COUNTRY PROFILE

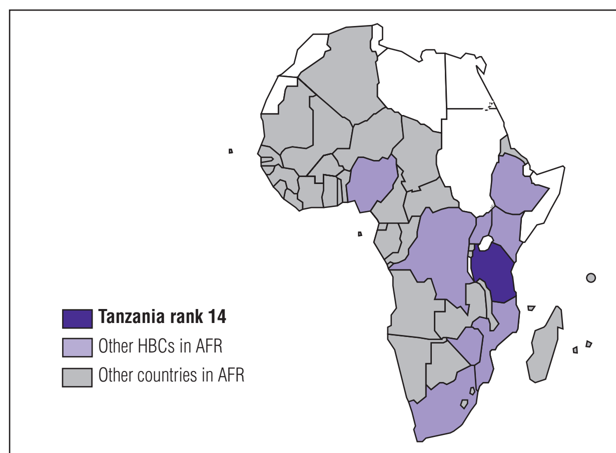
United Republic of Tanzania

In 2008 the United Republic of Tanzania will benefit from a massive increase in the budget for TB control that is almost met by a corresponding increase in available funding. The planned expansion of collaborative TB/HIV activities to the whole country in 2007, use of community-based TB care in more districts and formal collaboration with private practitioners should improve both the case detection rate and treatment success. The provision of ART to HIV-positive TB patients is likely to reduce the currently high death rate, and plans to improve the recording and reporting system may help reduce the number of patients lost to follow up after transfer. Management of MDR-TB was begun in 2007; preparations began in 2006 with the construction of laboratories and hospital wards and the recruitment of personnel.

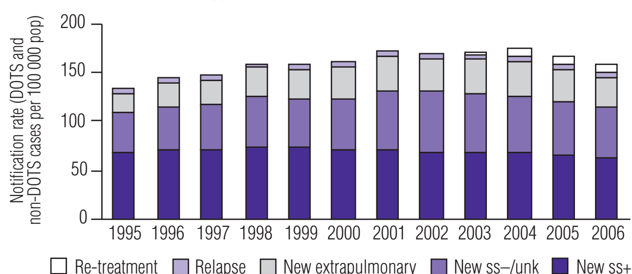
SURVEILLANCE AND EPIDEMIOLOGY, 2006

Population (thousands)[a]	39 459
Estimates of epidemiological burden[1]	
Incidence (all cases/100 000 pop/yr)	312
Trend in incidence rate (%/yr, 2005–2006)[2]	**-3.9**
Incidence (ss+/100 000 pop/yr)	135
Prevalence (all cases/100 000 pop)[2]	**459**
Mortality (deaths/100 000 pop/yr)[2]	**66**
Of new TB cases, % HIV+[b]	*18*
Of new TB cases, % MDR-TB (2007)[c]	1.1
Of previously treated TB cases, % MDR-TB (2007)[c]	0.0
Surveillance and DOTS implementation	
Notification rate (new and relapse/100 000 pop/yr)	150
Notification rate (new ss+/100 000 pop/yr)	63
DOTS case detection rate (new ss+, %)	**46**
DOTS treatment success (new ss+, 2005 cohort, %)	**82**
Of new pulmonary cases notified under DOTS, % ss+	55
Of new cases notified under DOTS, % extrapulmonary	22
Of new ss+ cases notified under DOTS, % in women	37
Of sub-national reports expected, % received at next reporting level[d]	100
Laboratory services[3]	
Number of laboratories performing smear microscopy	690
Number of laboratories performing culture	3
Number of laboratories performing DST	1
Of laboratories performing smear microscopy, % covered by EQA	100
Management of MDR-TB	
Of new cases notified, % receiving DST at start of treatment	0.6
Of new cases receiving DST at start of treatment, % MDR-TB	1
Of re-treatment cases notified, % receiving DST	3.7
Of re-treatment cases receiving DST, % MDR-TB	5.3
Collaborative TB/HIV activities	
National policy of counselling and testing TB patients for HIV?	Yes (to all patients)
National surveillance system for HIV-infection in TB patients?	Yes
Of TB patients (new and re-treatment) notified, % tested for HIV	11
Of TB patients tested for HIV, % HIV+	50
Of HIV+ TB patients detected, % receiving CPT	57
Of HIV+ TB patients detected, % receiving ART	26

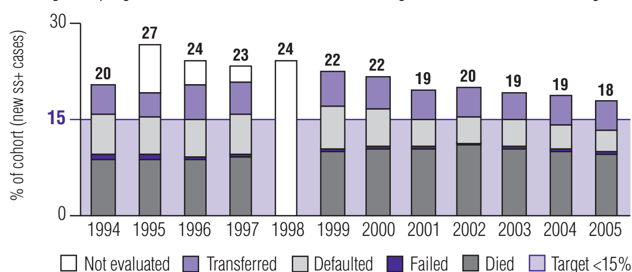
WHO Africa Region (AFR)
Rank based on estimated number of incident cases (all forms) in 2006



Case notifications
Notification rates for all case types declining



Unfavourable treatment outcomes, DOTS
Making slow progress towards treatment success rate target but death rate remains high



DOTS expansion and enhancement	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
DOTS coverage (%)	98	100	100	100	100	100	100	100	100	100	100	100
DOTS notification rate (new and relapse/100 000 pop)	133	145	147	159	159	161	177	169	168	167	159	150
DOTS notification rate (new ss+/100 000 pop)	67	70	70	74	73	71	71	68	68	69	66	63
DOTS case detection rate (all new cases, %)	47	48	46	49	47	46	48	47	47	48	47	47
DOTS case detection rate (new ss+, %)	57	56	53	54	52	49	48	45	46	47	47	46
Case detection rate within DOTS areas (new ss+, %)[e]	58	56	53	54	52	49	48	45	46	47	47	46
DOTS treatment success (new ss+, %)	73	76	77	76	78	78	81	80	81	81	82	–
DOTS re-treatment success (ss+, %)	76	75	75	73	74	73	76	77	75	76	77	–

IMPLEMENTING THE STOP TB STRATEGY[1]

DOTS EXPANSION AND ENHANCEMENT

Political commitment, standardized treatment, and monitoring and evaluation system

Achievements

- Declared TB a national emergency in August 2006
- Changed TB treatment regimen countrywide from 8 to 6 months by introducing rifamipicin in the continuation phase
- Set up quarterly meetings to computerize district TB recording and reporting countrywide, with support from CDC
- Revised TB reporting and recording forms and TB register in line with WHO recommendations
- Produced 11th annual report of NTP activities

Planned activities

- Develop strategic plan, including component on national TB emergency
- Monitor treatment outcomes and adverse drug reactions nationally
- Monitor accuracy and completeness of TB data by development of specific indicators

Quality-assured bacteriology

Achievements

- Completed national DRS

Planned activities

- Pilot test use of liquid culture media and introduce LED microscopy in 3 regions: Dar el Salaam, Mwanza and Tanga

Drug supply and management system

Achievements

- Introduced FDCs in priority areas, with support from GDF
- Distributed anti-TB drugs free of charge to all collaborating service providers, including NGOs and major private-for-profit health facilities

Planned activities

- Conduct physical inspection of drugs and drug stores in health facilities

TB/HIV, MDR-TB AND OTHER CHALLENGES

Collaborative TB/HIV activities

Achievements

- Developed national guidelines for collaborative TB/HIV activities
- Trained more than 1500 health workers to implement collaborative TB/HIV activities
- Scaled up HIV testing and counselling for TB patients, and provided ART and CPT to identified HIV-infected TB patients

Planned activities

- Provide CPT to 80% of HIV-positive TB patients
- Provide ART in TB clinics in 31 out of 156 districts
- Train 700 health workers at district level to implement collaborative TB/HIV activities

Diagnosis and treatment of multidrug-resistant TB

Achievements

- Built new TB wards and laboratory unit for management of MDR-TB
- Recruited 6 medical officers, 16 nurses, 1 pharmacist and 2 laboratory technologists for management of MDR-TB
- Strengthened laboratories in order to perform culture and DST

Planned activities

- Apply for second-line drugs for treatment of MDR-TB through GLC
- Train 26 clinicians, nurses and laboratory staff in management of MDR-TB
- Introduce drug resistance surveillance by providing DST for all previously treated cases and 10% of new cases
- Introduce EQA for culture and DST

High-risk groups and special situations

Achievements

- Initiated screening for TB in prisons and among refugee populations

Planned activities

- None reported

HEALTH SYSTEM STRENGTHENING, INCLUDING HUMAN RESOURCE DEVELOPMENT

Achievements

- Collaborated with planning department of MoH, ministries of justice and of defence, NAP and NGOs in planning for TB control
- Trained over 4000 general health workers in clinical management of TB and leprosy (1 health centre established in each village)
- Renovated 12 TB diagnostic centres in 7 districts
- Provided 60 microscopes and other laboratory supplies to diagnostic centres and to public and private health facilities in 18 districts, as part of FIDELIS programme
- Developed draft modules on TB control for inclusion in curricula for medical doctors and nurses of 4 medical schools

Planned activities

- Continue to renovate health infrastructure and increase supply of microscopes
- Develop long-term HRD plan for TB, with technical support from partners
- Train additional 600 general health workers

[1] Unless otherwise specified, achievements are for financial year 2006; planned activities are for financial year 2007.

ENGAGING ALL CARE PROVIDERS

Achievements

- Carried out national assessment of involvement of non-NTP providers in diagnosis and treatment of TB, with WHO technical support
- Supplied anti-TB drugs free of charge to private health centres

Planned activities

- Introduce patient-centred treatment approach to all districts, in close collaboration with PATH
- Strengthen PPM by involving major private providers in urban areas in TB control
- Introduce ISTC in medical school curriculum

EMPOWERING PEOPLE WITH TB, AND COMMUNITIES

Advocacy, communication and social mobilization

Achievements

- Collaborated with NGOs and influential community leaders in advocacy and sensitization about TB
- Developed new ACSM messages for TB/HIV

Planned activities

- Conduct social marketing of TB

Community participation in TB care

Achievements

- Involved communities in TB control in 11 districts
- Introduced patient-centred treatment and community-based DOT
- Supported creation of club for former TB patients
- Introduced community-based TB control activities in 3 districts with nomadic populations

Planned activities

- Involve former TB patients in TB centres in 31 districts
- Recruit focal persons at central level to coordinate community and empowerment activities
- Support creation of additional associations for former TB patients
- Monitor community-based DOTS in nomadic populations

Patients' Charter

Achievements

- Distributed 500 copies of Patient's Charter to districts

Planned activities

- Develop mechanisms to involve TB patients and former TB patients, recognizing their potential to contribute to TB control activities

RESEARCH, INCLUDING SPECIAL SURVEYS AND IMPACT MEASUREMENT

Achievements

- Conducted national DRS
- Began research projects on treatment of HIV in TB patients
- Initiated national survey of prevalence of infection (3 health workers attended workshops in Botswana and Latvia) and began preparations for national prevalence of disease survey

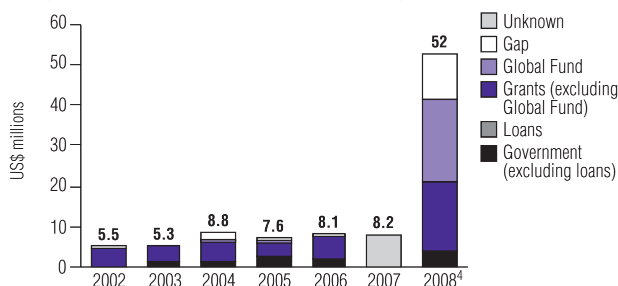
Planned activities

- Continue preparation for prevalence of disease survey

FINANCING THE STOP TB STRATEGY

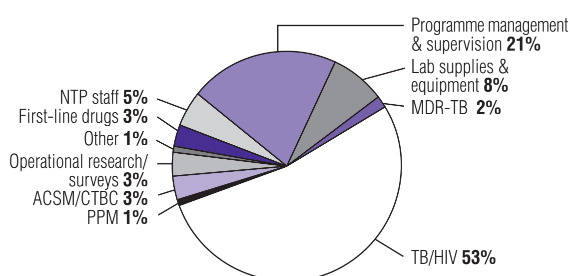
NTP budget by source of funding

NTP has developed plan and budget for 2008–2012 that covers all elements of the Stop TB Strategy; funding needs now much higher than previous years; while funding has grown, mostly from external donors and Global Fund, funding gaps remain



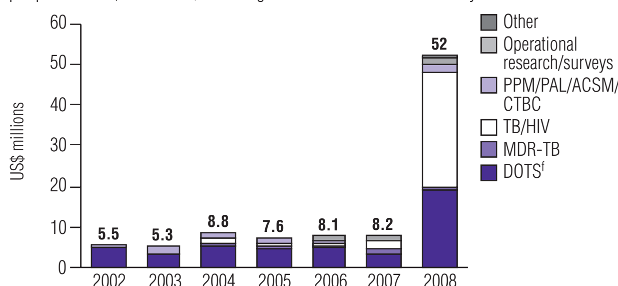
NTP budget by line item, 2008

Largest components of budget are TB/HIV (53%) and DOTS (37%); the NTP has estimated and reported a comprehensive budget for collaborative TB/HIV activities, including activities funded through the NAP



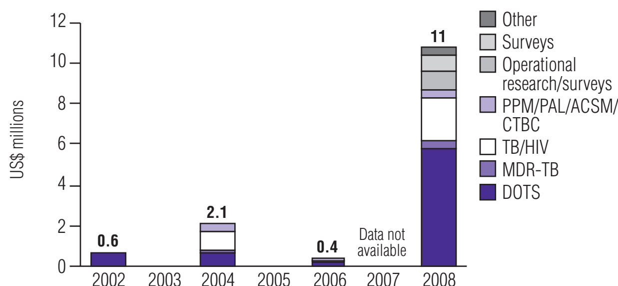
NTP budget by line item

Increased budget for DOTS component, mainly for supervision activities and training at peripheral level; 85% of TB/HIV budget is for activities conducted by the NAP



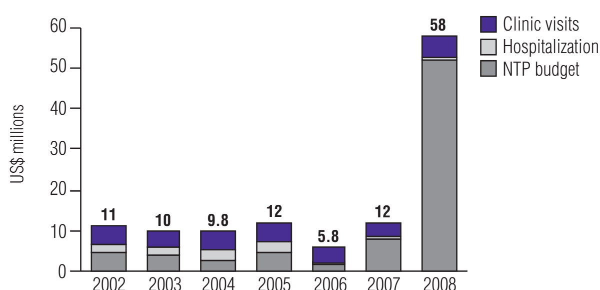
NTP funding gap by line item

Funding gap within DOTS mainly for training and laboratory supplies and equipment



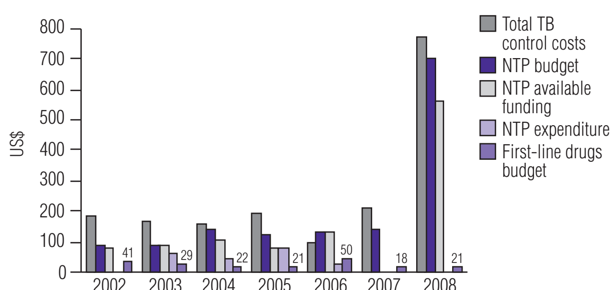
Total TB control costs by line item[5]

NTP budget will account for largest share of total TB control costs in 2008 if fully funded, whereas the use of general health services by TB patients accounts for the largest share of total TB control costs 2002–2005



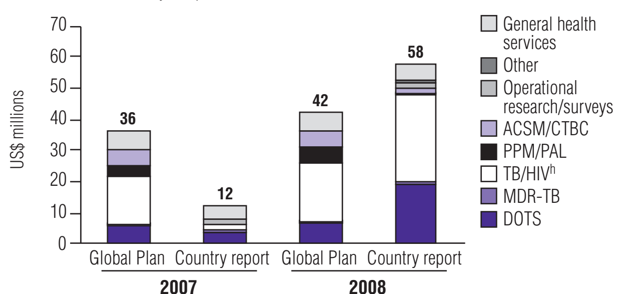
Per patient costs, budgets and expenditures[6]

Substantial increase in cost and budget per patient as TB control broadened in line with the Stop TB Strategy; increase in available funding per patient



Comparison of country report and Global Plan:[g] total TB control costs, 2007–2008

Planned implementation of DOTS and TB/HIV in 2008 ahead of Global Plan expectations; full costing of TB/HIV activities has brought costs reported by country in line with Global Plan; this might happen for other HBCs if similarly comprehensive assessments of costs were undertaken



NTP budget and funding gap by Stop TB Strategy component

(US$ millions)	2007 BUDGET	2007 GAP	2008 BUDGET	2008 GAP
DOTS expansion and enhancement	3.3	–	19	5.8
TB/HIV, MDR-TB and other challenges	3.2	–	29	2.5
Health system strengthening	0	–	0	0
Engage all care providers	0	–	0.4	0.3
People with TB, and communities	0	–	1.8	0.3
Research	1.7	–	1.8	1.8
Other	0	–	0.4	0.3

Financial indicators for TB

	2007	2008
Government contribution to NTP budget (including loans)	–	8.0%
Government contribution to total cost of TB control (including loans)	–	16%
NTP budget funded	–	79%
Per capita health financial indicators (US$)		
NTP budget per capita	0.2	1.3
Total costs for TB control per capita	0.3	1.4
Funding gap per capita	–	0.3
Government health expenditure per capita (2004)	5.2	
Total health expenditure per capita (2004)	12	

SOURCES, METHODS AND ABBREVIATIONS

a–h Please see footnotes page 169.

1 Incidence, prevalence and mortality estimates include patients infected with HIV. Incidence estimate originally based on assumption of 55% ss+ case detection rate in 1997 (DOTS and non-DOTS). Trend in incidence estimated from 3-year moving average of notification rate (new and relapse, DOTS and non-DOTS).

2 MDG and STB Partnership indicators shown in bold. Targets are 70% case detection of smear-positive cases under DOTS, 85% treatment success, to ensure that the incidence rate is falling by 2015, and to reduce incidence rates and halve 1990 prevalence and mortality rates by 2015. Estimates for 1990 are prevalence 270/100 000 pop and mortality 36/100 000 pop/yr.

3 For routine diagnosis, there should be at least one laboratory providing smear microscopy per 100 000 population. To provide culture for diagnosis of paediatric, extrapulmonary and ss-/HIV+ TB, as well as DST for re-treatment and failure cases, most countries will need one culture facility per 5 million population and one DST facility per 10 million population.

4 Funding channelled through the NAP is mostly external financing, e.g. other donors or Global Fund. The split of these funds between Global Fund and other donors was not known This figure assumed a 50/50 split.

5 Total TB control costs for 2002 are based on available funding, whereas those for 2003–2006 are based on expenditure, and those for 2007–2008 are based on budgets. Estimates of the costs of clinic visits and hospitalization are WHO estimates based on data provided by the NTP and from other sources. See Methods for further details.

6 NTP available funding for 2004–2005 is based on the amount of funding actually received, using retrospective data; available funding for 2002–2003, 2006 and 2008 is based on prospectively reported budget data, and estimated as the total budget minus any reported funding gap.

– indicates not available; pop, population; ss+, sputum smear-positive; ss–, sputum smear-negative pulmonary; unk, pulmonary – sputum smear not done or result unknown; yr, year.