mining Ltd., Mine Bay Estates Ltd.;

**Sustainable financing**

- Formation of a national interagency co-ordinating committee, involving all stakeholders: DOH, AusAID, JICA, ADB, TLMI, PNG Health Alliance
**TREATMENT RESULTS**

DOTS areas: cohort registered in 1999
Non DOTS areas: not cohort based: outcomes reported during 1999

<table>
<thead>
<tr>
<th></th>
<th>DOTS areas</th>
<th>Non DOTS areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not evaluated</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Died</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defaulter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transer Out</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cured</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Failure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**DOTS EXPANSION**

- Population (%) covered full implementation
- Number of districts with training completed
- Number of provinces with laboratories operational
- Number of districts fully implemented
- Number of provinces with TOT completed

**COUNTRY PROFILE: PHILIPPINES**

**CHALLENGES FACED BY NTP**

- Drug resistance and MDR TB: survey will be conducted in 2002
- TB / HIV collaboration activities still in process
- Health Sector Reform
- Re-engineering of DOH reduced staff at Central and Regional Office
- TB package for OPD planned by Phil. Health Insurance Corporation (PHIC) for public/private sector financing

**ACTIONS TAKEN TO FACILITATE DOTS EXPANSION SINCE BEIJING (2)**

**Human Resources Development**
Overseas training:
- IUATLD TB course (Vietnam) - two
- Pacific Islands international TB course (Fiji) - two
TOT: four batches, of which two with international facilitator

**Drug Issues**
- Change in regimen adopted closer to international recommendations
- Decision for introducing FDCs.

**Constraints**
- Underdeveloped central unit
- Insufficient management capacity at provincial and district level

**CHALLENGES FACED BY NTP**

- HIV/AIDS increasing dramatically
- MDR TB: no data available
- Facilities for CIS will become available soon
- HSR: no disease specific staff, except one person at central level
- SWAp: donors have committed to support TB programme through HSIP
- Private Sector: little involved in TB control in PNG
TB Situation in 2000

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>77 Million</td>
</tr>
<tr>
<td>TB Case Notification</td>
<td>164 / 100,000</td>
</tr>
<tr>
<td>Pulmonary TB</td>
<td>98.2 / 100,000</td>
</tr>
<tr>
<td>Proportion of Smear (+) to Total</td>
<td></td>
</tr>
<tr>
<td>TB Cases</td>
<td>58.9%</td>
</tr>
</tbody>
</table>

Treatment Outcomes

- Patients Registered in 1999

Challenges Faced by NTP (2)

- Sector Wide Approaches
- Sustained co-ordination and synchronize activities with all partners (PACT)
- Advocacy and promotion to improve demand for DOTS services - Radio / TV coverage of NTP
- Address TB in special groups like children, prisoners, indigenous population

Challenges Faced by NTP (3)

- Involvement of the private sector
- Mobilize private sector / private mixed in supporting DOTS through Phil. Coalition Against TB (PhilCAT)
- Support other NGOs and private hospitals implementing DOTS by providing TB drugs, supplies to patients

Constraints Faced Since Cairo

- Maintaining high quality while rapidly increasing coverage
- Inadequate staff at central and regional levels
- Insufficient and irregular supervision in new areas
- Difficulties in DOTS implementation in cities (co-ordination, private sector)
- Problems in procurement and distribution system

Needs to Implement Priority Activities in 2002

- Technical Support
- Re-orientation/refresher course to maintain quality of DOTS
- Drug resistance survey
- Training on Quality Assurance for Microscopy & Reference Laboratory
- Monitoring/Supervision
- Financial Support: $500,000
COUNTRY PROFILE: VIETNAM

DOTS IMPLEMENTATION BY YEAR

TREND OF CASE DETECTION S+ CASE RATE PER 100 000 POP.

TREATMENT RESULT OF SCC FOR NEW S+ 2000

FINANCIAL GAP (2006)

PROGRAM MANAGEMENT
- Provide DOTS to HIV-positive IV drug users with TB and to homeless and migrant populations
- Limited managerial capacity of the staff at all level
- Delay procurement

LABORATORY NETWORK
- Focus investment mainly to lab district by equipment, training, provision personnel, supply and quality monitoring
- Develop culture technique for provincial lab. order to AFB-diagnosis, TB/HIV, rapid diagnostics/technical equipment
NEW CHALLENGES FACED BY NTP

- Implementation DOTS in mountainous, remote areas and special people
- Health sector reform and sector wide approaches
- The involvement of the private health sector for TB control
- Maintenance sustainability of success and original DOTS implementation strictly
- TB and HIV

LABORATORY NETWORK

- Contribution and development of 3 national reference labs. in 3 regions
- Technical improvement routine quality control on microscopy and double-blinded method application