Meetings of the National TB Control Programme (NTP) managers have been held bi-annually since the beginning of the scale-up of DOTs in the Region. These meetings have, in a steadfast manner, provided a strategic forum for exchange of information on existing and new, innovative approaches being applied in countries, for discussions on technical issues, and to follow up on actions taken on the recommendations of previous meetings, resulting in valuable advice for developing policies, strategies and plans for implementation of TB control interventions in Member countries.

NTP managers from all 11 Member countries of the South-East Asia Region and representatives from donors, partners, as well as WHO regional and country staff, participated in the meeting and discussed extensively various issues including the importance of current priorities such as ensuring universal access to high-quality TB control services and scaling up programmatic management of drug-resistant TB.
Tuberculosis control

Report of a meeting of national TB control programme managers and partners
Bangkok, Thailand, 23–27 September 2013
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**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ACSM</td>
<td>advocacy, communication and social mobilization</td>
</tr>
<tr>
<td>ART</td>
<td>antiretroviral treatment</td>
</tr>
<tr>
<td>BOPM</td>
<td>National Drug Regulatory Agency, Indonesia</td>
</tr>
<tr>
<td>BRAC</td>
<td>Bangladesh Rural Advancement Committee</td>
</tr>
<tr>
<td>CAP-TB</td>
<td>control and prevention of tuberculosis</td>
</tr>
<tr>
<td>CCM</td>
<td>country coordinating mechanism</td>
</tr>
<tr>
<td>CHW</td>
<td>community health workers</td>
</tr>
<tr>
<td>DOT</td>
<td>directly-observed therapy</td>
</tr>
<tr>
<td>DOTS</td>
<td>directly-observed treatment, short-course</td>
</tr>
<tr>
<td>DR-TB</td>
<td>drug-resistant TB</td>
</tr>
<tr>
<td>DST</td>
<td>drug susceptibility testing</td>
</tr>
<tr>
<td>EQA</td>
<td>external quality assessment</td>
</tr>
<tr>
<td>FLD</td>
<td>first line (anti-TB) drugs</td>
</tr>
<tr>
<td>GDF</td>
<td>Global Drug Facility</td>
</tr>
<tr>
<td>GF</td>
<td>Global Fund to Fight HIV/AIDS, TB and Malaria</td>
</tr>
<tr>
<td>rGLC</td>
<td>regional Green Light Committee</td>
</tr>
<tr>
<td>HR</td>
<td>human resources</td>
</tr>
<tr>
<td>JMM</td>
<td>joint monitoring mission</td>
</tr>
<tr>
<td>LPA</td>
<td>line probe assay</td>
</tr>
<tr>
<td>MDG</td>
<td>Millennium Development Goals</td>
</tr>
<tr>
<td>MDR-TB</td>
<td>multidrug-resistant tuberculosis</td>
</tr>
<tr>
<td>M&amp;E</td>
<td>monitoring and evaluation</td>
</tr>
<tr>
<td>NFM</td>
<td>new funding model</td>
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<tr>
<td>NSP</td>
<td>national strategic plan</td>
</tr>
<tr>
<td>NTP</td>
<td>national tuberculosis control programme</td>
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<tr>
<td>NRL</td>
<td>national research laboratory</td>
</tr>
<tr>
<td>PMDT</td>
<td>programmatic management of drug-resistant tuberculosis</td>
</tr>
<tr>
<td>PPM</td>
<td>public–private mix</td>
</tr>
<tr>
<td>QA</td>
<td>quality assurance</td>
</tr>
<tr>
<td>SEAR</td>
<td>WHO South-East Asia Region</td>
</tr>
<tr>
<td>SLD</td>
<td>second line (anti-TB) drugs</td>
</tr>
<tr>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>---------</td>
<td>------------------------------------------------</td>
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<tr>
<td>SOP</td>
<td>standard operating procedures</td>
</tr>
<tr>
<td>TA</td>
<td>technical assistance</td>
</tr>
<tr>
<td>TB</td>
<td>tuberculosis</td>
</tr>
<tr>
<td>TB–HIV</td>
<td>tuberculosis and HIV</td>
</tr>
<tr>
<td>TRP</td>
<td>technical review panel</td>
</tr>
<tr>
<td>TS</td>
<td>technical support</td>
</tr>
<tr>
<td>TBTEAM</td>
<td>TB Technical Assistance Mechanism</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>WHA</td>
<td>World Health Assembly</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
<tr>
<td>XDR-TB</td>
<td>extensively drug-resistant TB</td>
</tr>
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1. **Introduction**

Tuberculosis remains one of the major public health concerns in the South-East Asia Region (SEAR) of the World Health Organization (WHO). With an estimated 5 million prevalent cases and 3.5 million incident cases in 2011, the Region continues to carry about 40% of the global burden of tuberculosis (TB). Five of the 11 Member States in the Region are among the 22 high-burden countries, with India alone accounting for 25% of the world’s incident cases. Most cases continue to occur among young adults, particularly in the most productive age group of 25–34 years. Males are disproportionately affected: the male-to-female ratio was 2.0 among all new smear-positive TB cases detected for the year 2011 in the Region and 2.9 among cases older than 45 years. An estimated 450,000 people in the Region died from TB in 2012 illustrating that universal access to quality assured diagnosis and treatment for all persons with TB is not yet ensured.

The Millennium Development Goals (MDG) and Stop TB partnership goals and targets of reducing the prevalence and death rates by 50%, compared with their levels in 1990, are likely to be met by 2015 from a regional perspective, if progress to date is maintained and scaling up of implementation of prevention and control activities is ensured.

While progress continues to be made, national TB control programmes still face a number of challenges that relate to uncertainties regarding sustainable financial and operational resources, limited technical and management capacity, weak procurement and supply management mechanisms, and national laboratory networks. These uncertainties, in turn, are slowing the planned expansion of early and enhanced case detection and interventions for tuberculosis and HIV (TB–HIV) and drug-resistant TB (DR-TB). Though collaboration with other sectors is steadily increasing, the provision of care by all health-care providers is not sufficiently linked to national programmes to make an impact at the national level. Low community awareness and utilization of services hamper the uptake of services. It is increasingly becoming recognized that attention needs to be paid to addressing the social, economic and behavioural determinants that impact TB, if national efforts to combat TB are to succeed in the longer term.

Meetings of the national TB control programme (NTP) managers have been held annually since the beginning of the scale-up of directly-observed treatment, short-course (DOTS) in the Region. These annual meetings have, in a steadfast manner, provided a strategic forum for exchange of information on existing and innovative approaches being applied in countries, for discussions on technical issues, and to follow up on actions taken on the recommendations of previous meetings, resulting in valuable advice for developing policies, strategies and plans for implementation of TB control interventions in the countries in the coming year, including contributions by WHO and partners. Currently, this meeting is held bi-annually. The last meeting was held in 2011, jointly with partners.
The annual TB Technical Assistance Mechanism (TBTEAM) meeting includes participation of NTP managers and donors, partners, as well as regional and country staff, and has proven to be a valuable forum for planning and priority-setting. The Global Plan to Stop TB 2011–2015 highlights the important role of technical support (TS) to NTPs. Given the economic instability and the importance of current priorities such as ensuring universal access to high-quality TB control services including scaling up programmatic management of drug-resistant TB (PMDT), it is imperative that NTP managers are well informed on how to access as well as fund high-quality TS.

2. Opening session

The meeting was opened by the WHO Representative to Thailand, Dr Yonas Tegegn who highlighted the importance of the TB control programmes in the Region and read out a message from Dr Samlee Plianbangchang, Regional Director, WHO South-East Asia Region. (See text of the message at Annex 1).

Dr PR Narayanan, Chair of the SEAR TB Technical Working Group, stressed that TB is still a major problem in the Region. He acknowledged the role of WHO in terms of policy development and noted the efforts made by Member States to reach all people with TB to ensure their successful treatment. Dr Narayanan stressed the importance of partnerships and the need to accelerate PMDT and address the suboptimal diagnostic capacity in the countries. He concluded by reiterating the importance of the leadership role of programme managers.

Welcoming the participants to Thailand, Dr Chawetsan Namwat, NTP Manager of Thailand, informed them about the successful organization of the TB joint monitoring mission (JMM) in August 2013. Dr Chanvit Thrathep, Deputy Permanent Secretary, Ministry of Public Health inaugurated the meeting and highlighted the challenges due to the magnitude of the TB disease burden in the Region, especially DR-TB. He also mentioned the problems of ensuring laboratory capacity, weak procurement systems and stressed the need for an extensive regional approach for cross-border issues. He noted that the uncertainty related to sustainability of financial resources is a particularly trying issue in view of the goal of universal access to high quality TB prevention, care and control services.

The general objective of the meeting was to strengthen the implementation of TB control interventions in the Region.

The specific objectives were:

(1) To review progress towards the achievements of TB-related MDG targets;
(2) To review progress on achieving universal access to high-quality care for all people with TB;
(3) To share experiences in scaling up PMDT;
(4) To discuss new tools and issues in TB control including development of global targets and strategies for post-2015; and
(5) To identify steps to strengthen country capacity to plan, implement and monitor TB control activities.

(See Annexes 2 and 3 respectively for the agenda of the meeting and the list of participants.)

3. Progress and challenges of TB control

3.1 Global update

With the exception of data on mortality for people with HIV, provisional data describing the global burden of TB in 2012 do not show any major change compared to the situation in 2011. Due to rapid expansion of HIV screening and the provision of antiretroviral treatment (ART), TB-related deaths among people with HIV are clearly decreasing (Figure 1). The highest numbers of new cases of TB are found in China and India. The highest incidence rates (per 100,000 populations) are found in sub-Saharan Africa. TB is driven by HIV in sub-Saharan Africa. In 2011, 3.7% of new cases were multidrug-resistant tuberculosis (MDR-TB). Case detection remains the main challenge (See Annex 4 for Global overview of TB control).

Figure 1: Provisional data for the global burden of TB in 2012

Globally, incidence rates were relatively stable from 1990 up to around 2001, and then started to fall. Between 2010 and 2011, the rate of decline was 2.2%; if this trend is sustained, MDG Target 6.c will be achieved. The absolute number of incident cases is falling, albeit slowly (Figure 2), as the decline in the incidence rate (per 100,000 populations) exceeds the rate of growth in the world’s population. Table 1 illustrates overall progress in global TB control from 2000 to 2012.
Case detection remains the overall challenge. Even if the chain of infection is cut, 2.3 billion people are infected with the potential to develop TB disease. Changing lifestyle factors such as smoking, alcohol abuse and unhealthy diets, cause increased vulnerability to TB infection, illustrating the need for a multispectral approach to TB control. Selected key determinants and their relative risk for TB are listed in Table 2.
Table 2: Selected determinants for TB

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Relative risk</th>
</tr>
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<tbody>
<tr>
<td>HIV infection</td>
<td>20–35</td>
</tr>
<tr>
<td>Undernutrition</td>
<td>3.1–3.3</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2.3–4.3</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>1.9–4.6</td>
</tr>
<tr>
<td>Cigarette smoking</td>
<td>1.6–2.5</td>
</tr>
</tbody>
</table>

Source: Lancet. 2010 May 22; 375 (9728):1814—29

The 2013 Global TB Control Report will be launched around the Union World Lung Conference in October 2013.

3.2 Regional update

SEAR had an estimated 5 million prevalent and about 3.5 million incident cases in 2011 and carried about 40% of the global burden of TB. Five of the 11 Member States in the Region are among the 22 high-burden countries, with India alone accounting for 25% of the world’s incident cases. Most cases continue to occur among young adults, particularly in the most productive age group of 25–34 years. While death rates due to TB are declining, an estimated 450 000 people in the Region died from TB in 2012 illustrating that universal access to quality-assured diagnosis and treatment for all persons with TB is not yet ensured. The estimated incidence of HIV-positive TB cases in 2011 is 140 000 (7.7 per 100 000 population) in the entire Region, but varies widely among countries.

The burden of TB in the Region includes an estimated 90 000 cases of MDR-TB. In 2012, about 16 000 patients with MDR-TB were registered for treatment in the Region, while 19 000 were diagnosed. Although very steady progress was observed, there is an urgent need for significant expansion in the scale and scope of TB control activities and to fully implement World Health Assembly Resolution WHA62.15 on “Prevention and control of multi-drug resistant tuberculosis and extensively drug-resistant tuberculosis”.

While the incidence and prevalence rates in Member States of SEAR are slowly decreasing, the absolute number of TB cases remains high due to population increases, posing continued challenges to national health systems. An estimated 1.2 million TB cases out of an estimated 3.4 million cases are not notified, leading to continuous spread of disease and unnecessary suffering for the individuals. Population structures are also changing in some countries of the Region. Hence, the elderly are becoming a larger percentage of the population, and with high rates of TB, they will become an important source of TB cases in the coming years. Prevalence surveys are showing that a significant percentage of cases existing in the community have lesser symptoms, or may even be asymptomatic, and are smear-negative culture-positive cases. This is partially a result of the success of the DOTS
programmes in identifying and removing the more symptomatic and smear-positive cases out of the pool.

The MDG and Stop TB partnership goals and targets of reducing the prevalence and death rates by 50%, compared with their levels in 1990, are likely to be met from a regional perspective by 2015, if progress to date is maintained and implementation of prevention and control activities is scaled up. (Figure 3).

Figure 3: *Incidence, prevalence and mortality 1990—2011*

![Incidence, prevalence and mortality 1990—2011](chart)

Source: SEAR TB Annual Report 2013

Major challenges for TB control in the Region include:

- maintaining and improving the quality of basic TB control services: ensuring access to high quality diagnosis and treatment services, including services for children;
- slow progress in improving PMDT;
- slow progress in increasing TB–HIV collaborative activities;
- inadequate laboratory capacity;
- overstretched health systems, including major challenges related to the quality and quality of the health workforce;
- insufficient resource mobilization;
- involvement of big hospitals and private providers;
- limited involvement of NTPs in decision-making related to the health sector reform processes.

In addition, new challenges such as policies, targets and interventions post-2015; universal health coverage; introduction of newer and rapid diagnostics; TB control beyond the health sector; enhancing TB care and civil society involvement; operational research on
new anti-TB medicines are emerging. There is a need to urgently review and strengthen national strategic plans (NSPs); take advantage of opportunities provided by the Global Fund to Fight HIV/AIDS, TB and Malaria (GF), donors and expanded national investments in health systems; and, ensure sufficient funding and technical assistance (TA), both in the medium and long term.

4. Technical sessions

4.1. Review of recommendations of the meeting of NTP managers and partners, 2011

The progress in implementation of selected recommendations from the meeting of NTP managers and partners, 2011, was discussed in detail.

Earlier and higher case detection in the private sector: India

In 2011, India had an estimated 2.2 million incident cases with 1.3 million notified new and relapse cases, indicating that there are nearly a million missing incident cases. The main reasons for the missing cases include lack of access to the health system or delayed access and many people with signs and symptoms compatible with TB accessing private health-care providers who are not linked or engaged with NTP. Diagnosis is often ineffective and delayed in both the private and public sectors; there is a failure to notify and register people diagnosed with TB; and a failure of health service providers to link people diagnosed with TB to appropriate and effective treatment.

The private sector in India is huge and consists of more than 15 000 hospitals and institutions; approximately 5 000 000 physicians; approximately 18 000 stockists; 2 000 000 chemists; and more than 50 manufacturers. India consumes more TB drugs in the public sector than any other country (US$ 25 million in 2006). It also consumes more drugs in the private sector than any other country (nearly US$ 70 million in 2006).

The Government of India is attempting to address these challenges by implementing specific policies, systems and interventions:

1) TB Notification Order 7 May 2012: Government of India made a major policy decision to make TB a mandatorily notifiable disease.

2) reaching out to the unreached and vulnerable population:
   - integration with general health system (rural and urban health missions);
   - targeted case-finding activities with improving specimen transport and feedback of results to patients.

3) expanding efforts to engage all health care providers:
   - standards for TB care in India have been formulated;
   - innovative private sector engagement especially for urban TB control;
– diagnostic testing at private laboratories including DR-TB;
– flexible treatment options for private providers as per standards for TB care in India.

(4) developing and deploying systems for notifying patients upon TB diagnosis from all sources (case-based and web-based).

(5) creating public health system accountability for all diagnosed TB patients from all sectors by:
– using the case-based web-based ICT intervention NIKSHAY;
– strengthening referral for treatment (transfer) mechanism, using electronic referral and feedback system.

The National Strategic Plan 2012–2017 – Universal Access to TB Care – is putting more emphasis on public–private mix approaches. This includes the establishment of a private provider interface agency to manage the many points of contact, monitor, and move micro-payments for services.

Challenges and lessons learnt include:

➤ irrational use of anti-TB drugs
➤ unorganized private sector
➤ trust deficit
➤ different objectives of stakeholders
➤ specific partnership modalities not defined
➤ costing of services not in line with the market
➤ slower pace of notification from the private sector.

**Establishment of systematic screening of high risk groups – prison inmates: Sri Lanka**

There are 34 prisons and detention centres in the country. In 2011, there were approximately 109,000 inmates. The prison health facilities are limited and government health facilities are used for OPD and inpatient care. Up until 2011, there was no systematic screening for TB.

Since 2011, the following specific interventions have been implemented:

➤ TB control in prisons included in the agenda of TB advisory committee meetings;
➤ advocacy for prison authorities;
➤ awareness for prison guards/welfare officers;
➤ routine screening of TB symptomatics (regular clinic visits in prisons established; microscopy centres established in four prisons; X-ray facilities introduced in Colombo prison complex; separate ward for TB patients in Colombo prison hospital; DOTS implemented);
Tuberculosis control

- periodic mass screening in large prisons; and
- prevalence survey among convicted persons.

In 2012, 50,128 inmates were screened; 7,900 TB suspects identified and a total of 255 TB patients (204 S+) diagnosed. However, there is currently no screening of prison staff.

The main challenges are the poorly developed prison health system; scarce human resources; security issues related to the transportation of prisoners to chest clinics/treatment facilities; uncooperative inmates; forgery (faking or not taking medicine to remain in directly-observed therapy (DOT) clinic or selling SS+ results); DOT implementation; lost to follow-up following transfer or release.

Lessons learnt include the need for intersectoral collaboration and a change in attitude of caregivers; empowerment of prison inmates to make them responsible for their treatment; the need for ancillary care such as rehabilitation for drug addicts/alcoholics and the need to address social issues.

The next steps will be: continuation of periodic advocacy to prison officials and awareness for prison guards; efforts to improve human resource (HR) issues in the prison health services; improvements to the general prison environment; strengthening of rehabilitation work; utilization of mobile digital X-ray facility and implementation of Xpert MTB/RIF; and streamlining of screening (on admission, symptomatic and periodic mass screening).

**Strengthening the laboratory network: Myanmar**

Myanmar has taken major steps to strengthen the laboratory capacity in 2012—2013. Specific interventions include:

- scaling up efforts to improve access to laboratory services (better identify people with presumptive TB, increase the number of smear laboratories and sputum collection centres, conducting mobile clinics, and organize sputum transportation to culture laboratory);
- increasing the number of laboratories with external quality assessment (EQA); introducing new laboratory tools (expanding iLED microscopy, developing SOP; rolling out Xpert MTB/RIF, and expanding solid culture);
- improving management (additional human resources, developing TB diagnosis plan 2014–2018 with three additional BSL-3 laboratories, conducting integrated and/or laboratory-specific supportive supervision, laboratory evaluation meetings at different levels, and introducing new recording and reporting tools);
- TA (organize laboratory consultancy visits) with support from WHO and JICA.

The outcomes to date are: 464 smear microscopy laboratories under EQA among which 299 at township level; SOP for iLED microscopy. The absolute number of cases is increasing, but SS+ is stable. Smear-positive rate among TB suspects is 14.9%.
Annual proficiency testing is done by the Bangkok Supranational Reference Laboratory (SRL). Sputum collection centres in hard-to-reach areas are contributing to case detection. Due to GF support, it has been possible to fill vacant positions. Training activities are being supported by The Union and WHO is providing support in the area of supervision and coordination.

Key challenges to strengthen the laboratory network include: insufficient number of staff; increased workload; cost of maintenance of equipment; data management (paper-based, many sub-registers for different tests; weaknesses in systematic recording and reporting, weak communication); risk of infections; accessibility (low coverage, weak sputum specimens transportation system is not well established; second-line DST has not started yet); basic amenities not always ensured (uninterrupted power supply, low voltage power supply, good quality water supply, Internet connectivity); requirement of TA on new tools.

Efforts will continue to implement the TB diagnosis plan to increase access to quality-assured smear microscopy, X-ray and rapid laboratory diagnosis; and, to establish laboratory and X-ray quality management systems.

Scaling up access to TB and HIV (TB–HIV) diagnosis and treatment services: Thailand

Thailand has a population of 70 million. The universal health coverage scheme is providing health coverage to about 75% of the population; adding other schemes, bringing the coverage up to almost 100%. In 1991, there were approximately 150 000 new HIV infections in the country; in 2010, the number was down to 10 800. TB is found in one third of symptomatic HIV/AIDS cases. In 2010, 90% of TB cases were tested for HIV coinfection, out of which 16% were found to be HIV-positive. Out of the coinfected cases, 71% are receiving CPT while 53% are on ARVs.

Bureau of TB and STIs work together through strategy management committee meetings held four times a year. They are involved in the development of new HIV guidelines and TB–HIV reporting form. There is an AIDS ZERO portal to share information for policy and programme advocacy – TB–HIV mortality; screening for HIV among TB cases and for TB among HIV-infected; antiretroviral therapy (ART) in TB–HIV cases. The outcomes noted in 2011 are shown in Table 3.

Table 3: Outcomes of TB–HIV collaborative activities

<table>
<thead>
<tr>
<th></th>
<th>2011</th>
</tr>
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<tbody>
<tr>
<td>TB patients with known HIV status</td>
<td>50 457</td>
</tr>
<tr>
<td>% of TB patients with known HIV status</td>
<td>90</td>
</tr>
<tr>
<td>TB patients that are HIV-positive</td>
<td>7 394</td>
</tr>
<tr>
<td>% of tested TB patients that are HIV-positive</td>
<td>15</td>
</tr>
<tr>
<td>% HIV-positive TB patients started on CPT</td>
<td>75</td>
</tr>
</tbody>
</table>
% HIV-positive TB patients started on ART | 59
HIV-positive people screened for TB | 19,687
HIV-positive people provided with IPT | NA

Source: Bureau of TB, Department of Disease Control, MoPH, Thailand.

Challenges and lessons learnt from the implementation of collaborative activities to date are:

- a coordination body needed at all levels;
- high mortality TB–HIV due to delayed diagnosis of HIV and start of treatment;
- notification in private sector;
- selection of indicators for policy and programme level (AIDS zero portal).

Next steps include the establishment of formal coordination bodies at different levels and TB expert committees at regional levels, as well as expansion of current interventions that will closely work with HIV expert committees.

**Quality assured anti-TB drugs and supply chain management: Indonesia**

The situation with regard to anti-TB drug supply chain management in 2011 included major challenges: collaboration between the National Drug Regulatory Agency (BPOM) and NTP was weak; institutional capacity on regulation implementation was limited; standard operating procedures for anti-TB drug quality assurance (QA) were not available; anti-TB drug sampling for testing was not conducted regularly; and there was limited availability of human resources.

The specific interventions to address these challenges included: involving TBCARE partners to strengthen QA at NTP and the BPOM; strengthening of DRA laboratory capacity at central level and provinces; establishment of a working group on QA; QA for second line (anti-TB) drugs (SLD); facilitation for local manufacturers to qualify for WHO pre-qualification; development of a policy on rational TB drug use and pharmacovigilance; and providing budget from GF for QA activities. These interventions have led to:

- a SOP handbook for QA (Including rational use and pharmacovigilance);
- good collaboration with DRA (Drug Regulatory Authority) such as integrated supervision, development of regulations, providing reference material for TB testing and training and workshop on QA;
- working group on QA: Pharmacy Directorate, CDC (United States Center for Disease Control) Directorate, DRA, local manufactures, USP, and TBCARE;
- QA test for SLD availability at DRA;
- requests for WHO PQ submitted by two local manufacturers by the end of year 2013; and
- BPOM becoming SR of GF.
While major progress has been made, the following key lessons and challenges have been learnt:

- involvement of all stakeholders in QA implementation;
- law enforcement for compliance of the regulation and policy;
- importance of advocacy activities on QA system;
- financial and time commitment needed for WHO PQ; and
- key role of managerial policy.

4.2. Progress towards universal access

The session was organized as a poster session focusing on progress towards universal access to high quality diagnosis and treatment services for all people with TB; national strategic planning and financing and TBTEAM. A summary of the poster information as well as responses to a questionnaire on NSP and Technical Support (TS) circulated during the meeting is at Annex 5.

4.3. Scaling up programmatic management of drug-resistant TB (PMDT): review of activities

Report from the regional meeting on combating DR-TB

A regional meeting on combating DR-TB was organized in Bangkok on 25–26 June 2013 with high level participation from Member States and partners. The meeting participants made the following recommendations:

Recommendation for Member States:

(1) A re-invigorated high-level political commitment to prevent and combat M/XDR–TB must be ensured.

(2) National TB programmes and the private sector should acknowledge and promote TB prevention, care and control services based on evidence, public health approaches, ethical values and human rights principles and for the public good.

(3) It must be ensured that policies and strategies to address the underlying social determinants of TB are included in comprehensive country-specific NSPs.

(4) Efforts to achieve universal access to diagnosis and treatment of M/XDR TB should be accelerated, in particular:

a) strengthening collaboration and coordination between different components of public health services, and between public and private health care providers;

b) strengthening joint planning and coordination between NTP and key partners;

c) ensuring early and increased case detection of all TB cases;
d) implementing mandatory TB case notification;

e) strengthening and expanding laboratory networks by introducing new diagnostic tools, implementing QA systems, and by utilizing all existing and newly established laboratories;

f) promoting the rational use of anti-TB drugs and pharmacovigilance in the public and private sectors;

g) ensuring uninterrupted availability of sufficient amounts of first and SLD free of charge to patients via NTPs and innovative public–private mix (PPM) mechanisms;

h) strengthening and implementing patient support mechanisms;

i) strengthening coordination and collaboration for cross-border TB prevention, care and control activities;

j) ensuring adequate TB infection control measures in health care facilities and congregate settings;

k) making available sufficient numbers of competent and motivated staff at all levels.

(5) Comprehensive NSPs should be updated, based on an in-depth assessment of the epidemic, including the full financial demand to ensure universal access and identification of funding gaps to secure sufficient domestic and external financing for TB prevention, care and control.

(6) Regional collaboration and coordination should be strengthened for TB prevention, care and control activities targeted at migrant populations.

(7) Operational research should be encouraged for promoting new interventions in diagnostics and treatment such as shorter drug regimens for the treatment of MDR–TB.

**Recommendations for WHO, technical partners and donors:**

(1) Technical support should be provided to countries in SEAR by WHO and technical partners to develop and implement national strategic plans by which universal access to diagnosis and treatment of M/XDR in the public and private sectors is ensured.

(2) WHO should explore establishment of a SEA Regional PMDT Training Centre to provide support to strengthen managerial and technical capacities for the management of DR-TB within the Region.

(3) GF should ensure funding decisions are based on a comprehensive analysis of the burden of disease as well as the GDP are need-based and realistic and allow for appropriate re-programming for combating DR-TB.

(4) WHO and technical partners should provide support to Member States and organizations to conduct relevant operational research that will feed into future policy development (WHO, technical partners).
(5) WHO, technical partners and GF should explore the possibility of a regional proposal to address cross-border issues and the treatment of migrants.

(6) WHO and technical partners should provide TA to countries, upon request, in designing appropriate protocols for the introduction of the shorter treatment regimen for MDR–TB patients and in implementing the said regimen.

**Report from the regional GLC (rGLC)**

In 1998–1999, WHO and international partners observed that it was important to shift from the existing individualized practitioner approach to the community-based programmatic approach in order to have an impact on the problem of drug resistance in the world. This led to newer terms such as the DOTS Plus Strategy (1999), the Green Light Committee (2000) and PMDT. The role of the Green Light Committee was to facilitate countries in developing their strategies for PMDT, the provision of quality assured SLD at concessional price and to monitor the implementation of the strategy.

The Global Framework was subsequently revised to facilitate faster expansion and access to treatment of MDR–TB patients. Within this new framework, the role of the existing GLC at the global level was revised and the concept of decentralization of activities to regional level mooted. Hence, six regional GLCs (rGLCs) were envisaged which would be supported by a secretariat housed within the respective WHO regional office. The rGLCs support the development of PMDT scale-up plans in Member States, assist in the procurement of the required SLD through the Global Drug Facility (GDF); help the countries in the implementation of DR-TB management; monitor and evaluate the function of the programme at the country level; and provide recommendations to the country for further scale-up. The rGLCs also assist in fundraising, capacity-building and advocacy at the country level.

The SEAR rGLC was constituted in May 2012, and had its first and second meetings in May and December 2012 respectively, wherein the members selected the Chair and Vice-Chair and laid out the objectives and plans of action for the role of the rGLC in the context of different country programmes in the Region. An rGLC Secretariat was established at the WHO Regional Office for South-East Asia, New Delhi, India, to facilitate the functioning of the rGLC and the role of the Secretariat was also defined. Since then, the rGLC has been meeting at regular intervals and its third meeting was held in Bhutan in April 2013. Different issues have been discussed in these meetings, and by examining the various country mission reports, the rGLC has been able to identify the general concerns challenging the scale-up of PMDT in the Region. The Committee also discussed and made various recommendations to resolve these challenges and laid out plans for the future. The rGLC activities in 2013 are illustrated in Table 4.
Table 4: rGLC activities in 2013

<table>
<thead>
<tr>
<th>Title of meeting or mission</th>
<th>Venue</th>
<th>Dates</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Advisory Committee meetings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1 3rd MDR TB Advisory Committee</td>
<td>Thimphu, Bhutan</td>
<td>29–30 April 2013</td>
<td>completed</td>
</tr>
<tr>
<td>1.2 4th MDR TB Advisory Committee</td>
<td>Jakarta, Indonesia</td>
<td>21–22 November 2013</td>
<td>confirmed</td>
</tr>
<tr>
<td><strong>2. Regional workshops</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1 Regional meeting on combating DR-TB</td>
<td>Bangkok, Thailand</td>
<td>25–26 June 2013</td>
<td>completed</td>
</tr>
<tr>
<td><strong>3. In-country training</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1 PMDT training for Timor-Leste</td>
<td>Dili, Timor-Leste</td>
<td>25 Mar–4 April 2013</td>
<td>completed</td>
</tr>
<tr>
<td>3.2 PMDT Training for Thailand</td>
<td>Bangkok, Thailand</td>
<td>25 Feb–1 March 2013</td>
<td>completed</td>
</tr>
<tr>
<td><strong>4. r-GLC missions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.1 r-GLC mission Timor-Leste</td>
<td>Dili, Timor-Leste</td>
<td>25 Mar–4 April 2013</td>
<td>completed</td>
</tr>
<tr>
<td>4.2 r-GLC mission Myanmar</td>
<td>Yangon, Myanmar</td>
<td>23–30 April 2013</td>
<td>completed</td>
</tr>
<tr>
<td>4.3 r-GLC mission Indonesia</td>
<td>Jakarta, Indonesia</td>
<td>11–22 February 2013</td>
<td>completed</td>
</tr>
<tr>
<td>4.4 r-GLC mission Democratic People’s Republic of Korea</td>
<td>Pyongyang, Democratic People’s Republic of Korea</td>
<td>2–9 October 2013</td>
<td>completed</td>
</tr>
<tr>
<td>4.5 r-GLC mission Bangladesh</td>
<td>Dhaka, Bangladesh</td>
<td>10–14 November 2013</td>
<td>confirmed</td>
</tr>
<tr>
<td>4.6 r-GLC mission Bhutan</td>
<td>Thimphu, Bhutan</td>
<td>2–6 December 2013</td>
<td>confirmed</td>
</tr>
<tr>
<td>4.7 r-GLC mission India</td>
<td>Delhi, India</td>
<td>November–December 2013</td>
<td>TBD</td>
</tr>
<tr>
<td>4.8 r-GLC mission Nepal</td>
<td>Kathmandu, Nepal</td>
<td>23 June–1 July 2013</td>
<td>completed</td>
</tr>
<tr>
<td>4.9 r-GLC mission Sri Lanka</td>
<td>Colombo, Sri Lanka</td>
<td>30 September–4 October 2013</td>
<td>completed</td>
</tr>
<tr>
<td>4.10 r-GLC mission Thailand</td>
<td>Bangkok, Thailand</td>
<td>13–26 August 2013</td>
<td>within JMM - completed</td>
</tr>
<tr>
<td>4.11 r-GLC mission Timor-Leste</td>
<td>Dili, Timor-Leste</td>
<td>18–22 November 2013</td>
<td>confirmed</td>
</tr>
</tbody>
</table>

Mission to support countries for TGF renewal | As and when required by countries |
Implementation of new diagnostic tools – regional overview

Beyond the current efforts to prevent, detect and cure TB, new tools and technologies are needed to radically transform the fight against TB, to contain the threat of drug-resistant strains and to seriously target elimination by 2050. Today’s most commonly used diagnostic tool, the light microscope, is more than 130 years old and is relatively insensitive, particularly in the presence of HIV coinfection, and gives no indication of drug susceptibility.

Molecular techniques have considerable advantages for scaling up programmatic management and surveillance of DR-TB, offering speed of diagnosis, standardized testing, potential for high through-put, and fewer requirements for laboratory biosafety. Molecular line probe assay (LPA) technology for rapid detection of MDR-TB was endorsed by the World Health Organization (WHO) in 2008. In 2009, Hain Lifescience introduced a new LPA, the Genotype MTBDR® test, for the rapid determination of genetic mutations associated with resistance to fluoroquinolone, aminoglycosides (kanamycin, amikacin), cyclic peptides (capreomycin), ethambutol, and streptomycin. The assay format is similar to the genotype MTBDRplus assay for the detection of mutations conferring rifampicin and isoniazid resistance, endorsed by WHO in 2008, and allows for testing and reporting results within 24 hours. In December 2010, Xpert MTB/RIF was introduced as the initial diagnostic test in individuals suspected of having MDRTB or HIV/TB and also as a primary diagnostic test for TB in people living with HIV.

The introduction of new tools for TB control and prevention should be regarded as a means of improving the quality of care by making available a wider choice of technologies to address unmet needs; it is also an opportunity to align the new tools with the capacity of laboratories and health systems to deliver care, address the changing nature of the epidemic and meet the needs of communities with or at risk of TB infection. The plans and investments to accelerate the development of new tools made thus far by the Global Partnership to Stop TB have led to high expectations that these technologies will provide national TB control programmes with better management tools. To achieve this, policy-makers need the information to make the right decisions about which new tools to implement and where in the diagnostic algorithm to apply them most effectively. These decisions are difficult, as the new tools are often expensive to implement and use, and the health system and patient impacts uncertain, particularly in developing countries where the burden of TB is high.

The key components of a process for implementing policy changes in both the public and private sectors can be divided into technical considerations, operational considerations, and monitoring and evaluation. Technical considerations relate to the registration of products and the revision of regulations; demonstration projects; development or updating of programme guidelines, essential medicines, medical devices and related supplies lists, recording and reporting forms; dissemination of guidelines; training of health workers and community partners providing TB care; and advocacy, communication and social mobilization (ACSM). Operational considerations include: management of tools currently in use that are to be replaced by new technologies; management of supply of new tools; addressing availability in public and private sectors; development of a phase-in or roll-out plan; quantification and demand forecasting; procurement, distribution and inventory management; and ensuring quality of products and services and their safety. Monitoring and evaluation of the adoption, introduction and implementation of new tools will provide
important lessons for the uptake of incrementally improved diagnostic services. New TB diagnostic tools offer fresh opportunities and challenges, but maintaining high-quality AFB smear microscopy remains essential, as it is still the fundamental method for TB control across all settings.

**Community-level TB control: Bangladesh**

The emergence of DR-TB has become a threat for TB control in Bangladesh and the country ranks 10th among the 27 high MDR-TB burden countries. Community PMDT has been implemented since May 2012.

The NTP treatment is 8 months’ intensive and 16 months’ continuation phase (24 months). Patients are hospitalized for up to eight weeks and discharged after two consecutive sputum examinations are negative. The treatment is then continued in the community using an ambulatory model of care. A community provider is an educated person who knows how to give injections. The community provider can also be a person from an NGO, who is trained and linked up to the district health care system. Anti-TB drugs are given to the community provider once a month and he is monitored on a monthly basis. Social support is provided to both patients and DOTS providers, e.g. nutritional support and travel allowance for patients and a cash incentive for the DOTS provider.

The system was piloted in four districts and one city corporation. It is now being scaled up in an additional 15 districts and two city corporations. Damien Foundation is providing treatment with a short regimen. Results are similar.

**Table 5: Number of MDR and XDR TB detected and numbers of cases actually enrolled on treatment 2008–2012**

<table>
<thead>
<tr>
<th>Year</th>
<th>GLC approved</th>
<th>Damien Foundation</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Diagnosed</td>
<td>Enrolled</td>
<td>Diagnosed</td>
</tr>
<tr>
<td>May 2005–2007</td>
<td>394</td>
<td>242</td>
<td>174</td>
</tr>
<tr>
<td>2008</td>
<td>274</td>
<td>107</td>
<td>194</td>
</tr>
<tr>
<td>2009</td>
<td>166</td>
<td>179</td>
<td>189</td>
</tr>
<tr>
<td>2010</td>
<td>291</td>
<td>183</td>
<td>189</td>
</tr>
<tr>
<td>2011</td>
<td>440</td>
<td>253</td>
<td>172</td>
</tr>
<tr>
<td>2012</td>
<td>544</td>
<td>376</td>
<td>157</td>
</tr>
<tr>
<td>January–June</td>
<td>380</td>
<td>242</td>
<td>89</td>
</tr>
<tr>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2095</strong></td>
<td><strong>1340</strong></td>
<td><strong>1369</strong></td>
</tr>
</tbody>
</table>

Source: NTP, Bangladesh

Major challenges include: ensuring adequate human resources to manage MDR-TB patients; establishing well-functioning DR-TB team at the community level; improving access...
to DST and culture; ensuring committed DR-TB DOTS provider in the community; channelling of nutritional and transport support costs to the patients; and implementing infection control measures at community level. While these challenges need to be addressed, the plans are to implement community PMDT countrywide.

**Laboratory scale-up: India**

The Revised National TB Control Programme (RNTCP) is planning to scale up the number of culture and DST laboratories nationwide. This includes: increasing the throughput per laboratory; strengthening the reference laboratories; engaging the private sector and medical college laboratory services; and establishing and scaling up training capacity. The expansion plans and the achievements in implementation are shown in Table 6.

**Table 6 a: Laboratory expansion plan**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance sputum processing capacity</td>
<td>12</td>
<td>+13</td>
<td>+18</td>
<td>43</td>
</tr>
<tr>
<td>Establish line probe assay (LPA)</td>
<td>12</td>
<td>+13</td>
<td>+18</td>
<td>43</td>
</tr>
<tr>
<td>Establish liquid culture systems</td>
<td>13</td>
<td>+9</td>
<td>+11</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: RNTCP National Laboratory Scale-up Plan 2010, www.tbcindia.org

**Table 6 b: Achievements versus plan**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance sputum processing capacity</td>
<td>43</td>
<td>27</td>
</tr>
<tr>
<td>Establish line probe assay (LPA)</td>
<td>43</td>
<td>35</td>
</tr>
<tr>
<td>Establish liquid culture systems</td>
<td>33</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: RNTCP National Laboratory Scale-up Plan 2010, www.tbcindia.org

A case-based, Web-based (NIKSHAY) notification system has been established to provide universal access to DST for all TB cases.

Challenges to the implementation of such a massive scale-up plan include: establishment of Biosafety Level-III; ensuring competent staff for LPA/LC; difficulties in establishing well-performing sputum sample transport systems and ensuring capacity for follow-up cultures for patients diagnosed with DR-TB.

The lessons learnt from the implementation of the laboratory scale-up plan include the need to:
streamline systems and training to improve suspect identification, prompt sample collection and transport systems from PHIs/DMCs;

- enhance coordination to fast-track processes for BSL III and HRD for LC laboratories;

- enhance follow-up capacity through one sample per follow-up culture policy, fast track application of potential laboratories to reach proficiency stage with national research laboratories (NRLs) and budget for C-DST (Culture-Drug Susceptibility Test) schemes with private laboratories;

- fast-track DR-TB centre establishments;

- strengthen district capacity for ambulatory PTE, ADR management;

- DR-TB Centre Scheme in 2013.

**HRD for PMDT: Indonesia**

Indonesia has an ambitious PMDT scale-up plan which put a major demand on human resource development for PMDT (See Table 7).

NTP has developed specific HRD strategies for PMDT to address the needs. These are being implemented within the overall framework for HRD for TB control:

1. contribution to overall workforce planning, policy development and leadership:
   a) assessment of human resources (HR) needs; and
   b) participation in HR policy revisions.
2. organization of ongoing in-service training (clinical, laboratory and managerial) for all health workers involved in the implementation of the Stop TB Strategy, that is, promoting and sustaining lifelong learning including:
   a) initial training on MDR-TB;
   b) initial training on culture and DST;
   c) on-the-job training (refresher: small performance problems that can be addressed during a supervisory visit); and
   d) continuing education (to gain more skills and knowledge).
3. contribution to integrated personnel management system to foster adequate workforce planning, recruitment, hiring, deployment and retention;
4. monitoring and supervision of health worker performance:
   a) following up on training, provide support and mentoring;
   b) detecting performance deficiencies;
   c) identifying new staff in need of training; and
   d) identifying additional staff needs for current and new interventions/strategies.
Table 7: PMDT scale-up plan

<table>
<thead>
<tr>
<th>Year</th>
<th>TB MDR suspect</th>
<th>Provincial coverage</th>
<th>TB MDR cases and treatment</th>
<th>No of health facilities involved</th>
<th>No of referral hospitals involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>300</td>
<td>4</td>
<td>100</td>
<td>29</td>
<td>4</td>
</tr>
<tr>
<td>2011</td>
<td>2 000</td>
<td>14</td>
<td>700</td>
<td>479</td>
<td>14</td>
</tr>
<tr>
<td>2012</td>
<td>4 800</td>
<td>21</td>
<td>1 600</td>
<td>1 095</td>
<td>21</td>
</tr>
<tr>
<td>2013</td>
<td>10 200</td>
<td>27</td>
<td>3 900</td>
<td>2 328</td>
<td>27</td>
</tr>
<tr>
<td>2014</td>
<td>15 300</td>
<td>33</td>
<td>5 600</td>
<td>3 492</td>
<td>33</td>
</tr>
</tbody>
</table>

Source: NTP, Indonesia

Table 8 illustrates the results of case-finding activities in 2009–2012.

Table 8: MDR-TB case-finding in Indonesia

<table>
<thead>
<tr>
<th>Year</th>
<th>MDR-TB suspects</th>
<th>MDR-TB patients diagnosed</th>
<th>MDR-TB patients registered for treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>137</td>
<td>34</td>
<td>19</td>
</tr>
<tr>
<td>2010</td>
<td>531</td>
<td>182</td>
<td>140</td>
</tr>
<tr>
<td>2011</td>
<td>1 245</td>
<td>326</td>
<td>251</td>
</tr>
<tr>
<td>2012</td>
<td>2 248</td>
<td>568</td>
<td>434</td>
</tr>
</tbody>
</table>

Source: NTP, Indonesia

Treatment success rate was 73.6% in 2011 and 71.4% in 2012.

To date, 1240 health staff from all levels of the health system have been trained in basic PMDT. Three international courses on clinical management of MDR-TB have been organized. A cascade system for training is being implemented. Establishment of a national training centre is planned. Sub-referral teams (consisting of at least one doctor, nurse and pharmacist each) have been established in 235 facilities; additional staff have been assigned at the provincial level; and professional organizations are being involved.

Since the availability of competent, motivated people is crucial to deliver high quality TB care and control services, the overall major challenge to HRD is to ensure that all suspects are identified, referred, diagnosed, treated and cured. More specifically, challenges include:

- embedding HRD on PMDT in TB HRD (and not as a separate *programme);
- addressing the major training needs (clinical and managerial) at all levels of the health system (including laboratories), based on defined roles, responsibilities and assigned tasks;
- decentralizing training and meeting challenges to maintain quality;
- ensuring that specialists in PMDT referral hospitals agree with/follow NTP guidelines;
- hiring additional staff to meet the increasing case-load;
addressing the high turnover of staff, especially at the peripheral level;

improving the quality of supervision;

conducting regular monitoring and evaluation.

The next steps to address the challenges include further strengthening of the process for HRD for PMDT; strengthening collaboration with HRH bodies in the MoH to have HR-TB issues integrated in the HRH plan of MoH as well as in the local development plan; strengthening the management information system for human resources; introducing reward systems (financial and non-financial Incentive) for remote area assignments, and continuing supervision and monitoring on HR PMDT.

**Case-finding and treatment: Myanmar**

WHO estimates that in 2011, there were 5500 MDR-TB cases among the notified pulmonary TB cases. Among the total annual TB cases, 9000 are estimated to have MDR-TB. Two nationwide drug resistance surveys have been completed and a third survey is being finalized. A total of six extensively drug-resistant TB (XDR-TB) cases have been confirmed.

The standard operating procedures (SOP) for DR-TB management was finalized in 2009. The DOTS-Plus Pilot Project was started in July 2009 and concluded in November 2011. The catchment areas included 10 townships, five each in Yangon and Mandalay. The model of care for MDR-TB patients was based on an initial period of hospitalization followed by home-based treatment.

The scale-up on MDR management started in 2011 December. A five-year scale-up plan for MDR-TB management was developed; the SOP was revised and services expanded into 38 townships. An ambulatory model of care was started: DOTS was provided by basic health staff. Funding for patient support was provided by external donors. To improve case-finding, 19 GeneXpert machines have been installed in 11 regional and State TB centres. As a result, enrolment has increased significantly (See Figure 4).

**Figure 4: Enrolment of MDR-TB patients by quarter in 38 sites (2009—2013)**

Source: NTP, Myanmar
Major challenges for MDR-TB case-finding and treatment include the need to:

- strengthen HR (number and skills), including the willingness of physicians to follow NTP guidelines;
- strengthen the referral network for utilization of GeneXpert;
- ensure geographical expansion;
- ensure timely delivery of SLD;
- ensure availability of ancillary drugs and support for infection control;
- expand MDR-TB follow-up sites (decentralization);
- ensure DOT;
- ensure/sustain nutritional support for MDR-TB patients;
- implement infection control measures for health-care settings;
- implement paper-based recording, reporting;
- meet TA needs for implementation of new diagnostics, monitoring and evaluation;

Planned activities for next steps include:

- case detection and diagnosis of MDR-TB by GeneXpert; liquid culture and LPA for all retreatment cases;
- ensuring timely SLD procurement and delivery including a regular assessment of SLD needs;
- providing MDR-TB support package for patients;
- reinforcing infection control measures;
- disseminating new guidelines;
- capacity-building among health staff;
- geographical expansion of 15 townships per year in 2013—2014;
- introducing eR&R (Electronic Recording and Reporting).

In conclusion, since the introduction of new tools, the waiting list for enrolment on treatment for MDR-TB patients is increasing. The timely delivery of SLD and the establishment of diagnostic infrastructure, HR strengthening, and implementation of infection control measures are all crucial for PMDT scale-up.

**Achieving nationwide coverage: Nepal**

The burden of MDR-TB in Nepal in 2012 was estimated at 920 cases among the notified pulmonary TB cases. Overall health service coverage in Nepal is affected by poverty, shortage of human resources, harsh geographical terrain and uneven distribution of the population. To address this situation and improve access, NTP has set up treatment centres and sub-centres in all five regions of the country. Despite this, not all people have access. There are only two
national referral laboratories in Kathmandu that can process sputum culture and DST for first line (anti-TB) drugs (FLD) and SLD by conventional method and LPA. However, Xpert is rapidly expanding from 9 to 34 centres, including some mobile status for outreach case-finding among vulnerable and remote populations.

NTP has also established eight hostels and one DR home to manage cases in need of intensive clinical care with no access to DR-TB centres. Psychosocial support is provided to patients and families, including nutrition and transport allowance for MDR-TB and cat.II patients:

➢ training of health workers (75 every year) on PMDT
➢ development of PMDT, infection control and Xpert guidelines
➢ engagement of non-state partners

A case-based web-based surveillance system for DR-TB was established in 2012; however, it is still underutilized. The introduction of nutritional and transport allowances have improved case-holding and the treatment success rate is around 73–78%.

One of the main challenges is that a significant proportion of patients seek care in the large, unregulated private sector. There is still insufficient access for patients to diagnostic facilities and DR-TB centres including a shortage of properly trained health personnel. Social stigma, job insecurity, loss of income all lead to long delays in seeking care. Job seekers who are migrating to India take treatment off on due to seasonal movements and lack of clear coordination between the two programmes. XDR-TB cases detected in a Nepalese man in the US raised the issue of X/MDR-TB in ethnic minorities (Tibetans and migrants from northern Nepal).

Next steps include:

➢ securing a predictable financial flow through application to the New Funding Mechanism of GF;
➢ expansion of Xpert technology (total 25 additional devices in 2013—2014, including some for outreach activities among vulnerable, hard-to-reach groups)
➢ training of laboratory and clinical staff;
➢ upgrading of regional laboratories to perform culture (and DST);
➢ continued procurement of SLD from GDF and addition of new drugs to XDR-TB protocol;
➢ continued and expanded social protection for DR-TB patients and introduction of incentives to increase case-finding and adherence;
➢ construction of a chest hospital in NTC;
➢ establishment of a DR Home in Bandipur;
➢ establishment of five MDR clinical care centres inside regional hospitals;
➢ exploring possibilities for community-based PMDT in selected settings.
Large metropolitan areas: Thailand

Since 2009, there are 100 MDR-TB centres located in capital districts and large urban areas countrywide. In this period, MDR-TB reports from these centres were not complete due to lack of laboratory data for M/XDR-TB detection among risk groups. The GLC monitoring visit in 2012 recommended the revision of the recording and reporting system with full participation of community hospitals on MDR-TB care.

Specific interventions were developed including improving the capacity of the laboratory system for culture. Funding was secured for DST for risk groups by the Universal Health Care (UC) Scheme and Department of Disease Control as well as funding for second line drugs by the UC Scheme for Thai persons and by the GF for non-Thai persons. In 2013, a National Expert Committee for DR-TB was appointed. PMDT items were added into the auditing system of the “Quality TB Clinic” and implementation of the revised TB register and PMDT recording and reporting forms (now including the results of culture and DST for risk groups for MDR-TB) was started.

Challenges and lessons learnt to date with the revised system include:

- limited capacity of health care staff at community level to provide care for M/XDR-TB patients;
- inadequate living support for M/XDR-TB patients;
- provision of DOTS for M/XDR-TB patients;
- availability of a guideline for practice for staff such as psychosocial support for M/XDR-TB patients, side effect assessment/management;
- low coverage of DST among risk groups due to lack of indicators for laboratory data in the old R&R system.

The next steps for the 2013—2014 period will focus on:

- strengthening the laboratory capacity for culture and DST in 12 regions and culture in provincial hospitals in collaboration with NHSO(National Health Security Office);
- expansion of the PMDT module in the electronic recording and reporting system;
- strengthening PMDT in all public hospitals through auditing “Quality TB Clinic”;
- improving coverage and quality of PMDT reports to monitor the progress;
- building capacity of staff at community level through training, practice guide;
- integrating PMDT into regular health system such as indicators of health inspectors, NHSO, health assistants in the Ministry of Public Health;
- securing external funds for living support.
Resource constraints and limited number of donors: Democratic People’s Republic of Korea

The DOTS strategy was introduced in the Democratic People’s Republic of Korea over 10 years ago. Based on data in the Annual TB Report of Democratic People’s Republic of Korea 2012, the TB burden is approximately 34,000 new smear-positive TB cases and 52,000 new smear-negative TB cases. Case notification has gone up in the period 2008–2012 due to increased efforts in case detection (Table 9).

<table>
<thead>
<tr>
<th>Year</th>
<th>NSP</th>
<th>NSN</th>
<th>EP</th>
<th>Relapse</th>
<th>Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>28,026</td>
<td>31,444</td>
<td>10,914</td>
<td>2157</td>
<td>72,541</td>
</tr>
<tr>
<td>2009</td>
<td>29,366</td>
<td>32,491</td>
<td>12,232</td>
<td>2247</td>
<td>76,336</td>
</tr>
<tr>
<td>2010</td>
<td>31,240</td>
<td>36,285</td>
<td>13,725</td>
<td>3408</td>
<td>84,648</td>
</tr>
<tr>
<td>2011</td>
<td>31,279</td>
<td>37,457</td>
<td>16,828</td>
<td>5869</td>
<td>91,433</td>
</tr>
<tr>
<td>2012</td>
<td>31,240</td>
<td>35,959</td>
<td>17,321</td>
<td>6701</td>
<td>91,885</td>
</tr>
</tbody>
</table>

Source: NTP, Democratic People’s Republic of Korea

For the burden of MDR-TB, representative data is not available and no DRS survey has been conducted. Thus the estimated annual burden of MDR-TB is 3,900 of which 2,000 are from incident, new and relapsed TB cases and 1,900 are acquired. In 2012, 786 MDR-TB patients were registered for treatment, of which 50 patients were supported with funds from the GF and 736 patients by Eugene Bell Foundation. Laboratory confirmation of MDR-TB cases is done by NRL and supranational reference laboratories in Hong Kong.

In 2012, the reported NSP case-detection rate was 81% and the treatment success rate 90%. Other sectors have been oriented and involved in supporting TB control in terms of case-finding and treatment adherence. The laboratory network has been strengthened and there has been no stock-out of first line anti-TB drugs in the country.

However, the NTP is also facing the following challenges:

- inadequate availability of resources to manage with PMDTs;
- lack of diagnosis equipment for NSN and EPTB, such as X-ray machines;
- good nutrition, if required, for good treatment;
- Insufficient research capacity to conduct necessary operational research such as introducing traditional regimen and ambulatory treatment;
- frequent turnover of TB staff requiring timely and necessary training to new staff.

The National Strategic Plan covers the period 2014–2017. The core strategy was updated, based on the SEAR strategic plan in May 2012 and other components of the NSP are expected to be completed by the end of October 2013. The goal of the NSP is to reduce TB prevalence, death and infection so that TB no longer becomes a health issue in the country. The objectives are to:
➤ pursue high quality DOTS expansion and enhancement
➤ address MDR-TB management
➤ health system strengthening
➤ engagement of all providers
➤ establishment of partnership
➤ enabling and promoting research.

The number of donors supporting TB control in the Democratic People’s Republic of Korea is limited. Currently, two donors are supporting the NTP: GF and Eugene Bell Foundation (for PMDT). GF has been supporting the country since Round 8. It is the first such grant for the country and is currently in Phase II. The upcoming new funding model (NFM) of GF will also be critical to cover the gap in NSP. NTP is planning to apply NFM as early as possible to ensure successfully implementation of TB control activities.

Country experiences on implementation

Bhutan
The prevalence of MDR-TB is 2.1% among new cases (1.8—2.5%) 16% among re-treatment cases (12—19). In 2012, four cases notified among new cases and seven cases among re-treatment cases.

National guidelines have been developed on MDR-TB management. Liquid culture facility as well as first line DST has been established at the National TB Reference Laboratory (NTRL). Collaboration is established with the SNRL in Bangkok for second line DST. SLD are being procured through the GDF. NTP has also organized training of medical specialists and doctors on DR-TB management.

Challenges and lessons learnt include: delay in laboratory diagnosis of MDR-TB; DST for second line drugs; sample referral from districts to NTRL; technical capacity on PMDT; follow-up of cases during and after completion of treatment; long lead time for procurement of SLD; and fragile funding situation.

The way forward includes the establishment of LPA and other recent diagnostic tools to accelerate MDR-TB diagnosis; strengthen laboratory capacity for LPA and liquid culture; establish solid culture at two RRHs (Regional Referral Hospitals); improve capacity development in PMDT; improve contact tracing and case follow-up; strengthen ACSM on MDR-TB and infection control; promote operational research on MDR-TB and strengthen the involvement of medical colleges.

Maldives
In the period 2008—2013 (up until August) seven MDR-TB patients had been diagnosed. Out of those, one patient died, three were declared cured and three were still on treatment.
Challenges and lessons learnt include financial constraints; lack of skilled manpower with adequate training; time needed for diagnosis of MDR and XDR-TB; capacity to manage, weak monitoring and supervision of the programme from the central level, ensuring adequate supervision and monitoring of DOTS centres in the regions and atolls; and the social stigma attached to the disease.

The next steps are to strengthen the diagnostic capacity for TB and MDR TB; scaling up prevention and management of MDR-TB; training staff at hospitals at the regional, atoll and health centre levels; and increasing community participation in case detection and management.

**Sri Lanka**

In 2012, a total of five MDR-TB patients were diagnosed. All diagnosed patients were enrolled on treatment. This is an improvement from 2008 when only 63% of diagnosed MDR-TB patients were enrolled. Since 2008, a total of 27 cases have been diagnosed. Treatment success is 75% (12/16) with 11 patients still on treatment.

Addressing MDR-TB, TB–HIV, TB contacts and the needs of poor and vulnerable people is a strategic direction in the National Strategic Plan 2012—2016. Specific interventions have included:

- procurement of GeneXpert MTB/Rif;
- procurement of line probe assay;
- development of DRS protocol;
- establishment of two regional culture laboratories;
- upgrading of NTRL to bio-safety level 3 (in progress);
- development of draft PMDT Guidelines;
- development of the draft PMDT expansion plan;

Challenges and lessons learnt include: decentralizing MDR-TB treatment facilities; transportation of sputum for culture; cost of new technologies; financial sustainability; human resources; migration from HBCs (for employment).

The NTP will finalize the PMDT guidelines and the development of PMDT expansion plan including the stepwise expansion of culture and DST for all diagnosed TB patients.

**Timor-Leste**

During 2008–2012, a total of 16 MDR-TB patients were diagnosed of which 14 were enrolled for treatment.
Major challenges to PMDT are as follows:

- no culture and DST in country;
- non-availability of expertise on PMDT in the country;
- lack of knowledge of PMDT in health professionals;
- low awareness of community on MDR-TB and its treatment;
- transportation of sputum samples to SNRL.

Lessons learnt include: (i) good MDR case management is key to high cure rates; (ii) food support for MDR patients and family helped improved adherence to MDR treatment and (iii) collaboration with NGOs can be an added advantage in scaling up PMDT.

In the next phase, the NTP will continue to strengthen collaboration and coordination between public and private health care providers; ensure early and increased case detection; promote rational use of anti-TB drugs and pharmacovigilance in the public and private sectors; ensure uninterrupted availability of sufficient amounts of SLD free of cost; strengthen laboratory systems in the country with proper EQA and improve collaboration with the SRL; ensure adequate TB infection control measures in health care facilities and congregate settings and strengthen human resource at all levels.

**Global Drug Facility (GDF)**

GDF’s Grant Service combines the financing and procurement of quality-assured anti-TB drugs. GDF provides anti-TB drugs to countries that lack the resources required for purchasing them and are ineligible for funding from certain donor agencies, or financing mechanisms. It contracts procurement agents, manufacturers and service providers competitively and transparently. It helps countries access needed anti-TB drugs quickly because there is a single, simple application procedure rather than separate procedures for funding and drug procurement. It combines supply of anti-TB drugs with the TA necessary to manage those drugs effectively within countries. GDF can offer fast-track service -- for example, rapid support to countries that are waiting for disbursement of funds from donors to be able to order and receive drugs, or countries that are suffering from shortages due to civil strife or other humanitarian crises. GDF provides, exclusively, drugs that have either been prequalified by the WHO Prequalification Programme, approved by a stringent national drug regulatory authority or have passed a provisional evaluation by an independent expert committee commissioned by WHO at GDF’s request. Across the years, a total of 128 different countries received the benefits from the procurement system and the multiple advantages offered by GDF.

GDF has developed its strategic directions and framework for the period 2013—2016. The rationale for new directions is to:

- aim at zero tolerance for stock-outs in countries to re-shape operations;
- continue to further shape the market for more affordable prices with no compromise on the international quality standards for TB drugs;
➢ build on lessons learnt from the past and regular market dynamics research;
➢ incorporate new TB drugs and diagnostics within GDF platform;
➢ promote innovative tools for forecasting, monitoring and evaluation (M&E) to countries and leverage communication/collaborative actions with partners for improved planning;
➢ mobilize and catalyse partners’ expertise, including in-country TA programmes to improve service delivery and data management;
➢ foster countries’ shared responsibility, accountability and sustainability for supply chain systems strengthening, regulatory aspects and rational use;
➢ work closer and focus on country needs and feedback to improve operations.

GDF is aiming at universal access for quality-assured TB medicines and diagnostics for GDF clients. GDF commits to three main quality objectives: product quality, service quality and the lowest prices.

Key lessons learnt to date to avoid stockouts:
➢ Funding availability is the key, but technical support and close monitoring are crucial to implement a good management system at the country level.
➢ Standardized methods for information collection, data management and close monitoring + early information sharing with stakeholders / in country partners at all cycle steps are necessary.

GDF QA policy follows recommendations in the WHO Report: A Model Quality Assurance System for Procurement Agencies, 2007 where it recommends that pharmaceutical procurement is restricted only to approved suppliers to ensure that drugs of acceptable quality are procured. This is reflected in the GDF QA policy implemented in June 2010, in full harmonization with GF QA policy.

An increase in the number of suppliers results in a proportional increase in the prices of medicines and competition between manufacturers, thus impacting the total manufacturing capacities for the entire TB community. GDF has significantly increased the number of suppliers and thereby, production capacity and access; especially in the fragile SLD market. The GDF product catalogue includes details of all the drugs that GDF procures, including price range and the highest available price (to be used for planning purposes).

For most products, GDF has multiple suppliers and cheaper prices may be available during quotation, in addition to consolidation of orders and staircase pricing. The catalogue is available online at http://stoptb.org/gdf/drugsupply/pc2.asp.

GDF is ready to double its SLD business: to double its number of patient treatments to 60 000 on short notice e.g. three to six months and can deliver treatments for all global cases to be enrolled by 2015 as per Global TB report 2012. This assumes that funding is ensured and that there are no delays in payment for the medicines from projects/donors to the procurement agent.
Prevalence surveys

Information from routine TB surveillance (case notification) and vital registration (mortality) is essential to estimate the TB burden in the country and its trend. However, most TB high burden countries have not established complete surveillance and vital registration systems. A national TB prevalence survey is a very strong tool to measure and monitor changes in the burden of TB, although it demands a high input of financial and human resources. Therefore, a TB prevalence survey is recommended to clarify the TB epidemiological situation in a country and assess the impact of programme efforts on the TB burden. However, its feasibility should be carefully assessed.

In December 2007, the WHO Task Force on TB Impact Measurement defined three strategic areas of work:

- strengthening surveillance of cases and deaths in all countries, with the ultimate goal of direct measurement from notification and vital registration data;
- conducting national TB prevalence surveys in ≥ 21 global focus countries;
- periodically reviewing and revising methods used to translate surveillance and survey data into estimates of disease burden.

The aim is for the designated 21 global focus countries to carry out at least one survey by 2015. In 2011, the second edition of the handbook on TB prevalence surveys was published to provide clear direction for countries. Chest X-ray screening in the community itself and bacteriological confirmation with culture are the basic requirements of the survey and the survey operation has three phases:

- **Preparation:** Design, funding (US$ 1-3 million), procurement, pre-assessment and operational plan, and training (at least one year)
- **Field data collection:** Survey census; screening and diagnostic test; data management (6—12 months)
- **Post data collection:** Data management, analysis, interpretation, re-estimation of the TB burden and dissemination (6—12 months)

Since 2007, eight countries in Asia and five countries in Africa have completed the survey. These surveys began to provide not only essential information on the current TB situation, but also the future direction for TB control and care in the respective countries and regions.

There is significant progress in WHO South-East Asia Region: Myanmar completed a survey in 2010 and is planning a post-2015 repeat survey; Thailand completed one in 2013; Indonesia launched its survey in April 2013; preparations in Bangladesh, Nepal and the Democratic People’s Republic of Korea are now in the final stage to launch surveys in early 2014. Most completed surveys in Asia suggest a higher burden of bacteriologically confirmed pulmonary TB than previously estimated by tuberculin surveys; early impact of DOTS to lower the prevalence of chronic TB cases; significant reduction of TB prevalence with the expansion of DOTS; and the serious impact of an ageing population, whereby more than 50% of prevalent cases are aged 50 years or more.
Furthermore, achievements and lessons learnt from recent surveys have shown that the situation varies and four different types can be distinguished:

- **Type 1. Prevalence (P) > Notification (N):** *Significantly higher prevalence than the case notification rate* - Poor treatment intervention inflates the prevalence of TB due to prolongation of the disease period.

- **Type 2. P > N:** *High prevalence with a low case notification rate* - This pattern is often observed in remote areas where access to TB diagnosis is poor. Most cases are symptomatic and/or smear-positive.

- **Type 3. P > N:** *High prevalence with a high case notification rate* - Though a large number of TB cases are detected, there are still several undetected cases in the community, thus suggesting that the transmission of TB is high.

- **Type 4. P > N:** *Prevalence is close to the case notification rate* - This situation is observed in settings where DOTS is working at the community level or access to DOTS is fairly well established. Most prevalent cases do not report classical presumptive TB symptoms at the time of the survey.

Surveys have begun to show the limitations of the current case-detection strategy. Symptom screening and smear examination alone may be able to detect only one third of the prevalent cases in the community. Moreover, a significant proportion of smear-positive subjects detected by community screening do not have TB disease. Nontuberculous mycobacteria seem to be rampant in rural settings.

### 4.4. Technical support for TB planning and review

#### Community in TB response

The Global Coalition of TB Activists was launched in March 2013 during a meeting hosted by the Stop TB Partnership. The coalition is a new network that aims to put communities affected by TB at the centre of decision-making in the fight against TB. The objectives of this Coalition are to:

1. **(1)** act as a community representation body at local, state, national and international levels;

2. **(2)** provide input to the two representatives of communities affected by TB on the Stop TB Partnership Coordinating Board, and to community representatives on other Global Health Initiatives;

3. **(3)** build the capacity of activists and encourage their involvement in global health initiatives and establish TB advocacy forums at different levels;

4. **(4)** create a platform where different stakeholders such as affected communities, activists, civil society organizations and government allies can come together and lobby with policy-makers to develop rights-based and patient-centred TB policies and strategies;
(5) build a pool of well-informed and confident activists and advocates to share their experiences with other groups.

Treatment Action Group, along with other stakeholders in TB product development and access, identified the need for TB research-literate community activists. In 2011, TAG initiated the Global Tuberculosis Community Advisory Board to act in an advisory capacity to institutions conducting clinical trials of new TB drugs, treatment regimens, diagnostics, and vaccines, and to provide input on study design, early access, regulatory approval, post-marketing, and implementation strategies.

TB CAB has urged regulators and drug developers to take action on four important issues:

- harmonizing European and US regulatory guidance on accepted endpoints to streamline and accelerate drug development;
- evaluating the safety of using bedaquiline (marketed as Sirturo) and delamanid (the two most advanced candidates in clinical development for TB) together, as they are likely to be used once approved;
- enabling preapproval access to these drugs for select providers to administer them to patients with no other treatment options;
- lowering the price of the GeneXpert machines and MTB/RIF test cartridges to expand access to rapid TB diagnosis.

A mapping exercise was undertaken to map existing and potential organizations working on TB and TB–HIV across the six WHO regions as well as to create partnerships, and enhance collaboration with the GF and/or other international organizations. The methodology used was an online survey which globally resulted in 330 respondents across the WHO regions; 17% of respondents were from SEAR. Respondents were mainly involved in TB–HIV and MDR-TB; however, basic DOTS and research was also represented. The funding of activities comes mainly from the government (40%), multilateral organizations other than GF (38%) and the GF (32%).

**BRAC**

Bangladesh Rural Advancement Committee (BRAC) has a longstanding experience of collaboration with the NTP in the delivery of TB control, in particular, in the areas of delivering services, creating demand for services, generating support and operational research. The first Memorandum of Understanding was signed between the Government of Bangladesh and NGOs in 1994 for services in rural and in 2001 for urban areas. The partnership is considered a successful example of partnerships in TB control. GF approved large scale funding for the NGO consortium—BRAC is a principal recipient of the Fund.

BRAC programme strategies include:

- dissemination of TB information by community health workers (CHW) during household visits and group meetings;
➢ identification and referral of TB symptomatic for sputum test;
➢ establishment of outreach sputum collection center in remote areas;
➢ sputum examination at government/BRAC laboratories;
➢ financial support for X-ray, FNAC, biopsy and DR test;
➢ initialization of treatment under the guidance of medical doctors;
➢ ensuring daily intake of medicine (DOTS) through CHW;
➢ provision of nutritional and livelihood support to poor TB patients, MDR/XDR and TB–HIV coinfected persons.

In 2013, the support included:
➢ rural areas: 297 sub-districts (two/third sub-districts)
➢ urban areas: part of seven city corporations
➢ academic institutes (medical colleges/diabetic hospitals): 27
➢ prisons: 41
➢ garments and other industries/factories in five large cities
➢ TB–HIV
➢ NTRL, RTRL, Gene X-pert laboratories
➢ 392 laboratories and 26 EQA centres

The total population in BRAC-supported areas is 93 million. Despite major progress over recent years, there are still many barriers to universal access to TB control services:

Economic barriers:
➢ transportation cost
➢ investigation costs
➢ wage loss

Geographical barriers:
➢ distance to TB diagnosis and treatment services
➢ heard-to-reach, remote and slum areas

Sociocultural barriers:
➢ marginalized population
➢ stigma, discrimination and lack of knowledge on TB
➢ delay in care seeking
Health system barriers:

- poor adherence to treatment and unfavourable treatment outcomes
- inadequate diagnostic facilities for smear-negative, extra-pulmonary and DR-TB

BRAC will continue to expand its services to address barriers to improve access to TB care for the population including sustaining and intensifying basic DOTS to reach the unreached; expand diagnostic and treatment services to ensure access and equity; ensure quality of care (diagnosis and treatment); address gaps in health system (HR, infrastructure, equipment); engage all care providers including the private sector and strengthen community empowerment and civil society engagement.

Control and Prevention of TB: FHI 360

Control and Prevention of Tuberculosis (CAP-TB) is a five-year project funded by the United States Agency for International Development (USAID) to help reduce the incidence and mortality related to multi-drug resistant TB (MDR-TB). The overarching goal for all project activities is to increase early case detection and to improve treatment success of TB and MDR-TB in the Greater Mekong, with eventual impact on incidence, prevalence, and mortality from these diseases.

The project supports activities in partnership with the national TB programmes (NTPs) and local organizations in China, Myanmar, and Thailand. The prime cooperating agency for the CAP-TB Project is FHI 360 with teams of professionals in each of the countries. The project, which runs from October 2011–October 2016, aims to reduce MDR-TB-related incidence and mortality in these three target countries by:

- strengthening directly-observed therapy (DOT) through community-based volunteers, to prevent emergence of MDR-TB;
- increasing early case detection through the use of GeneXpert diagnostic machines for rapid diagnosis, as well as through increased referrals from the private sector;
- improving treatment outcomes through MDR-TB “living support packages” for patients, which include nutrition, transportation support, and psychosocial support;

In Myanmar, CAP-TB implements the following activities:

- a “living support package” for MDR-TB patients;
- identification of risk groups to improve case detection and treatment success
  - Support to people living with HIV, diabetic patients, geographic areas (border and remote) with high treatment interruption and default rates;
- conducting research in collaboration with the London School of Hygiene and Tropical Medicine.

In Thailand, CAP-TB implements the following activities:
supports the Bureau of TB to develop infrastructure for national MDR-TB decentralization through:

- on-line “help desk”;
- triage queries from around the country to specific experts (clinical niche and geography);
- tracking and monitoring queries over time;

leveraging CAP-TB Knowledge Gateway e-learning application to strengthen MDR-TB expertise:

- in Rayong province with multidisciplinary teams for MDR-TB: monthly case conferences;
- ongoing interval reinforcement of key MDR-TB concepts using online subscription based application

Research Institute of Tuberculosis

The Research Institute of Tuberculosis, Japan Anti Tuberculosis Association, has been providing support to SEAR NTPs for over 50 years and is a WHO Collaborating Centre for Tuberculosis Research and Training. Key activities include organization of training courses and technical support to countries.

The training courses are:

1. The two and a half months TB control course targeting TB programme managers at national and intermediate levels in developing countries (with JICA and WHO);
2. The three-month TB laboratory course targeting TB laboratory managers at the national level (with JICA and WHO).

Other individual and group training activities are organized upon request. Technical support to countries in the South-East Asia Region has included:

- technical support to NTP in Myanmar (JICA);
- laboratory EQA system development in Indonesia (JICA, TBCARE), Myanmar;
- participation in programme reviews in Bangladesh, Indonesia, Nepal, Thailand;
- technical support and research in urban TB in Dhaka;
- organization of mobile seminars on EQA in Bangladesh and Nepal;
- support to research units in Chiang Rai (TB–HIV) and Kathmandu (urban);
- support to prevalence surveys in Bangladesh, Indonesia, Myanmar and Thailand.

KNCV

KNCV is an international non-profit organization to fight TB worldwide by strengthening health systems. Its mission is to globally eliminate TB through effective, efficient and sustainable TB control strategies. KNCV is a centre for specialized expertise and knowledge-
sharing in TB control (since 1903) and supports TB control in more than 35 countries, including Indonesia. KNCV and other TB CARE I partners assist the Ministry of Health in Indonesia and other local partners in eight technical areas:

(1) universal access: PPM, PCA, vulnerable populations
(2) laboratory strengthening
(3) TB infection control
(4) expansion of PMDT
(5) addressing TB–HIV
(6) health system strengthening
(7) TB surveillance
(8) drug supply management.

Support is funded by USAID. The key strategies to provide technical support in the areas listed above include:

(1) Support to development and implementation of TS and GF grants;
(2) Local capacity-building and knowledge exchange based on lessons learnt;
(3) introduction of new technologies and innovative approaches /strategies (e.g. GeneXpert, MGIT);
(4) Technical trouble-shooting to address bottlenecks in implementation.

In conclusion, key lessons learnt from the work to date include the importance of full private sector engagement and strong local commitment to reach the targets of the national TB control programme, and that TA and international partner support remain crucial to maintain and improve quality of care standards and address bottlenecks in TB control.

PATH

With a team of 1200 staff around the world, PATH takes an entrepreneurial approach to developing and delivering high-impact, low-cost solutions, from vaccines and devices to collaborative programmes with communities in more than 70 countries. Support to TB control is concentrated in Bangladesh, China, the Democratic Republic of Congo (DRC), Ethiopia, India, Kenya, Mexico, Nigeria, Peru, Swaziland, The United Republic of Tanzania, Ukraine and Viet Nam.

Key activities and approaches include:

- introduction/scale up of new diagnostic tools and technologies;
- new approaches to PPM (including informal sector);
- integration with HIV, primary care, diabetes, child health services;
- engaging civil society, building capacity, ACT!
- developing global tools, training implementers;
Tuberculosis control

- (ACSM, M&E, MDR-TB planning);
- supporting PMDT planning and scale-up;
- operations research;

In the South-East Asia Region, PATH is supporting a variety of activities in Bangladesh and India such as:

**Bangladesh (USAID):**
- assistance to NTP in PPM expansion, scale up and streamlining;
- NSA, high level advocacy, mandatory notification;
- assistance in developing a ‘Dhaka model’.

**India:**
- diverse support across country (USAID) such as laboratory strengthening, infection prevention and control with Partners in Health (PHI), small pilot PPM, ACSM with FHI 360 and HRD through Initiatives Inc;
- identified as private provider interface agency for the urban TB project in Mumbai including:
  - innovative private network model to improve notification;
  - strengthen and coordinate systems within the private sector;
  - autonomy for private providers within STIC.

PATH is ready to further expand the support to Member States in the Region in areas such as scale-up of PPM, assessment and introduction of new screening technologies, coordination with civil society groups, building their capacity and linking with NTP; and coordinating with professional associations. PATH has also a variety of relevant expertise outside of the TB programme including HSS (Health System Strengthening), technology solutions and research.

4.5 Strategic planning

**Post-2015 global targets and strategies for TB control**

Between 1995 and 2012, steady progress in TB control has been noted in Member States. The TB mortality rate has decreased to 45% since 1990 and the world is on track to achieve the Stop TB Partnership’s global target of a 50% reduction in the mortality rate by 2015. In 2012, 6.1 million newly diagnosed cases notified to NTPs were reported to WHO. Globally, treatment success rates have been maintained at 85% or more since 2007.

However, the battle against TB is not over. The burden of the disease is still enormous; bottlenecks persist and new challenges have emerged: universal access to high quality TB care and prevention is still not in place; weak health systems prevent establishing linkages required across social sectors to address poverty, under-nutrition and risk factors that adversely
influence people’s vulnerability to TB and health outcomes of people with TB; and the full potential of community and civil society engagement is still not explored. Greatly intensified efforts and increased investments are now needed to effect a transformational change with bold targets towards a vision of “zero deaths, disease and suffering due to TB”.

The draft post-2015 global TB strategy reaffirms the vision of a world free of TB and is based on four core principles. The major actions envisaged at the country level are captured under the three pillars and ten components of the strategy presented in Figure 5 below.

Figure 5: Draft Post-2015 Global Tuberculosis Strategy at a glance

<table>
<thead>
<tr>
<th>Vision:</th>
<th>A world free of TB – zero deaths, disease and suffering due to TB</th>
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</thead>
<tbody>
<tr>
<td>Goal:</td>
<td>End the global TB epidemic</td>
</tr>
<tr>
<td>Targets for 2035</td>
<td>95% reduction in TB deaths (compared with 2015)</td>
</tr>
<tr>
<td></td>
<td>Less than 10 cases per 100,000 population</td>
</tr>
<tr>
<td>Milestones for 2025</td>
<td>75% reduction in TB deaths (compared with 2015);</td>
</tr>
<tr>
<td></td>
<td>TB cases reduced to less than 50 per 100,000 population</td>
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<tr>
<td></td>
<td>No affected families face catastrophic costs due to TB</td>
</tr>
<tr>
<td>Principles:</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>government stewardship and accountability, with monitoring and evaluation</td>
</tr>
<tr>
<td>2.</td>
<td>strong coalition with civil society organizations and communities</td>
</tr>
<tr>
<td>3.</td>
<td>protection and promotion of human rights, ethics and equity</td>
</tr>
<tr>
<td>4.</td>
<td>adaptation of the strategy and targets at country level, with global collaboration</td>
</tr>
<tr>
<td>Pillars and components:</td>
<td></td>
</tr>
<tr>
<td>1. Integrated patient-centred care and prevention</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>early diagnosis of TB including universal drug susceptibility testing; systematic screening of contacts and high-risk groups;</td>
</tr>
<tr>
<td>B.</td>
<td>treatment of all people with TB including drug-resistant TB, with patient support;</td>
</tr>
<tr>
<td>C.</td>
<td>collaborative TB–HIV activities; and management of co-morbidities;</td>
</tr>
<tr>
<td>D.</td>
<td>preventive treatment of persons at high-risk and vaccination for TB.</td>
</tr>
<tr>
<td>2. Bold policies and supportive systems</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>political commitment with adequate resources for TB care and prevention;</td>
</tr>
<tr>
<td>B.</td>
<td>engagement of communities, civil society organizations, and public and private care providers;</td>
</tr>
<tr>
<td>C.</td>
<td>universal health coverage policy; and regulatory frameworks for case notification, vital registration, drug quality and rational use, and infection control;</td>
</tr>
<tr>
<td>D.</td>
<td>social protection, poverty alleviation and actions on other determinants of TB.</td>
</tr>
<tr>
<td>3. Intensified research and innovation</td>
<td></td>
</tr>
<tr>
<td>A.</td>
<td>discovery, development and rapid uptake of new tools, interventions, and strategies;</td>
</tr>
<tr>
<td>B.</td>
<td>research to optimize implementation and impact, and promote innovations;</td>
</tr>
</tbody>
</table>
For ensuring accountability, regular monitoring and evaluations need to be built into strategy implementation. Progress will have to be measured against ambitious national targets and indicators. Table 10 presents a list of key global indicators for which country-specific targets should be set, to be adopted and adapted for national use.

**Table 10: Draft key indicators, milestones and targets for the post-2015 tuberculosis strategy**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Milestones and Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2020</td>
</tr>
<tr>
<td>Reduction in deaths due to TB</td>
<td>35%</td>
</tr>
<tr>
<td>Reduction in TB incidence rate</td>
<td>&lt; 85 per 100 000</td>
</tr>
<tr>
<td>Families bearing catastrophic costs due to TB</td>
<td>Zero</td>
</tr>
</tbody>
</table>

**Updated Regional Strategic Plan for TB Care and Control 2012—2015**

The updated Regional Strategic Plan for TB control 2012—2015 aims to support Member States in their continued efforts to reach the TB-related MDG; making universal access to quality TB preventions, care and control services a reality to all persons living in the Member States of the South-East Asia Region.

The plan is based on the following guiding principles:

- health system strengthening based on primary health care principles as the basis for TB control;
- fostering partnerships at all levels; and
- promoting ethical values and human rights principles.

The vision for TB control in SEAR is to eliminate TB as a public health problem (SEA RC resolution SEA/RC60/R5 2997) defined as an incidence rate of active TB of less than one case per 1 million populations per year. The overall goal for TB control in SEAR is to reduce morbidity, mortality and transmission of TB until it is no longer a public health problem.

The overall objectives of the plan are in line with the objectives of the Global Plan to Stop TB 2011—2015:

- achieve universal access to high-quality care for all people with TB;
- reduce the human suffering and socioeconomic burden associated with TB;
➢ protect vulnerable populations from TB, TB–HIV, and drug-resistant TB;
➢ support development of new tools and enable their timely and effective use; and
➢ protect and promote human rights in TB prevention, care and control.

The strategies and interventions to reach the overall goal, vision, objectives and targets for TB control are grouped under the following five key strategies:

1. ensuring universal access to quality TB diagnosis and treatment services for all persons with TB including children;
2. scaling up the programmatic management of drug-resistant TB;
3. scaling up TB–HIV collaborative activities;
4. strengthening laboratory capacity; and
5. contributing to health system strengthening.

The targets and indicators in the plan are based on the Global Plan to Stop TB 2011—2015.

Additional indicators for the scale-up of PMDT and for TB–HIV are found in the respective detailed Regional Plans. There are substantial gaps in the available funding for planned TB control activities in the Region during 2012—2015. This is despite the substantial increases in domestic and external funding over the past decade.

The updated Regional Strategic Plan for TB control 2012–2015 is available on the web page http://intranet.searo.who.int/EN/Section10/Section2097/Section2105.htm or as a hardcopy with the reference number SEA-TB-345.

Strategic planning framework

The NSP for TB control is a key instrument for NTP management. The NSP should consist of the following components:

1. narrative description of the core plan
2. financial plan (including a detailed gap analysis)
3. monitoring and evaluation plan
4. operational plan
5. TA plan.

The NSP should be in line with the national health policies and plan (e.g. health system structure and operations). The plan should be based on a comprehensive analysis of the TB epidemic and of the implantation of TB prevention, care and control services in the respective country. Goals and targets should be clearly stated, based on the analysis and interventions to achieve the identified goals and targets.

The NSP is also essential to identify funds availability and gaps, establish standards and indicators to monitor and evaluate the strategic interventions; operationalize the
Implementation of activities and identify and plan the technical support needs. The process of developing the NSP is a good opportunity for identification and inclusion of new partners in both advocacy and implementation activities. NSP should be used to mobilize resources at national and international levels, through bilateral and multilateral mechanisms such as the GF.

National TB programme reviews (also called joint monitoring missions) are periodic external evaluations of the NTP that aim at improving the managerial and technical performances of the programme in order to reduce TB morbidity and mortality.

The objectives of the review are to:

- review the epidemiology of TB in the country;
- review the structure, organization, and management framework for TB policy and programme development within the health system and the national development agenda;
- assess the financial and human resource situation in light of TB programme performance and demands;
- assess progress towards achievement of national, regional and global targets;
- review the current programme performance by strategic intervention and service delivery level.
- review the arrangements and mechanisms for engaging with other stakeholders such as NGOs and other civil society organizations (CSOs);
- identify obstacles for meeting the objectives of the NTP;
- define the next steps for improving programme performance or redefining the strategic direction and focus, including revising policies and strategic plans.

A TB programme review usually comprises three phases:

- Phase 1: Planning and preparation for the programme review
- Phase 2: Conducting the programme review in the field
- Phase 3: Writing and finalizing the programme review report, and recommendations on next steps.

To monitor the process of the review, a checklist should be prepared which includes all of the activities in the three phases of the review as well as a timeline for implementation. A checklist for this purpose has ten key tasks:

- appoint review coordinators
- establish a review task force
- define the objectives
- set the dates
- select the members of the review team and define roles and responsibilities
- select sites for the field visits
- plan the logistics
- prepare a budget, identify and secure funding
- prepare data collection tools and background documents
- identify the lead report writer (working with the international review coordinator).

The checklist can be expanded and adapted to the specific country situation. During Phase 1, preparatory missions may include:

- a systematic assessment of the TB surveillance system to establish the current TB disease burden and evaluate the impact based on variations of burden over time;
- an in-depth assessment of one or more programme components, with the main focus on TB laboratory network, roll-out of new diagnostic tools, or PMDT scale-up, based on the review.

Preparations for funding applications within the GF NFM should include the following steps:

1. organization of a national programme review, including epidemiological evaluation of TB situation and impact of interventions;
2. development/revision/update of the NSP based on the NTP review recommendations;
3. development of the country concept note, based on the above findings and strategy.

**GF new funding model (NFM)**

The following is a summary of the presentation made on the NFM. For more detail, please refer to the web site: [http://www.theglobalfund.org/en/about/grantmanagement/fundingmodel/](http://www.theglobalfund.org/en/about/grantmanagement/fundingmodel/).

NFM has a number of key features that fundamentally change the way countries apply for funding, get approval of their proposals and then manage their grants. These include:

<table>
<thead>
<tr>
<th>Flexible timeline</th>
<th>Eligible countries may apply whenever desired during the three-year allocation period, so that funding can be more in line with national budgeting cycles and country-specific demands.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simplicity</td>
<td>A more streamlined concept note begins the process of applying for a grant.</td>
</tr>
<tr>
<td>Predictability</td>
<td>All eligible countries receive an indicative funding amount to provide more predictability. The GF Secretariat adjusts these amounts to account for implementers’ circumstances.</td>
</tr>
<tr>
<td>Focus on high disease burden and low resources</td>
<td>NFM allows the GF to focus on countries with the highest disease burden and least ability to pay.</td>
</tr>
</tbody>
</table>
Enhanced engagement | The GF Secretariat engages more proactively in ongoing country-level dialogue, and provides early feedback prior to the Board’s approval of grants. This iterative process should lead to the support of high-impact investments and ensure disbursements can take place as soon as grants are signed.

Improved grant management | Grant management in the NFM is more responsive and proactive, and based on implementers’ risk level, oversight differs.

“Unfunded quality demand” | Parts of concept notes reviewed by the technical review panel (TRP) and considered technically sound, but for which financing from the GF is not possible immediately, will be registered for possible funding by GF or other donors when, and if, new resources become available.

**Eligibility**

GF’s eligibility, counterpart financing and prioritization establish a country’s eligibility for funding for a particular disease component. As noted, participation in the transition to the NFM will be by the invitation of eligible applicants.

**Funding Amounts**

Eligible countries receive an indicative funding amount over a three-year period, communicated by the Secretariat during the country dialogue process. Countries will develop their funding requests by taking into account this amount, and will have to prioritize their needs; applicants will also be encouraged to submit their full expression of demand to the GF, which is the total amount needed to finance a technically appropriate response to the disease. An allocation formula will determine the indicative funding amount, which will be adjusted on the basis of a number of qualitative criteria.

**How will eligibility and the allocation formula work together?**

GF has established the list of eligible countries for 2013. The GF Board will update the eligibility list and aspects of allocation prior to the full implementation of the NFM. An indicative funding amount for the allocation period (three years) will then be communicated to each eligible country.

**Step-by-Step Process**

NFM contains a number of steps, from the design of a concept note to grant negotiations and Board approval. The end-to-end process is illustrated in the figure below. During 2013, selected “early applicants” go through the application process, whereas “interim applicants” only experience certain elements.
The following describes each step in more detail.

1. **Strengthening of national strategic plan**

GF’s NFM strongly encourages countries to base funding requests on quality national strategic plans and through national systems. Using an inclusive multistakeholder process, national strategic plans should be developed for the purpose of making a funding request to the GF. Ideally, these plans will be jointly assessed through a credible, independent, multistakeholder process that uses internationally agreed frameworks.

Where a country does not have a national strategic plan, or where one is no longer current, then an investment case may be presented in the concept note in support of the funding request. See Figure 6 for the process to be followed under NFM.

2. **Process aligned to country dialogue**

Country dialogue is a process that builds upon existing, ongoing mechanisms and discussions that are happening in health and development in each country. It is not a GF-specific process, and includes not only the country coordinating mechanism (CCM), but also key stakeholders such as governments, donors, partners and civil society.

3. **Design and submission of a concept note**

Concept notes should be based on national strategic plans or an investment case. The concept note is the mechanism to request financing from the GF for any one of the three diseases or cross-cutting support for health and/or community systems-strengthening. CCMs will submit the concept notes in most cases. The concept note captures (i) a country’s context, a description of national plan, (ii) request to the GF, which consists of prioritized needs to be financed from the indicative funding amount, and (iii) the full expression of
demand including additional interventions or programme elements that could be covered by availability of incentive funding or additional resources.

4. The TRP review

The TRP continues to review new funding requests in an independent and transparent way, although its working methods are changing from past practice. The TRP reviews all concept notes and makes recommendations to the Secretariat’s Grant Approvals Committee on the technical merit of the proposed activities. As part of this review, an enhanced dialogue takes place between the TRP and the Secretariat to provide relevant contextual and background information. If necessary, the TRP will undertake a further review prior to Board approval.

5. The Grant Approvals Committee

If the TRP recommends a concept note proceed to grant-making, the Grant Approvals Committee will determine an upper ceiling for the budget of each grant, which will consider the TRP’s recommendations and the application of qualitative factors. This final upper ceiling for grant-making will include funding available from a country’s indicative funding amount and, if applicable, any available incentive funding.

6. Grant-making

In contrast to the previous funding model, the GF Secretariat begins negotiating grants prior to requesting approval from the Global Fund Board, providing the Secretariat and implementers with greater flexibility during these negotiations. The Secretariat works with applicants to transform technically sound concept notes into disbursement-ready grants. The iterative process of country dialogue allows disbursements to take place as soon as grants are signed.

7. Approval of grants by the GF Board

When a grant is ready for signature and deemed to be “disbursement-ready,” the GF Secretariat submits it to its Board for approval. Conducting negotiations before Board approval should significantly reduce the time it takes for implementers to receive funds after completion of their grant documents.

Country experience with GF NFM: Myanmar

During the last 10 years, technical and financial support and collaboration for TB control in Myanmar has increased dramatically. In 2011, the Government spent 2% of its GDP on health; however commitments are increasing. The majority of funding for health care comes from out-of-pocket payment by households and from external partners. Despite the increase in funding, there are huge gaps to reach universal access to high quality TB care and control services. Universal access to TB care is also hampered by the weak health system, infrastructure and communication. Myanmar is among the lowest recipients of official development assistance in the world, receiving only a fraction of what neighbouring countries receive.
The history of collaboration with GF in Myanmar has gone through numerous phases:

- GF Rounds 2 and 3 (with a total of US$ 98 million) started in March 2005, and was subsequently interrupted in August 2005. The Three Diseases Fund was established to cover major gaps;
- Round 9, was agreed upon in 2009 and covers the period 2011—2015. However, it was based on an underestimation of the TB disease burden; covers only basic DOTS with limited support for MDR-TB and TB–HIV; and includes additional safeguards with zero cash-flow to government.
- A proposal was drafted for Round 11. However, Round 11 was cancelled in November 2011.
- Myanmar was not eligible for the Transitional Funding Mechanism.
- A request for renewal was submitted in August 2012 for Round 9 Phase 2.
- The GF Secretariat requested Myanmar to develop a concept note with different scenarios for a maximum of 100% additional funding to top up Phase 2. The concept note submitted in October 2012 was discussed with a GF panel in January 2013 with positive results. Round 9 Phase 1 is extended till June 2013, incorporating the first two quarters of Phase 2.
- In February 2013, an invitation was received to apply to the NFM. A new concept note was submitted in April 2013 for the period 2013—2016. Out of US$ 106 million requested for TB, a US$ 82 million grant was approved and committed. The Grant was signed in June 2013.

The National Strategic Plan was updated in 2012, based on the data from the prevalence survey conducted in 2009—2010 and the external review of the NTP in November 2011, which greatly contributed to the possibility of applying to the NFM.

The GF NFM offered the following additional opportunities:

- an alignment with national health strategies;
- fostering in-country partnerships between three disease communities (joint submission);
- predictability on amount and timeframe;
- significant input from the GF country team and the Technical Review Panel (TRP);
- advocacy for increased health funding by the Government (co-financing);
- emphasis on rights-based care.
However, the challenges were significant:

- while the process is simplified, the concept note is almost like a full proposal;
- a slowdown of Phase II and need to accelerate for the second half of 2013;
- no possibility to select new SRs due to short timeframe;
- disease split, PR split and SR split negotiations due to fixed ceiling;
- two different budgets – indicative and incentive;
- uncertainty about incentive funding amount;
- next funding opportunity only in 2017.

Despite major progress in the funding for the NTP, there are still major gaps. The total needs for 2011—2015 are US$ 186 million. The current funding gap of US$ 48 million is mainly for the scale-up of PMDT. However, updates are needed for infection control and laboratory strengthening.

In conclusion, the country could benefit from previous concept notes and proposals in the preparation of the concept note for the NFM. The engagement with TRP (through the GF Secretariat) was based on mutual respect and “equal” partners. WHO has an important role at the country level to ensure a proactive approach, bring the stakeholders together, support the need for continuous consultation and dialogue and keep HQ and RO in the loop. The Fund Portfolio Manager in the GF is the key contact person linking the GF Country Team and Secretariat.

The next steps will include the strengthening of the capacity of the Government to become principal recipient (no longer a UN organization); advocating for the current PRs to start handing over to the Government and national NGO principal recipient and increasing the absorption capacity to ensure access to all TB patients in all parts of Myanmar.

**Group work**

The purpose of the group work was to give countries an opportunity to review and discuss actions needed to ensure good preparation to apply for funding under the GF New Funding Mechanism and share experiences. The outcome of the group work is incorporated in Annex 5.

### 4.6. TBTEAM

**Global overview**

TBTEAM aims to assist NTPs in improving the performance of TB grants from the GF by linking countries with technical support (TS) provided through multiple TBTEAM partners and consultants. TBTEAM provides a platform to coordinate TS and analyse GF grant implementation phases to address challenges through technical partners. It works closely with
the GF Secretariat to proactively prevent bottlenecks and improve the performance of TB grants.

The majority of missions by technical partners go to WHO African Region with 41% of the total missions in 2012, followed by the European Region with 18% and South-East Asia Region with 14%. WHO is the biggest organizer of TA missions with 40%, followed by KNCV with 20%, CDC, Atlanta with 9% and the Union with 8%.

This year, TBTEAM has refocused its activities in light of GF NFM to maximize partners’ engagement with periodic reviews, strategic planning and programmatic and financial gap analysis in preparation for release of future funding. The objectives are to:

1. coordinate the provision of quality TA and programme reviews that inform GF grant renewal and implementation in countries with poorly performing grants; and
2. strengthen the capacity of national TB programmes (NTPs) and TB stakeholders at country level to engage with GF grant processes, including the development and improvement of NSPs and coordination of TA among technical partners.

TBTEAM activities in 2013 include the following:

- tracking grant performance to alert us to any problems (e.g. pipelines);
- regular engagement with GF country teams and relevant partners to address problems;
- TB technical knowledge sharing with Fund Portfolio Managers;
- support to grant renewals
- GF country team pre-assessment of existing grants;
- dialogue with stakeholders and ensuring TA needs are being addressed;
- assisting countries with the preparation of renewal applications and follow-up
- support for the NFM:
- planning process and guidance for conducting a programme reviews;
- NSP toolkit;
- consultant training on NSP and NFM, workshop at the Union conference, workshop on NSP for selected countries in Cepina, Italy, November 2013;
- facilitating assistance with development of robust national strategic plans and GF concept notes.
- TBTEAM website development; and
- advocacy.
The experience with TBTEAM is evolving. The lessons learnt from activities this year are as follows:

- local partners need to play a crucial role in supporting implementation of GF grants, grant renewal as well as preparation for the NFM.
- a focal point at local level (such as TB CARE partner) links the local TB stakeholders (PR/SRs, NTP, WHO and partners) with the regional and global partners (GF country team, USAID, WHO and partners) to flag issues and needs for technical support in a timely manner.
- Open and ongoing dialogue between TB stakeholders at national, regional and global levels and the GF is key to facilitate grant implementation, grant renewal, and during preparations for NFM.

**Regional experience**

The regional TBTEAM is working in close collaboration with the global TBTEAM Secretariat and country level TBTEAM focal points. The role and function of the regional TBTEAM is to coordinate TA requests and responses, support countries in the development of TA plans; coordinate regional stakeholder meetings and ensure quality of TA mission.

The overall role and function of the country level TBTEAM is to build capacity for TA planning, coordination and monitoring. This can apply to:

- short and long-term in-country TA
- GF proposal preparation
- GF grant negotiation
- GF grant bottleneck removal and other implementation requests
- GF Phase II renewal preparation
- development of NTP TA plans
- monitoring of TA planning and coordination.

The total number of missions completed is illustrated in Figure 7. With regards to the type of mission, the areas of: TB programme planning and review and regional meetings; monitoring and evaluation/supervision/ impact measurement; MDR/XDR-TB; drug and commodities management; and laboratory strengthening. The WHO Regional Office for South-East Asia has had the biggest number of missions with 48, 34, 31, 21 and 20 missions respectively in the 2011–2013 (quarter 1 and 2) period out of a total of 216 missions.
However, issues still remain to be resolved. While national TBTEAMs have been established in all the 11 Member States in the Region, the level of operation based on the role and function remains suboptimal and the ownership of the national TBTEAM is not always clear. The number of mission reports uploaded on the web site is very low (9% in 2012 and not exceeding 12% for any year since 2008). There are many partners supporting the NTPs, however, there is still a lack of coordination and many work plans of the partners are not aligned with the NTP strategic plan.

The first annual regional TBTEAM meeting was held in Jakarta, Indonesia in May 2012 entitled “Regional Workshop on TB Control Planning, Implementation and Monitoring.”

**Country experience: Timor-Leste**

The first TBTEAM training in Timor-Leste was conducted in February 2012 using the training material developed by the TBTEAM Secretariat in WHO Headquarters. The training was attended by 11 participants including the NTP manager and the WHO TBTEAM focal point.

As a next step, the National TB Technical Working Group was trained and is now functioning as the national TBTEAM with the NTP manager as the focal point. The team meets on a quarterly basis and follow-up of technical support missions is conducted by the national TBTEAM.

The initial experience with TBTEAM has been very positive and has demonstrated that an active national TBTEAM is very important for TA planning, monitoring and coordination. It can ensure timely and quality-assured TA, keep all stakeholders and partners “a click away”, improve coordination, avoid duplications and enable dissemination of information requests/reports in a timely manner.
Monitoring GF grant performance and getting ready for 2014 NFM: identifying technical support needs

Monitoring the grant performance is an essential component of the GF’s performance-based funding. Technical support during grant implementation is provided to Member States by WHO and technical partners. Technical support will also be provided to assist in the preparations for applications to the NFM.

A variety of partners are involved in the monitoring of GF grant performance:

- At global level: TBTEAM Secretariat and partners/GF, USAID TB team
- At regional level: WHO regional offices and partners
- At country level: Principal recipients/sub-recipients, NTP, WHO and partners.

As part of the monitoring process, a variety of processes needs to be put in place and implemented:

- analysis of grant performance data and identification of actions needed to address problems;
- meetings/teleconferences with GF country teams, NTPs and national partners when facing bottlenecks or when planning next steps in grant implementation;
- engagement in open and ongoing dialogue to facilitate grant implementation and keep funding flowing.

In preparation for the NFM, countries should ensure that robust and up-to-date national strategic plans are in place, based on NTP reviews, epidemiological (EPI) analyses and programmatic and financial gap analyses. National strategic plans should include budgets with funding gaps i.e. should be a "full expression of demand". Countries need to proactively keep up-to-date on NFM requirements. Table 11 provides a summary of the answers to the questionnaire on technical support needs in the South-East Asia Region and timing on the anticipated submission of the concept note that was given to Member States during the meeting. Table 12 shows the anticipated needs and timing for such TA.

Within the framework of its role and responsibilities, TBTEAM has organized or will be organizing a number of activities to support the Member States in the preparation of their application to the NFM:

- consultant orientation on new model (Geneva, 9–11 July), workshop at the Union conference (31 October), workshop on NSPs for selected countries (Cepina, Italy, 17–27 November);
- regional workshops with NTPs and partners: (country roadmaps developed in EURO);
- start mapping out which partners will support which country;
- support to countries in conducting reviews and developing/updating strategic plans.
A review of the information in Tables 11 and 12 shows that there will be a considerable number of requests for TA in the near future. The number of consultants available at global level to provide such TA is limited and it will be essential to maximize coordination and collaboration. However, there are many partners based in or active at country or regional level willing and available to provide assistance (e.g., TB CARE partners are now encouraged by USAID to provide such TA and can reallocate budget for this). It will be essential to plan well in advance and indicate TA needs early to partners at country, regional or global levels. It is also essential to engage in open and continuous dialogue with GF throughout the process.

Regional and global TB TEAM secretariats will explore how best to respond to the requests for TS that cannot be addressed in-country and identify additional resources, training opportunities, and innovative ways of TA, such as countries with experience within the Region helping other countries in the Region to apply to the NFM.

Table 11: Summary of answers to questionnaire on technical support needs in SEAR: timing of submission of concept note

<table>
<thead>
<tr>
<th>Countries of SEAR</th>
<th>GF estimated date for concept note submission</th>
<th>Country response to questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladesh</td>
<td>1 August 2014</td>
<td>February 2014</td>
</tr>
<tr>
<td>Bhutan</td>
<td>1 September 2014</td>
<td>Mid 2014</td>
</tr>
<tr>
<td>Democratic People’s Republic of Korea</td>
<td>1 August 2014</td>
<td>Late 2014</td>
</tr>
<tr>
<td>India</td>
<td>1 April 2014</td>
<td>2014</td>
</tr>
<tr>
<td>Indonesia</td>
<td>30 January 2016</td>
<td>2015</td>
</tr>
<tr>
<td>Maldives</td>
<td>1 August 2014</td>
<td>Early 2014</td>
</tr>
<tr>
<td>Myanmar</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Nepal</td>
<td>1 March 2015</td>
<td>July 2014</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>1 September 2014</td>
<td>Before 2014</td>
</tr>
<tr>
<td>Thailand</td>
<td>1 May 2014</td>
<td>Early 2014</td>
</tr>
<tr>
<td>Timor-Leste</td>
<td>30 October 2014</td>
<td>Late 2014</td>
</tr>
</tbody>
</table>
### Table 12: TA needs and timing

<table>
<thead>
<tr>
<th>Countries SEAR</th>
<th>NSP</th>
<th>TA needs</th>
<th>When</th>
<th>Previous and next review</th>
</tr>
</thead>
</table>
| Bangladesh     | 2012—2016 | Preparation of review  
EPI analysis  
Costing of NSP  
Concept note | Q4 2013–Q2 2014 | 2010 March 2014 |
| Bhutan         | 2012—2016 | EPI assessment  
Concept note | Q1—Q3 2014 | June 2010 2014 |
| Democratic People’s Republic of Korea | 2014—2017 | Programme review  
Concept note | Q4 2014 | No previous review 2014 |
| India          | 2012—2017 | — | | August 2012 2015 |
| Indonesia      | 2010—2014 | EPI assessment  
PSM  
Concept note | In the course of 2014 and for CN Q2 2015 | March 2013 2015 |
| Maldives       | 2014—2018 | Data system  
Concept note | Q4 2013—Q1 2014 | September 2012 2014 |
(if Government becomes PR) Data analysis related to new tools; Electronic database | Q4 2013 and onwards | End 2011 End 2014 |
| Nepal          | 2010—2015 | Data system and analysis of data  
Concept note | Q4 2013 and CN 2014/Q1 2015 | June 2013 2018 |
| Sri Lanka      | 2012—2016 | Preparation review  
Laboratory expert  
Revision of NSP;  
Concept note | Q4 2013—Q1 2014 | September 2012 2014 |
| Thailand       | 2011—2015 | Electronic data base  
New costed NSP | Q4 2013—Q1 2014 | August 2013 2017 |
| Timor-Leste    | 2011—2015 | EPI as EPI assessment  
Programme review  
Update NSP  
Concept note | Early 2014 (CN to be ready by Q4 2014) | 2009 November 2013 |
5. Conclusions and recommendations

5.1 Conclusions

(1) TB control in SEAR has made considerable progress since 1995. The MDG and Stop TB partnership goals and targets of reducing the prevalence and death rates by 50%, compared with their levels in 1990 are likely to be met from a regional perspective by 2015, provided progress to date is maintained and scaling up of implementation of prevention and control activities is ensured.

(2) While the collaboration between TB and HIV control programmes has improved, this collaboration needs further strengthening in all Member States to ensure: universal HIV counselling and testing for all TB patients; availability of cotrimoxazole preventive therapy and ART for all TB patients coinfected with HIV; INH prophylaxis; screening of people living with HIV for TB; and air-borne infection control in health care facilities.

(3) Despite progress being made, significant challenges remain. Many population groups still have no access to quality assured diagnosis and treatment for all persons with TB, and many seek care outside NTPs. Care providers in other sectors often do not follow recommended TB diagnostic and treatment practices. Health systems are weak and underfunded in general, and continue to be overstretched in terms of both infrastructure and staffing.

(4) In addition to maintaining and strengthening the quality of basic TB control services, including better collaboration between paediatric clinics and TB control services for adults, new challenges are emerging. These include but are not limited to: policies and interventions for TB control post 2015; universal health coverage; introduction of new and rapid diagnostics and new anti-TB medicines, new definitions and indicators, and the role of social determinants beyond the mandate of the health sector.

(5) In the context of the global epidemic of noncommunicable diseases, collaboration between national TB control programmes and programmes for the control of diabetics and smoking in particular becomes increasingly important. TB patients need to be screened for diabetes and patients with diabetes screened for TB.

(6) The funding situation for TB prevention, care and control activities remains fragile in most Member States. There is an urgent need to review, update, strengthen as necessary, NSPs for Member States to be able to avail of funding opportunities provided by financial partners such as the GF; other donors and expanded national investments in health systems; adapt and take advantage of the growing introduction of health insurance schemes; secure increased domestic funding and ensure technical support both in the medium and long-term perspective.

(7) While considerable progress has been made in Member States in the Region, the regional burden of TB remains enormous. Sustained and significantly increased efforts are urgently needed to meet the MDG and Stop TB partnership targets in each Member country of the Region and to make significant progress towards the 2050 target of eliminating TB as a public health problem.
5.2 Recommendations

For Member States

Universal access to quality assured diagnosis and treatment for all persons with TB

(1) In order to continue to address the considerable gap between estimated and notified TB cases:

a) Efforts should be further intensified to strengthen the capacity of the public health system to provide high quality services for early and increased case notification. This includes, but is not limited to: revision of definition of TB symptomatic; broadening screening indications based on additional symptoms; using risk factors profile such as contacts of a person diagnosed with TB, especially children under five, HIV-infected persons, poor people, slum-dwellers, homeless, alcoholics, smokers, diabetics, elderly, infants, previously treated patients, prisoners, migrant workers and malnourished children.

b) Community involvement, awareness, early care-seeking behaviour and the empowerment of patients and key affected populations should be strengthened and improved.

c) PPM approaches including adoption of new approaches, and involvement of all care providers should be further scaled up.

d) Diagnostic algorithms should be revised in line with introduction of newer diagnostics.

(2) Capacity at all levels should continue to be developed to analyse and use locally available data to strengthen programme management at different levels.

(3) Laboratory expansion plans should be revised/updated as part of and in line with the NSP and comprehensive national laboratory plans, including the establishment of good quality specimen transportation systems and synchronized with the PMDT and TB–HIV expansion plans (alignment of diagnostic and treatment capacity).

(4) The level of collaboration for planning, guidance, oversight and implementation of TB–HIV collaborative activities should be strengthened through the establishment/strengthening of TB–HIV coordinating/technical committees/working groups and relevant mechanisms for implementation at all levels.

(5) Efforts to scale up and strengthen community and civil society involvement in TB control and develop mechanisms to reflect their contribution should be continued.

(6) Operational plans for airborne infection control in all health facilities should be developed/updated and implemented.

(7) Efforts to develop/strengthen clear linkages in strategic plans for TB control with health policies, health system strengthening strategies and plans should be reinforced and accelerated to ensure:

a) access to health care services for poor and vulnerable populations;
b) strategic allocation of resources for supporting priority health programmes including TB control services in a sustainable manner;

c) availability of sufficient, competent health workers at all levels of the health system including programme planning, implementation, monitoring and evaluation;

d) establishment of sufficient number of diagnostic facilities and storage space for drugs and supplies of necessary quality assured drugs and consumables to ensure universal coverage of health services;

e) integration and upgrading of TB information systems in the general health management information systems and use of data to identify strategic issues;

f) governance (leadership, policy, planning and organizational support);

g) full integration of TB control activities into all health system strengthening efforts;

h) inclusion of research on implementation and health systems.

**Scale-up of PMDT**

(1) A re-invigorated high level political commitment to prevent and combat M/XDR-TB as agreed upon by Member States under Resolution WHA62.15 and the Beijing Ministerial Meeting of High M/XDR-TB burden countries should be ensured.

(2) Availability of up-to-date national drug resistance surveillance data should be ensured at least for those countries with a significant DR-TB problem. Progressively, data on drug resistance should be available from routine surveillance activities amongst the diagnosed cases.

(3) Efforts to achieve universal access to diagnosis and treatment of M/XDR-TB should be accelerated, in particular:

a) ensuring early and increased case detection and treatment of all TB cases;

b) consolidating and expanding laboratory networks by introducing the new rapid molecular diagnostic tools; utilizing revised diagnostic algorithms, and all existing and newly established laboratories, as well as implementing QA systems;

c) strengthening collaboration and coordination between the different components of the public health services, and between public and private health-care providers;

d) promoting the rational use of anti-TB drugs, and strengthening pharmacovigilance in the public and private sectors, especially with the availability of new drugs;

e) ensuring the uninterrupted availability of sufficient amounts of first and second line anti-TB drugs free of charge to patients,
f) reinforcing a patient-centred approach by ensuring appropriate and adequate patient support mechanisms are in place and implemented;

h) addressing the continuing lack of adequate human resources at all levels, and NTPs ensuring their competence and motivation in order to manage the M/XDR-TB patients;

i) promoting community-based interventions to address DR-TB.

(4) Regional collaboration and coordination for TB prevention, care and control activities targeted at migrant populations should be strengthened.

(5) Implementation research promoting new interventions in diagnostics and treatment such as shorter drug regimens for the treatment of MDR-TB and introduction of new drugs should be encouraged.

**Quality-assured drugs and supply chain management**

(1) Only internationally quality-assured medicines for both drug-sensitive and drug-resistant TB treatments should be procured from domestic sources, meeting stringent national drug regulatory policies. Alternatively, using the Global Drug Facility (GDF) mechanism as the source of affordable internationally quality-assured medicines should be considered (not only for DR-TB, but also for medicines to treat drug-sensitive TB (FLD), as well as for TA for building national capacity for drug management including procurement.

(2) The Global Drug Facility should be used as the primary source for all diagnostic commodities including LPAs, GeneXpert and cartridges to avoid excessive payments for overpriced diagnostic commodities through other channels.

(3) GDF services and tools should be used to further forecast the needs for anti-TB medicines according to PMDT scale-up; improve the planning process to ensure adequate funding for anti-TB medicines and strengthening of treatment capacity, as a result of rapid expansion of the diagnostic capacity in Member States.

**Surveillance and prevalence surveys**

(1) A policy of mandatory notification of TB cases should be introduced and enforced to have a reasonable estimate of incidence and a reliable measure on the size and the trends of TB burden that should include a national vital registration system.

(2) Countries that are planning to conduct prevalence surveys should utilize the experience and lessons learnt from completed and ongoing surveys.

(3) Strong NTP leadership should be ensured in the planning and implementation of the different components of the study, recognizing that the prevalence survey takes place once in 5–10 years.

(4) Lessons learnt from the results of national prevalence surveys in other countries should be shared and used to further develop policies and strategies to strengthen surveillance and case detection.
(5) Quality of disease estimates should be ensured in countries where prevalence surveys are not recommended and national information systems are of adequate quality.

(6) WHO new standard definitions and indicators should be introduced as part of the strengthening of diagnostic capacity.

**Strategic planning and the GF NFM**

(1) Close collaboration with all technical, financial and implementation partners at country level, including key affected populations and people living with the disease, should be ensured in the process of planning, developing and implementing comprehensive national strategic plans for TB prevention, care and control.

(2) Comprehensive national strategic plans should be reviewed and updated as necessary, based on an in-depth assessment of the TB and M/XDR-TB epidemic, including the full costing to ensure universal access and identify funding gaps in order to secure sufficient domestic and external financing for TB and M/XDR-TB prevention, care and control.

(3) Timely assistance should be ensured for the country dialogue and development of the concept note and subsequent necessary documentation for the application of funds through the GF NFM and other donors.

**TBTEAM**

(1) An effective national TBTEAM mechanism should be set up for effective TA planning, implementation and monitoring for development and implementation of the national strategic plans including the linked proposal for external funding.

(2) Collaboration with the regional and global TBTEAM should be strengthened.

(3) Timely planning for technical support should be ensured.

**For WHO, technical partners, donors and civil society**

(1) High-level advocacy should be undertaken to ensure that Member States sustain and increase their commitment and actions to meet the targets set out under World Health Assembly Resolution WHA 62.15, the new post-2015 strategy and targets for TB care and control.

(2) Technical support should be provided to Member States to develop and implement updated comprehensive national strategic plans by which universal access to diagnosis and treatment of TB including M/XDR-TB in the public and private sectors can be ensured.

(3) Advocacy and need-based assistance for resource mobilization for Member States in the Region should be provided.

(4) Advocacy for funding decisions of external funding agencies should be based on a comprehensive analysis of the burden of the disease, including M/XDR−TB,
vulnerable populations, as well as the GDP, and needs to be realistic, allowing for appropriate reprogramming for combating TB.

(5) Support should be provided to Member States for enhancing community and civil society engagement in TB control, care and prevention.

(6) Assistance should be provided to Member States to develop TA plans to support scaling up of TB care and control services, and continue the coordination and provision of the required TA for scaling up PMDT through the rGLC Secretariat and regional TBTEAM mechanism.

(7) Assistance should be provided in efforts to strengthen the health systems, particularly strengthening district health system; human resource management, including improving training quality, supply management, public health laboratories and information management and resource mobilization.

(8) Technical support should be provided to countries for the development of the concept note and other documentation to GF and other donors to mobilize resources for TB control.

(9) Technical support should be given to Member States for the development and implementation of DRS survey, analyses and dissemination of results, and to the gradual introduction of routine surveillance amongst the diagnosed TB patients.

(10) The TBTEAM website should be updated and revised to make it more user-friendly; the categories of expertise aligned on the basis of the evolving needs of NTPs; and the quality of TA provided monitored, including the working environment for the TA provider.

(11) Member States and organizations should be offered assistance to conduct relevant implementation/health system research, including the use of the shorter treatment regimen for MDR-TB patients and new anti-TB medicines. Timely supply of anti-TB medicines by GDF and other partners should be advocated.

(12) The possibility of a multi-country proposal to GF to address cross-border issues and treatment of migrants as well as for opportunities for intercountry coordination mechanisms should be explored.
Annex 1

Address by Dr Samlee Plianbangchang, Regional Director, WHO SEAR
(Delivered by WR Thailand)

Distinguished participants, colleagues,

I have great pleasure in conveying the greetings of Dr Samlee Plianbangchang, Regional Director, WHO South-East Asia Region, and welcoming you on his behalf to this Regional Meeting of National TB Control Programme Managers and Partners. As Dr Samlee is unable to attend, I have the honour to deliver his message.

I quote:

Tuberculosis remains one of the major public health concerns in the South-East Asia Region of WHO. The Region continues to account for 40% of the global burden in terms of TB incidence. It is estimated that about 3.5 million new cases of TB continue to occur each year, resulting in about 480 000 deaths.

Drug-resistant TB is a potential threat to the global health security. Given the large number of TB cases, there are an estimated 90 000 multidrug-resistant TB cases in SEAR. It may, however, be kept in mind that this number could be only the “tip of an iceberg”. In 2011, multidrug-resistant TB in the Region accounted for nearly one-quarter of the world’s estimate. Extensively drug-resistant TB, which is the most severe form, has been reported from five countries of the Region.

TB–HIV coinfection is a serious problem in the South-East Asia Region. In 2011, 32% of the total reported TB patients knew their HIV status and, among them, 7.2% were found HIV–positive.

All 11 Member States of the Region have sustained country-wide access to DOTS. Each year, more than 2 million TB cases are being registered for treatment and the success rate among new smear-positive pulmonary cases has remained above 85% since 2005. It was 88% in the 2010 cohort. The TB mortality rate has decreased by 40% since 1990 and the Region is on track to achieve the global target of a 50% reduction by 2015. The decline in TB prevalence is observed in all Member States in the Region and, in some, it is over 50%.

While much has indeed been achieved, the national TB control programmes continue to face a number of challenges. These are related to many uncertainties in terms of sustainable financial and operational resources and limited technical and management capacity. Also, countries need to further strengthen procurement and supply management mechanisms for TB drugs and commodities as well as national laboratory networks. These uncertainties, in turn, are slowing down the planned expansion of early and enhanced case detection and interventions for TB–HIV coinfection and drug-resistant TB.
Ladies and gentlemen,

Though collaboration with other sectors is steadily increasing, the provision of care by all health care providers is not sufficiently linked to national programmes to make an impact at the national level. Low community awareness and utilization of services hamper the uptake of services. It is becoming increasingly clear that attention needs to be paid to addressing the social, economic and behavioural determinants that impact TB, if national efforts to combat TB are to succeed in the longer term. We must ensure that we reach the hard-to-reach or unreached through multidisciplinary and multisectoral community actions based on the primary health care approach.

Ladies and gentlemen;

In recognition of TB as a disease of poverty, effective TB control has to go far beyond DOTS to encompass, among other things, nutrition and environmental factors. Along with medical interventions, related social and economic issues have to be simultaneously tackled. These non-medical aspects of TB control are especially important in the prevention and control of MDR-TB and XDR-TB for achieving long-term results.

Fortunately, TB control is receiving significant support, with increased funding currently available in several Member States. We acknowledge the commitment of several development and technical agencies, as well as national and international NGOs for the implementation of TB programmes in the Region. The Global Fund is the single largest funding source for TB control programmes in 10 Member States. In addition, USAID is supporting Bangladesh, India, Indonesia and the WHO Regional Office for South-East Asia.

Ladies and gentlemen,

The long-term goal is to eliminate TB as a public health problem. Given the nature of the TB epidemic, increased and sustained commitment will be needed from all stakeholders, including national governments as well as national and international partners. Our continued collaboration is critical to deliver much-needed services more effectively and efficiently, to reach all population groups and to overcome the physical, social and financial barriers that prevent people from accessing care.

Successful TB control activities need sustained support from all partners and stakeholders. I would urge that we use the opportunity provided by this meeting mainly to learn from the experiences in our Region and elsewhere which will be useful in more effective planning of the next steps in addressing the increasing burden of TB in the South-East Asia Region."

Unquote.

I shall, of course, apprise the Regional Director of your deliberations and the outcome which, I am sure, will be most fruitful. I wish you a successful meeting and a pleasant stay in Bangkok.

Thank you.
Annex 2

Agenda

(1) Opening and introduction
(2) Regional update and review of recommendations of the Meeting of NTP Managers, 2011
(3) Progress towards universal access
(4) Review of activities to scale up the programmatic management of drug-resistant TB (PMDT)
(5) TB control: targets and strategies post-2015
(6) Strategic planning
(7) Technical assistance for TB planning and review
(8) TBTEAM
(9) Conclusions and recommendations
Annex 3

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Report of a meeting of national TB control programme managers and partners

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Stop TB Partnership Secretariat

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Dili

**Independent Consultant**

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France
Annex 4

Global overview of TB control

Data from http://gamapserver.who.int/mapLibrary/app/searchResults.aspx accessed on 13/10/2013
**Estimated HIV prevalence in new tuberculosis cases, 2011**

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

**Percentage of HIV-positive tuberculosis (TB) patients enrolled on antiretroviral therapy (ART), 2011**

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Percentage of new tuberculosis cases with MDR-TB*

* MDR-TB: multidrug-resistant tuberculosis (resistance to, at least, isoniazid and rifampicin)
Note: Figures are based on the most recent year for which data have been reported, which varies among countries.


Percentage of previously treated tuberculosis cases with MDR-TB*

* MDR-TB: multidrug-resistant tuberculosis (resistance to, at least, isoniazid and rifampicin)
Note: Figures are based on the most recent year for which data have been reported, which varies among countries.

Percentage of tuberculosis (TB) patients with known HIV status by country, 2011*

* Data for the Russian Federation are for new TB patients only.

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Annex 5

Summary of poster session and the questionnaire and group work on NSP and technical support needs.

| Overview of TA needs related to GF processes | BAN | BHJ | DPRK | IND | ING | MAL | MRR | NAP | SRL | TLS |
|------------------------------------------------|-----|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|
| TA needs related to grant performance | Round 5 | AF | Initial feedback from Strategy Team | Grade | Stage 1 | SF | Initial feedback for 2013-2016, 2015 and BF phase | SF | Changes of BF | Phase 2 and BF/3 | TP | Start of Phase 1 (2015) | Round 7 |
| 1. Which GF grants do you currently have? | Round 5 | AF | Transitional support | Grade | Stage 1 | SF | Initial feedback for 2013-2016, 2015 and BF phase | SF | Changes of BF | Phase 2 and BF/3 | TP | Start of Phase 1 (2015) | Round 7 |
| 3. Do you need support for grant renewal? If yes, what kind of TA and by when? | No | No | No | No | No | No | No | No | No | No | No |
| 1. Which GF grants do you currently have? | Round 5 | AF | Initial feedback from Strategy Team | Grade | Stage 1 | SF | Initial feedback for 2013-2016, 2015 and BF phase | SF | Changes of BF | Phase 2 and BF/3 | TP | Start of Phase 1 (2015) | Round 7 |
| 3. Do you need support for grant renewal? If yes, what kind of TA and by when? | No | No | No | No | No | No | No | No | No | No | No |

Report of an informal expert consultation
## Overview of TA needs related to GF process

<table>
<thead>
<tr>
<th>Overview of TA needs related to GF process</th>
<th>BAN</th>
<th>BHU</th>
<th>DPRK</th>
<th>IND</th>
<th>ING</th>
<th>MMR</th>
<th>NEP</th>
<th>SRL</th>
<th>THA</th>
<th>TLS</th>
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<tbody>
<tr>
<td>In How much budget from the GF will remain in 2014?</td>
<td>$32 million</td>
<td>$238,998</td>
<td>$15 million</td>
<td>$84.57 million</td>
<td>Information not available</td>
<td>$56.5 million</td>
<td>$37.9 million</td>
<td>$44.9 million</td>
<td>$1.01 million</td>
<td>$2.6 million</td>
</tr>
<tr>
<td>4. How much budget from the GF will remain in 2014?</td>
<td>$32 million</td>
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<td>$37.9 million</td>
<td>$44.9 million</td>
<td>$1.01 million</td>
<td>$2.6 million</td>
</tr>
<tr>
<td>5. What is the expected end-date of the current GF period?</td>
<td>June 2015</td>
<td>December 2014</td>
<td>June 2014</td>
<td>September 2015</td>
<td>For phase 1, the end of 2015</td>
<td>For phase 1, June 2014</td>
<td>For phase 1, the end of 2014</td>
<td>For phase 1, the end of 2014</td>
<td>For phase 1, the end of 2014</td>
<td>For phase 1, the end of 2014</td>
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<tr>
<td>6. Did you include TA in your current grant(s)?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, there is TA budget</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<td>7. Has it been utilized? Please specify, and give a percentage.</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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<tr>
<td>8. Is there a need for additional TA for the implementation of the current grant(s)?</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes, there is TA budget</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</table>

### International lab expert TA for on the job training on biosafety, improved culture and DST results and good lab practices (2013)

### TA to study aspects of counterpart funding in Sri Lanka for TB control (2013)

### JMM: 2014

### TA to revise the NTP manual with new diagnostic algorithms (2013)

### National TA for infection control policy

This will be identified along with national gaps during the gap analysis for the GF application.
### Overview of TA needs related to GF process

<table>
<thead>
<tr>
<th>Country</th>
<th>BNK</th>
<th>BHU</th>
<th>DPRK</th>
<th>IND</th>
<th>INO</th>
<th>MAL</th>
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<th>TLS</th>
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<tr>
<td>Report of a meeting of national TB control programme managers and partners</td>
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</table>

#### TA needs related to GF

1. Are there any other issues related to grant performance that require TA? If yes, kindly specify which issues and when would you need the TA?

- Report preparation, November 2013:
  - BKD has already been discussed with TGF and TAD.
  - Budget and will be included in phase 2.

2. Are there any other issues related to grant performance that require TA? If yes, kindly specify which issues and when would you need the TA?

- Grant financial performance, but it has already been discussed with TGF and TAD.
- Probably required if government will become PR.
- It may also be helpful in line TA.
- TA for EQA Lab; early 2014.
- Costing for NSP; mid-2014.

3. Do you intend to apply to the GF NFM?

- Yes; early applicant in February 2014.
- Yes, by mid-2014.
- Yes, late 2014.
- Yes, in 2014, depending on the time when GF sends invitation to country for the next round.
- N/A
- Yes; July 2014.
- Yes, before beginning of 2014.
- Yes, early 2014.
- Yes, late part of 2014

4. Do you have a national strategic plan? If yes, what year does your NSF cover? Was your NSF revised or updated or developed after the NSF workshop in Jakarta held in May 2012?

- Yes, National Strategic Plan 2011–2015, developed and endorsed in December 2012.
- Yes, for 2010–2015; updating in process.
- Yes, for 2011–2015; supplement was developed in 2012; expanded and updated in December 2012.
- Yes, for 2011–2015; supplement was developed in 2012; revised in 2013; revised in 2015; TB Diagnosis Plan developed for 2014–2018.
- Yes, July 2014.
- Yes, updating phase after NSF workshop in Jakarta held in May 2012.
- Yes, July 2014.
- Yes, updating phase after NSF workshop in Jakarta held in May 2012.

15. Is there any funding structure for strengthening the health system? Yes.

16. In what areas have you planned to strengthen the health system? In areas such as laboratory network expansion, infection control and supportive management, technical and non-technical (monitoring and evaluation and strategic planning), laboratory information management systems, and others.

17. In what areas have you planned to strengthen the health system for the next four years? We need to do preliminary costing before revising the plan.

18. What has been the contribution of donors to the TB control program? Costs of TB control program:

<table>
<thead>
<tr>
<th>Donor</th>
<th>Cost (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>GF</td>
<td>1.01 million</td>
</tr>
<tr>
<td>WHO and GDF</td>
<td>3.26 million</td>
</tr>
<tr>
<td>Norwegian Government</td>
<td>6.64 million</td>
</tr>
<tr>
<td>Norway Macbund</td>
<td>11.1 million</td>
</tr>
<tr>
<td>Other donors</td>
<td>46.93 million</td>
</tr>
<tr>
<td>Total required</td>
<td>73 million</td>
</tr>
</tbody>
</table>

19. Which cost covering strategy has been used? Pre and post diagnosis.

20. Have you included any gap analysis in your NSP? Yes, it includes gap analysis.

21. Have you conducted any gap analysis recently? Yes, it was conducted in March 2013. The result of this has been utilized in drafting concept note for Phase 2 proposal.

22. When was the most recent National TB Programme review conducted? The last JMM was held in 2009. However, the result of JMM has not been utilized for drafting concept note for Phase 2 proposal.

23. How was the gap analysis used? To identify resource gaps and needs. The gap analysis was developed to identify resource gaps and needs, which particularities were funded in the last National TB Programme review.

24. Have you planned any gap analysis after the last JMM? No gap analysis done.

25. Is there any funding required for any particular strategy? Yes, its main focus is MDR TB costing, and it was identified in the last JMM. However, the result of JMM has not been identified.

26. How do you plan to finance this gap? The annual budgeting does not need to be revised. However, the result of JMM has not been utilized for drafting concept note for Phase 2 proposal.

27. What is the government contribution? US$ 22.72 million.

28. What is the GF contribution? US$ 1.01 million.

29. What is the total required? US$ 73 million.

30. What are the gaps in the donor contributions? Small gaps remoin.

31. Are there any unmet funding gaps? No, there is a gap in the financial gap in the donor's contribution.

32. Are there any financial gaps that need to be filled? Yes, in the financial gap in the donor's contribution.

33. What is the budget for the year 2018? The budget for the year 2018 is planned to be US$ 32.2 million.

34. What is the budget for the year 2019? The budget for the year 2019 is planned to be US$ 32.2 million.

35. What is the budget for the year 2020? The budget for the year 2020 is planned to be US$ 32.2 million.

36. What is the budget for the year 2021? The budget for the year 2021 is planned to be US$ 32.2 million.

37. What is the budget for the year 2022? The budget for the year 2022 is planned to be US$ 32.2 million.

38. What is the budget for the year 2023? The budget for the year 2023 is planned to be US$ 32.2 million.

39. What is the budget for the year 2024? The budget for the year 2024 is planned to be US$ 32.2 million.

40. What is the budget for the year 2025? The budget for the year 2025 is planned to be US$ 32.2 million.

41. What is the budget for the year 2026? The budget for the year 2026 is planned to be US$ 32.2 million.

42. What is the budget for the year 2027? The budget for the year 2027 is planned to be US$ 32.2 million.

43. What is the budget for the year 2028? The budget for the year 2028 is planned to be US$ 32.2 million.

44. What is the budget for the year 2029? The budget for the year 2029 is planned to be US$ 32.2 million.

45. What is the budget for the year 2030? The budget for the year 2030 is planned to be US$ 32.2 million.
### Overview of TA needs related to GF process

<table>
<thead>
<tr>
<th>Country</th>
<th>BNK</th>
<th>BHJ</th>
<th>DPRK</th>
<th>IND</th>
<th>ING</th>
<th>SRL</th>
<th>TLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSS</td>
<td>5.4m</td>
<td>US$</td>
<td>1.07m</td>
<td>US$</td>
<td>0.5m</td>
<td>0.5m</td>
<td>US$</td>
</tr>
<tr>
<td>BAN</td>
<td>4.7m</td>
<td>US$</td>
<td>0.6m</td>
<td>US$</td>
<td>0.2m</td>
<td>0.2m</td>
<td>US$</td>
</tr>
<tr>
<td>BHU</td>
<td>0.2m</td>
<td>US$</td>
<td>0.2m</td>
<td>US$</td>
<td>0.1m</td>
<td>0.1m</td>
<td>US$</td>
</tr>
<tr>
<td>DPRK</td>
<td>0.1m</td>
<td>US$</td>
<td>0.1m</td>
<td>US$</td>
<td>0.05m</td>
<td>0.05m</td>
<td>US$</td>
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<tr>
<td>IND</td>
<td>0.05m</td>
<td>US$</td>
<td>0.05m</td>
<td>US$</td>
<td>0.02m</td>
<td>0.02m</td>
<td>US$</td>
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<tr>
<td>ING</td>
<td>0.02m</td>
<td>US$</td>
<td>0.02m</td>
<td>US$</td>
<td>0.01m</td>
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<td>SRL</td>
<td>0.01m</td>
<td>US$</td>
<td>0.01m</td>
<td>US$</td>
<td>0.005m</td>
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<tr>
<td>TLS</td>
<td>0.005m</td>
<td>US$</td>
<td>0.005m</td>
<td>US$</td>
<td>0.002m</td>
<td>0.002m</td>
<td>US$</td>
</tr>
</tbody>
</table>

All strategic directions are more or less affected by funding gaps. The strategic directions are:

1. Improving access and quality services to enhance case finding and further improve treatment results
2. Address MDR-TB, TB-HIV, TB contacts, HIV-positive TB patients, and vulnerable people
3. Contribute to health system strengthening based on primary health care
4. Engage all-care providers in TB control and management of respiratory diseases
5. Implement tailored advocacy, communication, and social mobilization campaign for TB and other respiratory diseases
6. Conduct surveillance work with a focus to improve programme performance
### Overview of TA needs related to GF process

<table>
<thead>
<tr>
<th>Country</th>
<th>BAN</th>
<th>BRU</th>
<th>DPRK</th>
<th>IND</th>
<th>ING</th>
<th>MNL</th>
<th>MMK</th>
<th>NEP</th>
<th>SRL</th>
<th>THA</th>
<th>TLS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>16. Is there any need to develop a new NSP or revise/strengthen the current NSP? If yes, please specify your needs and indicate by when?</strong></td>
<td>No.</td>
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<tr>
<td><strong>Indonesia</strong></td>
<td>No.</td>
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<td><strong>No.</strong></td>
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<tr>
<td><strong>If this is for TA, then the answer is No.</strong></td>
<td>No.</td>
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<tr>
<td><strong>Need in late 2014 after NTP review and finalization of post-MDG goals.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>NTP Indonesia needs a new NSP for 2015–2019. NTP Indonesia will start development of NSP by 2014.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>Yes, since the current NSP will end in the end of 2014, NTP Indonesia needs a new NSP for 2015–2019. NTP Indonesia will start development of NSP by 2014.</strong></td>
<td>Yes.</td>
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<td><strong>Yes.</strong></td>
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<td><strong>Before end of 2013.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>Yes, as mentioned above and we shall revise it by early 2014 for the NFM application in the latter part of 2014.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>No sound epidemiological data? Please specify (e.g. data on mortality, prevalence data, NTP information system, etc.). Do you need TA to strengthen your information system? If yes, by when?</strong></td>
<td>No sound epidemiological data. Prevalence survey will be done in 2014-2015. Meanwhile we need to review and document the epidemiological estimates, and TA is needed by December 2013.</td>
<td>No.</td>
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<tr>
<td><strong>Democratic People’s Republic of Korea</strong></td>
<td>Yes.</td>
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<td><strong>Yes and no.</strong></td>
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<tr>
<td><strong>Epidemiological data available. Need TA to strengthen the information system by 2015.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>Yes. National prevalence survey is currently implemented, need to strengthen the information system by 2015.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>Yes. Prevalence survey is currently implemented. Need to strengthen the information system by 2015.</strong></td>
<td>Yes.</td>
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<td><strong>Yes.</strong></td>
<td>No.</td>
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<tr>
<td><strong>TB registry of which the quarterly analysis and report are available provides the burden and treatment outcome. The national vital registry system is another source of information that can be linked to the National Health Security Office data. We need TA to evaluate the electronic database and software we used and the way forward to the web-based reporting system. It will be most useful if this TA available in Nov 2013 - Apr 2014.</strong></td>
<td>Yes.</td>
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<td>No.</td>
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<tr>
<td><strong>County have these data. National prevalence survey is currently implemented.</strong></td>
<td>No.</td>
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<tr>
<td><strong>National prevalence survey is currently implemented. Need to strengthen the information system by 2015.</strong></td>
<td>Yes.</td>
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<tr>
<td><strong>Yes.</strong></td>
<td>No.</td>
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<tr>
<td><strong>National prevalence survey is currently implemented. Need to strengthen the information system by 2015.</strong></td>
<td>Yes.</td>
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<td><strong>Yes.</strong></td>
<td>No.</td>
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<td>No.</td>
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<tr>
<td><strong>National prevalence survey is currently implemented. Need to strengthen the information system by 2015.</strong></td>
<td>Yes.</td>
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</tr>
<tr>
<td>Country</td>
<td>DBN</td>
<td>BUR</td>
<td>DPRK</td>
<td>IND</td>
<td>ING</td>
<td>NIS</td>
<td>NKG</td>
<td>NKD</td>
<td>TUR</td>
<td>URI</td>
<td>NLD</td>
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</tr>
<tr>
<td>THA</td>
<td>No. NTP has sufficient capacity to analyse the available data on TB and TB control. Do you need TA to strengthen this capacity? Yes (by whom?)</td>
<td>Yes. There is a need to improve further.</td>
<td>Yes. The data is still not considered so the TB control data analysis is essentially done at the central level. TA is needed to improve further.</td>
<td>Yes. NTP is planning to strengthen the capacity of available data at the central level. TA is needed.</td>
<td>Yes. NTP needs TA to strengthen the capacity of available data at the central level. (Regional level is being done).</td>
<td>Yes. NTP needs TA to strengthen the capacity of available data on TB and TB control. (In a regional level, TA is needed.</td>
<td>Yes. NTP needs TA to strengthen the capacity of available data. (Regional level is done.</td>
<td>Yes. TA needs capacity to analyse the available data. (Regional level is being done.)</td>
<td>Yes. TA needs capacity to analyse the available data. (Regional level is being done.)</td>
<td>Yes. NTP needs TA to strengthen the capacity of available data. (Regional level is being done.)</td>
<td>Yes. TA needs capacity to analyse the available data. (Regional level is being done.)</td>
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</tr>
</tbody>
</table>

**Note:**
- TA: Technical Assistance
- DBN: December
- BUR: January
- DPRK: February
- IND: March
- ING: April
- NIS: May
- NKG: June
- NKD: July
- NIS: August
- NKG: September
- NKD: October
- NIS: November
- NKD: December
- DBN: January
- BUR: February
- DPRK: March
- IND: April
- ING: May
- NIS: June
- NKG: July
- NKD: August
- NIS: September
- NKD: October
- NIS: November
- NKD: December

**Report of a meeting of national TB control programme managers and partners**
### Overview of TA needs related to GF processes

<table>
<thead>
<tr>
<th>Country</th>
<th>Overview</th>
</tr>
</thead>
<tbody>
<tr>
<td>BAN</td>
<td>Yes. The KAPs are being involved in consultations with various stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>BHU</td>
<td>Yes. The KAPs are migrant workers, institutions, PHAs, civil society, and floating populations.</td>
</tr>
<tr>
<td>DPRK</td>
<td>Yes. Key affected populations (KAPs) are involved in the GF processes.</td>
</tr>
<tr>
<td>IND</td>
<td>Yes. The involvement of KAPs is being conducted in consultation with relevant stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>INO</td>
<td>Yes. The proposal is being developed in consultation with various stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>MAL</td>
<td>Yes. Key affected populations (KAPs) are involved in the GF processes.</td>
</tr>
<tr>
<td>MMR</td>
<td>Yes. The involvement of KAPs is being conducted in consultation with relevant stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>NEP</td>
<td>Yes. The involvement of KAPs is being conducted in consultation with relevant stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>SRL</td>
<td>Yes. The involvement of KAPs is being conducted in consultation with relevant stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>THA</td>
<td>Yes. The involvement of KAPs is being conducted in consultation with relevant stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
<tr>
<td>TLS</td>
<td>Yes. The involvement of KAPs is being conducted in consultation with relevant stakeholders which includes proposal co-creation and involvement through group meetings.</td>
</tr>
</tbody>
</table>

#### Key affected populations (KAPs)

- Cured TB patients
- Community affected with TB
- Migrant workers
- Institutions
- PLHA
- Transport workers
- Hard to reach/floating populations

#### Proposed actions

- Proposal is being developed in consultation with various stakeholders which includes proposal co-creation and involvement through group meetings. Any proposal/ concept note is being submitted through Country CCM where there is a representative of TB community.

- Every time the country drafts a concept note for GF Proposal, the proposal is being submitted through the CCM of TB where there is a representative of TB community. The proposal is being submitted through the CCM of TB community.

- Usually, every time the country drafts a concept note for GF Proposal, the proposal is being submitted through the CCM of TB where there is a representative of TB community. The proposal is being submitted through the CCM of TB where there is a representative of TB community.

- For HIV yes, at CCM.

- In the context of TB, involvement of key affected populations is very poor. However, there is involvement by NGOs in GF processes without TB community.
Table: Overview of TA needs related to GF process

<table>
<thead>
<tr>
<th>Country</th>
<th>Key barriers to accessing services for any population? Please specify.</th>
</tr>
</thead>
<tbody>
<tr>
<td>BRN</td>
<td>Yes. Migrant workers and other key affected populations such as drug users; lack of civil society organization that works with key population groups.</td>
</tr>
<tr>
<td>BHU</td>
<td>Insufficient human resource capacity in specific populations (childhood TB, remote areas, prisons).</td>
</tr>
<tr>
<td>DPRK</td>
<td>Barriers have been identified through OR. However, this may not be comprehensive or cover all vulnerable groups.</td>
</tr>
<tr>
<td>IND</td>
<td>Insufficient human resources in specific populations (Childhood TB, remote areas, prisons).</td>
</tr>
<tr>
<td>IND</td>
<td>Insufficient human resources in specific populations (Childhood TB, remote areas, prisons).</td>
</tr>
<tr>
<td>MMR</td>
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<tr>
<td>SRL</td>
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22. Have you identified key barriers to accessing services for any populations? Please specify.

- Yes: Hard to Reach groups, Poor pop, Slums, Floating population, Prisons, inadequate diagnostic facilities for smear negative DR including childhood TB
- Yes. The barriers include social, accessibility to services, cultural, economic and level of awareness/generosity.
- Yes. Mainly geographical access issues.
- Yes under NSP barriers have been identified and a strategy to address them has been incorporated in B21NSP.
- Insufficient human resource capacity in specific populations (Childhood TB, remote areas, prisons).
- Geographical for high risk remote poverty, low income areas and marginalized population; Economic barriers to urban slums.
- Yes. They are as follows:
  1. People living in plantation areas are having poor health services. Accessing health services outside the estate environment poses difficulties due to wage loss and distance.
  2. Following the end of armed conflicts that caused vast devastations in the Northern Province, the health system yet needs considerable improvement in terms of infrastructure and human resources. Therefore, people resettle in these areas have poor access to health care when compared with inhabitants of parts of the country.
  3. Prison health system is poor and therefore, prison inmates have healthcare accessibility issues in terms of quality and timeliness.
- The KAP is just completed and report will be available by end of Oct. 2013. Perhaps some information on barriers to accessing services might be available.
Meetings of the National TB Control Programme (NTP) managers have been held bi-annually since the beginning of the scale-up of DOTS in the Region. These meetings have, in a steadfast manner, provided a strategic forum for exchange of information on existing and new, innovative approaches being applied in countries, for discussions on technical issues, and to follow up on actions taken on the recommendations of previous meetings, resulting in valuable advice for developing policies, strategies and plans for implementation of TB control interventions in Member countries. NTP managers from all 11 Member countries of the South-East Asia Region and representatives from donors, partners, as well as WHO regional and country staff, participated in the meeting and discussed extensively various issues including the importance of current priorities such as ensuring universal access to high-quality TB control services and scaling up programmatic management of drug-resistant TB.