3. KEY CROSS-CUTTING ISSUES: STRENGTHENING HEALTH SYSTEMS, TB AND POVERTY, TB IN CHILDREN, AND TB AND GENDER

3.1 Introduction

As the Partnership’s working groups take forward their individual strategic plans for 2006–2015, they will work within the overall holistic vision of the Global Plan to Stop TB. To do this, the Working Groups have to work together effectively and efficiently, and to take a common approach to key cross-cutting issues. This section addresses four such issues important to the Global Plan: health system strengthening, poverty, TB in children, and TB and gender.

3.2 Strengthening health systems

The crucial need to strengthen health systems

The Global Plan for 2006–2015 has been developed at a time of increasing recognition that the achievement of most of the health-related MDGs depends on overcoming health system constraints that hinder access, equity and quality of care. See Box 3: Core goals and functions of the health system.

In planning and implementing DOTS expansion and other interventions over the past decade, countries with a high TB burden have responded to the strengths and weaknesses of their health systems. National TB Programme capacity to coordinate and guide response was strengthened, but staffing and management resources vary widely and are still seriously lacking in many countries. Innovation in many countries allowed the capacity of the public, private and community organizations engaged in service delivery to be expanded. New ways were found to overcome bottlenecks in drug supply, access to diagnosis and laboratories, use of basic information and evaluation of results. Nevertheless, it was still not possible to reach all patients in need.

The crisis in human resources for health is one of the greatest challenges in TB control and for the MDGs in general. It requires action across all levels of the health system, all programmes, partnerships and global stakeholders.

Addressing the health workforce crisis

Human resources (HR) for health are an essential component of health systems; without them, individual or public health interventions are not possible. A wide variety of workers in the health and allied fields are involved in TB control. A shortage of competent and motivated staff is one of the most important barriers to achieving the MDGs and Stop TB targets. The impact of HIV on the health workforce exacerbates the HR crisis, particularly in sub-Saharan Africa. The Global Plan recognizes that weaknesses in the workforce are complex and require concerted, comprehensive approaches to address them. National plans to pursue DOTS expansion and all the elements of the Stop TB Strategy over the next 10 years will take explicit account of the HR base in specific country settings. Furthermore, they should be integrated within larger system planning to ensure that constraints are recognized and efficient use is made of new opportunities, such as initiatives to train and finance new cadres of health staff.

The main HR issues constraining effective TB control are insufficient quantity, quality and distribution of staff. These problems are not specific to TB control and most require action at national level or throughout the health sector. Such action could include improvements in educational policies, financial ceilings for recruitment, and human resource planning, covering skills mix and distribution, policies to improve staff recruitment, retention and accountability, and budgets to ensure adequate remuneration. However, TB programmes should facilitate the continuing development of competence in all staff involved in TB control, and should keep accurate records of which staff have been trained and where they are.

The Global Plan envisages action on three linked platforms for health system strengthening related to TB control. See Figure 6: Health system strengthening and TB control: advancing outcomes across three platforms

At the macro level, there is need for measures such as: advocacy and collaboration among partners to mobilize greater resources for staffing; removal of barriers to the creation of more posts; and financial reforms to allow better salaries or the use of incentives to ensure adequate distribution and increased retention of staff. At national level, the key lies in building managerial capacity for middle- to long-term HR planning, and in improving recruitment and retention policies by promoting attractive terms and conditions of service. TB programmes worldwide are using various innovative strategies to increase access to treatment, such as using staff in the private sector and in the public sector outside national TB programmes. Many of these initiatives appear to have a positive impact on the HR situation, but need to be properly evaluated. Similarly, innovative initiatives currently employed by other programmes to improve HR use could be adapted to TB control.
Wider action to strengthen health systems

The Stop TB Partnership is committed to being an active player in health system strengthening partnerships. This involves working at the global, regional and inter-regional level, where emerging alliances are promoting more concerted approaches to strengthening critical aspects of national health systems. These include global initiatives, such as the Health Metrics Network (for strengthening national information systems) and the Health Workforce Alliance.

This links with a broader discussion currently being led by the High-Level Forum on the Health MDGs about the possibility of identifying some best practice principles for the engagement of global health partnerships at country level. These primarily relate to alignment and harmonization, in the expectation that better harmonized and aligned aid from partnerships will ultimately lead to better health outcomes. While the full implications for operationalization would need to be explored once any such best practice principles are agreed, the Stop TB Partnership’s Coordinating Board has already endorsed the principles of alignment and harmonization. The Stop TB Partnership will immediately work with other partnerships and agencies to achieve greater harmonization of funding streams within and beyond TB. WHO is currently creating working groups on health financing, working with private providers, and service management, designed to engage multiple partners and to promote exchange of knowledge and good practice, and more consistent action and advice in countries. Stop TB partners will contribute to these working groups.

National TB programmes and their collaborators will engage further with others to identify bottlenecks and support system-wide actions to improve stewardship and management, financing, HR development, service delivery and structures, and community engagement.

Within TB control, and through this Plan, partners will continue to scale up and further adapt innovations (including from other fields) for TB control that can strengthen systems. The strategic plans here include actions designed to improve the stewardship of TB programmes, district health systems and local services (policy guidance, strategic planning and oversight of performance), some elements of HR development, infrastructure and commodity management, service provision, financing, and vital innovations in research, technology provision, and knowledge exchange. As part of service provision, the Global Plan calls on countries to further diversify patient-friendly models of service delivery over the next 10 years to reach more of those missing care today.

The costs of pursuing actions related to health system strengthening at national level have been addressed in all the components of the Global Plan, as shown in Table 1. The costs of engagement and collaboration in global, regional and inter-regional initiatives and joint pilot innovations to strengthen health systems is estimated at approximately US$2 million per year.

The Partnership’s targets for 2015 can be reached and impact sustained, but only with country-led action in the more than
### TABLE 1: COSTS OF HEALTH SYSTEM STRENGTHENING AT NATIONAL LEVEL IN THE GLOBAL PLAN TO STOP TB

<table>
<thead>
<tr>
<th>Component of health system strengthening</th>
<th>Costs included in the Global Plan</th>
<th>Costs not included in the Global Plan</th>
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<tbody>
<tr>
<td><strong>Human resources</strong></td>
<td>Staff who work full time in TB programmes. Time of multipurpose staff who spend some of their time on TB patients (e.g. on inpatient and outpatient care for TB patients in general health care facilities, TB/HIV collaborative activities). Total time of multipurpose staff (and related total costs) assumed to increase in line with total number of patients being treated. Financial incentives where these already exist. General training related to TB and training required to implement new interventions (e.g. DOTS-Plus, TB/HIV collaborative activities). Extra staff required at national and subnational level to improve the quality of TB care and to implement new approaches (e.g. PPM, community-based care).</td>
<td>Increased salaries that may be necessary to improve overall recruitment and retention of health workers. New incentive schemes that can help to ensure adequate staff distribution and retention. Initial training to add to the existing stock of health workers. These cannot be estimated for TB control alone.</td>
</tr>
<tr>
<td><strong>Engagement of non-MOH and non-state sector</strong></td>
<td>Public-private mix DOTS (PPM) – all costs needed for implementation at national and subnational level.</td>
<td>General work required to engage the private sector that is not TB-specific. This cannot be budgeted for TB control alone.</td>
</tr>
<tr>
<td><strong>Health information systems</strong></td>
<td>Recording and reporting system for TB, TB/HIV and DOTS-Plus.</td>
<td>General investments required in health information systems that are not TB-specific. These cannot be budgeted for TB control alone.</td>
</tr>
<tr>
<td><strong>Health financing</strong></td>
<td>Resource mobilization efforts related to TB</td>
<td>Activities – e.g. resource mobilization efforts, work on financing mechanisms – that relate to the health sector as a whole. This cannot be budgeted for TB control alone.</td>
</tr>
<tr>
<td><strong>Management capacity</strong></td>
<td>TB programme management at the level existing in 2005, plus extra investments in managerial staff at national and subnational level to improve quality of TB care and to implement new approaches.</td>
<td>General improvements in health system management capacity, e.g. overall financial management system. This cannot be budgeted for TB control alone.</td>
</tr>
<tr>
<td><strong>Infrastructure</strong></td>
<td>Costs associated with inpatient and outpatient care provided in existing facilities (e.g. buildings, equipment). Investment in buildings and equipment that is TB-specific (e.g. renovation of clinics, purchase of microscopes). Costs to overcome poor coverage of health facilities (e.g. community-based TB care).</td>
<td>Building of new facilities and associated purchase of new equipment. This cannot be budgeted for TB control alone. Large investments may, however, be needed, especially in Africa.</td>
</tr>
</tbody>
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184 countries now pursuing DOTS, implementation of the Stop TB Strategy and this Global Plan, increased resource flows, engagement within larger networks for health system strengthening, and application of poverty reduction strategies.

3.3 Addressing TB and poverty

The links between TB and poverty

The association between poverty and TB is well established. TB infection is transmitted more readily in the environmental conditions of poverty: overcrowding, inadequate ventilation and malnutrition. Improvements in socioeconomic conditions will therefore lead to reductions in tuberculosis incidence. They should also lead to improvements in access to care, its rational use, and quality of care. 

See Figure 7: The link between socioeconomic development, TB and TB care

Booming population expansion, combined with poor civic planning and lack of resources for infrastructure development, has resulted in sprawling slum settlements in many urban areas, especially in the poorest countries. About 1 billion people live in urban slums and in the next 30 years the number is expected to reach 2 billion. In the poorest countries, about 80% of the urban population live in slums. The poor socioeconomic and environmental conditions that characterize slums facilitate transmission of most communicable diseases, including TB. The burden of TB is often greater in urban than in rural settings.

Urban areas themselves pose distinct challenges to effective TB control: challenges related to the multiplicity of public and private health-care providers, to the complex mix of often poorly coordinated health authorities, and to the variety of patient populations with diverse characteristics and needs – slum-dwellers, migrants, drug addicts, homeless people, prison inmates and those with TB-HIV coinfection.

In recent years, there has been a growing recognition that TB itself reduces people’s ability to work and earn a living, and that TB control therefore has the potential to reduce poverty. There is a need for a better understanding of this issue. The Partnership has recently commissioned a study by the World Bank of the economic impacts of TB at the household and macro level in Africa.

Concurrently there is increasing recognition that poverty means far more than economic poverty alone. It encompasses lack of opportunities (including capabilities), lack of voice and representation, and vulnerability to shocks. The Stop TB Partnership has adopted this broad conceptualization of poverty.

In 2003 the Stop TB Partnership commissioned an in-depth analysis of the evidence that TB control reduces poverty. The analysis was positive at the global level in that:

- the DOTS strategy’s standardized, public health approach to TB treatment, by providing subsidized quality TB care, promotes better access to the poor than privately financed TB care;
- the emphasis on DOTS implementation in developing countries promotes equity in service provision at the global level.

FIGURE 7: THE LINKS BETWEEN SOCIOECONOMIC DEVELOPMENT, TB AND TB CARE
However, at the national level and below:

- Even where DOTS programmes are well established, patients with TB face substantial costs prior to TB diagnosis because care-seeking pathways are long and involve many consultations with different providers. While aggregate costs for poor people tend to be lower than those for non-poor people, costs as a proportion of income are much higher for the poor.
- Poor TB patients in developing countries are mainly dependent on daily wages or income from petty trading and have no security of income or employment. In many studies, patients were found to have borrowed money, used transfer payments (given by friends or relatives), or sold assets on account of their illness.
- There are instances where TB patients from poorer sections of society are missed or excluded from DOTS services.

**Action to address TB and poverty**

This analysis and related work led to the establishment of the Network for Action on TB and Poverty and the creation of the TB and Poverty Subgroup of the DOTS Expansion Working Group. In 2005 the Subgroup, together with the Network for Action on TB and Poverty and the WHO Stop TB Department, published a document, *Addressing poverty in TB control*, which outlines options for national TB programme managers to choose from in addressing poverty issues in DOTS implementation.

This guide will be used to prioritize the needs of the poor and vulnerable in implementing all the activities of the Global Plan. As evidence and experience accumulate, these options will be revised and reformulated into formal guidelines for use at national and international levels.

Poor and vulnerable TB patients will benefit from tangible improvements as policy-makers and service providers promote this cycle of action by following the six practical steps laid out in the document (see Box 4). These practical steps are supported by the Partnership’s working groups as set out in their individual strategic plans for 2006–2015. Both in overall vision and in country-level specific action, the implementation of this plan will make a substantial contribution towards achieving the MDGs for communicable diseases and poverty reduction.

**3.4 Addressing TB in children**

Ideally, all TB patients should receive standardized high quality care under the auspices of a national TB programme. In practice, in many countries the care provided to TB patients outside the national TB programme often falls below the standard consistent with good clinical care and good public health practice. In particular, children with TB often receive care outside national TB programmes.

The Partnership’s DOTS Expansion Working Group has a Childhood TB Subgroup, which works to decrease the global burden of childhood TB mortality and morbidity, by promoting the care of children with TB as part of routine TB activities. It assists national TB programmes, technical partners, and the Stop TB Partnership Working Groups in explicitly addressing issues related to diagnosis, treatment, and drug formulations for children with TB. There is an urgent need to improve registration of children with TB and reporting of their treatment outcomes by national TB programmes, and to use this information to ensure that all children with TB receive a high standard of care.

The strategic plans of each of the implementation working groups address the care of all patients with TB, including children. For example, the DOTS Expansion and TB/HIV Working Groups address the benefit of isoniazid preventive treatment for those at high risk of developing TB, including children under six years of age living in the same household as an adult with infectious TB, and children of any age with HIV. The Working Group on New TB Diagnostics is pursuing better diagnostic tests for use with children. To facilitate the effective treatment of children with TB, the Global Drug Facility is promoting the development of child-friendly formulations of anti-TB drugs.

**3.5 Addressing TB and gender**

In most countries, many more men than women have TB. The Russian Federation provides a typical example. Of almost 120,000 new TB patients registered in 2004 (excluding those in the penitentiary system), 71% (85,000) were male and 29% were female. The predominance of men among TB patients in most countries is more likely to be due to epidemiological differences between the sexes than differential access to health care.

However, a different picture is emerging in several countries in sub-Saharan Africa with high HIV prevalence, where the majority of notified cases are now in women. Because HIV infection rates are higher in women than in men, more TB cases are also being reported among women, especially among those aged 15–24 years.

Addressing gender-specific differences in TB epidemiology and barriers to effective care can contribute to ensuring full access to the Stop TB strategy. The Partnership is exploring what more needs to be done to mainstream gender issues in all working group activities. The Partnership recommends the following practical steps for national TB programmes to address gender issues in TB control:

1. Countries planning a population-based TB prevalence survey as a means of monitoring the national TB burden will gain important information on the sex ratio among TB cases. Differences in the sex ratio between a population-based TB prevalence survey and national TB programme reports suggest differential access to health care. Qualitative research is useful in exploring the reasons for differential access to health care.

2. Steps to address differential access to health care include:
   - developing gender-sensitive information, education and communication (IEC) programmes and activities;
   - using gender-sensitive technical training for health workers to overcome any gender-specific barriers to TB diagnosis and treatment;
PART I: STRATEGIC DIRECTIONS

BOX 4: ADDRESSING POVERTY IN TB CONTROL: SIX PRACTICAL STEPS

Step 1. Establish the profile of poor and vulnerable groups using:
- government or other data on the prevalence and distribution of poverty and social vulnerability, and on poverty-reduction plans;
- information on which types of health care providers are used by poor and vulnerable groups;
- locally conducted surveys on the socioeconomic status of TB patients and poverty-related disparities in access to and outcomes of care;
- information on any adaptations already made in DOTS delivery to serve poor and vulnerable groups.

Step 2. Assess the barriers to accessing TB services faced by the poor and vulnerable under the following headings:
- Economic barriers: Does the organization of the TB services simplify the health care pathway? Are diagnostic and treatment services for TB well integrated into general primary care facilities? Does treatment observation require patients to make multiple visits? Which services require patients to pay?
- Geographic barriers: Identify areas where patients have to travel long distances over difficult terrain to reach TB services.
- Social and cultural barriers: Identify areas and population groups where TB services are underutilized.
- Health system barriers: Assess staff attitudes towards poor patients and investigate whether decentralization leads to strengthening of TB services at primary care level.

Step 3. Take action to overcome barriers to access. For example:
- Address economic barriers by integrating TB services within primary care provision, encourage pro-poor PPM DOTS, promote TB control in workplaces, improve the coverage of smear microscopy networks, avoid user-fees, provide free smear microscopy and other diagnostic services.
- Address geographical barriers by extending diagnostic and treatment services to remote regions, providing free transport to patients from such regions, and promoting community-based TB care.
- Address social and cultural barriers by engaging former TB patients and TB support groups to advocate for services and encourage community mobilization.
- Address health system barriers by engaging in health service decentralization to ensure capacity strengthening in less well-served areas and by establishing TB control as a district-level priority.

Step 4. Work with situations and population groups requiring special consideration, such as
- refugee communities, asylum seekers, economic migrants and displaced populations;
- pockets of deprivation in wealthier countries; ethnic minorities, homeless people;
- injecting drug users;
- prison populations.

Step 5. Harness resources for pro-poor TB services from:
- available strategies to improve access to health services (such as the GFATM, Poverty Reduction Strategies);
- technologies to enhance the efficiency and effectiveness of services.

Step 6. Assess the pro-poor performance of TB control and the impact of pro-poor measures by:
- harnessing the human and other resources required for equity monitoring through alliances with partners (such as universities);
- including socioeconomic variables in routine data collection and analysis; ensuring that TB-related questions are included in district health surveys and other household surveys;
- ensuring socioeconomic questions are included in TB prevalence surveys;
- conducting periodic studies of care-seeking, diagnostic delay, and use of DOTS in health facilities, with linked socioeconomic data;
- conducting qualitative assessments among community members and TB patients about who benefits from TB services (including linked services for HIV) and who does not.
• ensuring that data collection and analysis take gender into consideration;
• increasing the involvement of nongovernmental health providers in TB control, and decentralizing TB care services, so that social organizations and volunteer groups (including ex-patients) who are representative of local communities can identify and address gender-specific barriers to TB diagnosis and treatment.

3. In countries with high HIV prevalence, steps to respond to the increasing proportion of women among TB patients include:
• collaboration of the national TB programme with services for women, e.g. programmes for prevention of mother-to-child transmission (PMTCT) of HIV, so that HIV-positive women can receive information about TB, periodic screening for TB, and treatment of latent TB infection;
• involvement of women’s groups and organizations in TB care and prevention, e.g. by recruiting and training women, including those who are HIV-positive, to be health volunteers.