

**Uzbekistan: Tuberculosis Control Programme I and III**

**Ex-post evaluation report**

<b>OECD sector</b>	12250/Infectious disease control	
<b>BMZ project ID</b>	1.) 1999 666 31 2.) 2002 651 99	
<b>Project executing agency</b>	Uzbek Ministry of Health	
<b>Consultant</b>	EPIC POEM/GOPA	
<b>Year of ex-post evaluation report</b>	2009 (Phase III part of sample 2007)	
	<b>Programme appraisal (planned)</b>	<b>Ex-post evaluation (actual)</b>
<b>Start of implementation</b>	1.) Q 1 2000 2.) Q 2002	1.) Q 4 2000 2.) Q 2 2002
<b>Period of implementation</b>	1.) 48 months 2.) 6 months	1.) 59 months 2.) 6 months
<b>Investment costs</b>	1.) EUR 2.71 million 2.) EUR 3 million	1.) EUR 2.71 million 2.) EUR 3 million
<b>Counterpart contribution</b>	1.) EUR 0.15 million 2.) EUR 0.5 million	1.) EUR 0.15 million 2.) EUR 0.5 million
<b>Finance, of which FC funds</b>	1.) EUR 2.56 million 2.) EUR 2.5 million	1.) EUR 2.56 million 2.) EUR 2.5 million
<b>Other institutions/donors involved</b>	--	--
<b>Performance rating</b>	2	
• <b>Relevance</b>	2	
• <b>Effectiveness</b>	2	
• <b>Efficiency</b>	2	
• <b>Overarching developmental impacts</b>	2	
• <b>Sustainability</b>	2	

**Brief Description, Overall Objective and Programme Objectives with Indicators**

The programme objective was to support the efforts of the Uzbek Ministry of Health to introduce the DOTS strategy recommended by WHO for controlling tuberculosis (TB). In the first phase (as of May 2000), the TB I programme concentrated on the population in the Autonomous Republic of Karakalpakstan and Choresm Province, in the second phase (as of February 2002) on Tashkent Province and in TB III (as of June 2002) on the population of the three provinces in Fergana Valley, Fergana, Namangan and Andijan. The programmes financed TB medicine, laboratory equipment for TB diagnosis, medical consumables, technical medical equipment and vehicles and consultancy services for the six programme regions. At programme appraisal, the

overall objective for TB I was defined as interrupting the chain of infection to contain the TB epidemic. Overall objective achievement was to be measured with the indicator, annual decline in new TB infections in the programme areas by 15%. In keeping with its state of knowledge at the time, WHO later abandoned this indicator, because it proved to be unrealistic. Meeting the indicator implied solving the TB problem in a few years, which would have been unrealistic considering the ongoing economic problems and their social repercussions as well as the marked migratory trends in Central Asian states.

The overall objective for TB III was amended to contributing to the elimination of implementation bottlenecks in the DOTS strategy in the programme regions and in the procurement of essential drugs to help contain a transregional TB epidemic. No explicit indicator was defined at programme appraisal for this overall objective. By today's standards, appropriate indicators for measuring overall objective achievement are declines in TB incidence and TB mortality rates. The programme appraisal reports for TB I and TB III defined programme objectives as the improvement in the diagnosis and treatment of various TB varieties in the programme regions. The following indicators were set:

1. The ratio of smear-positive cases to the total number of registered TB lung cases in the programme regions amounts to at least 60% as of 2001 (or 2003 for TB III).
2. The ratio of successful treatments through DOTS therapy for registered smear-positive cases amounts to at least 70% and at least 85% for new smear-positive cases as of 2002 (or 2004 for TB III).

### **Programme Design/Major Deviations from Original Planning and Main Causes**

The Uzbek Government is supported in TB control by various donors, primarily German FC and GFATM. Technical assistance in implementing the DOTS strategy is provided by the USAID-financed Project HOPE (equipping the central reference laboratories and training measures), the U.S. Centre for Disease Control (CDC, training measures) and the international NGO, Médecins Sans Frontières (MSF).

As provided for in the programme appraisal reports, the following measures were carried out in TB I and TB III:

- Supplies of drugs for TB control in line with the DOTS strategy for each of 3 provinces
- Supplies of technical medical equipment
- Provision of vehicles for supervision purposes to the Republican DOTS Centre (RDC) and the regional DOTS and training centres in the programme regions
- Delivery of basic technical equipment for RDC and 6 regional DOTS and training centres
- Training of medical staff for the diagnosis and treatment of TB in keeping with the DOTS strategy
- Consultancy services to support the programme implementing agencies

The main outcome of the measures is the improvement in the diagnosis and treatment of TB in the programme regions. The supplies of drugs and equipment and the training measures laid the foundation for the efficient operation of the TB facilities and the implementation of the DOTS strategy. In 2005, no bottlenecks occurred in the supply of TB medicine (first line anti-TB drugs) either at central or provincial level. Nor were equipment supply bottlenecks for the TB laboratories recorded in 2006 or 2007.

## **Key Results of Impact Analysis and Performance Rating**

One of the central effects of the programme was the establishment and implementation of the DOTS strategy and the resultant contribution to containing TB. The macroeconomic significance of preventing new infections, loss of working hours and death and of successful treatment should not be underestimated. According to a World Bank study in 2005, TB morbidity and mortality reduce gross domestic product (GDP) by up to 0.5% in the Central Asian region: GDP losses in Tajikistan are estimated at 0.43% and in Uzbekistan at as much as 0.53%. The study also points out that every US dollar invested in TB treatment can be expected to produce a yield of two US dollars thanks to the reduction in TB morbidity and mortality. Men in the 25-54 age range are the prime victims in Uzbekistan, i.e. as a rule the main earners of working age. Moreover, WHO estimates that the probability of men dying of tuberculosis is 2.5 times higher than for women. TB is also spreading among youth and young adults in Uzbekistan.

Applying the subcriteria relevance, effectiveness, efficiency, overarching developmental impact and sustainability, programme performance is assessed as follows:

**Relevance:** The results chain set out at project appraisal of supporting the Uzbek Government in improving the diagnosis and treatment of TB in the programme regions by procuring TB drugs and equipment for TB laboratories and thus making a contribution to containing the TB epidemic would seem plausible. Poverty, malnutrition, unemployment and the collapse of previous social welfare and TB control systems in the early nineties resulted in the significant spread of TB. Controlling TB, including MDR TB, is still accorded high priority in Uzbekistan. The adoption of the DOTS strategy was established by law in 2003. The overall objective of the FC programme conforms with MDG 6 (Combat HIV/AIDS, malaria and tuberculosis) and hence with a central goal of German development cooperation, for which Uzbekistan is a partner country. Health is a priority sector for assistance. The activities of the donors working in TB control are well coordinated. We assess the relevance of the programme overall as good (Subrating 2).

**Effectiveness:** The case recognition rate has continuously increased since the introduction of the DOTS strategy at the end of the nineties to 46% in 2007. The target of 60% was not met, but was unrealistic in the period set. The Uzbek Government does not presently expect to reach the target of 60% before 2011. At 59% in 2007, the treatment success rate for registered smear-positive cases fell short of the 70% target. Treatment success rates for new smear-positive cases between 2000 and 2006, however, averaged about 80%, which is very close to the target of 85%. Altogether, the various targets set at programme appraisal can rate as overambitious. Although the objective indicator figures were not quite met, we may assume that the programme contributed to improving the diagnosis and treatment of TB in the programme regions and that case recognition and treatment success rates will increase in future. We therefore classify effectiveness as good (Subrating 2).

**Efficiency:** The implementation of Phase I of the programme started after a 6-month delay due to protracted consultant negotiations. The programme was then largely implemented as planned, although the scheduled implementation period was extended by 11 months due to the need to reach agreement on the use of residual funds. Altogether, the consultancy costs (TB I and TB III) were low at 6%. Treating TB using the DOTS strategy is more economical than with conventional methods, which resulted in distinct cost savings. Although TB control has been increasingly integrated into the primary health care services, there is still room to improve cooperation between these and the specialised TB facilities, particularly in patient supervision during the out-

patient treatment phase. Spot checks in the ex-post evaluation found that the delivered equipment, vehicles, medicine and consumables are put to proper use. Efficiency is therefore assessed as good (Subrating 2).

Overarching developmental impacts: The overall objective was defined as contributing to containing the TB epidemic. Overall objective achievement was measured by the indicators, TB incidence and TB mortality rates. Since programme appraisal, TB incidence has risen, which is probably largely attributable to improved records of TB cases. There has also been an adverse trend in the TB mortality rate since programme appraisal, thought to be due to the increased incidence of MDR TB, which is currently being addressed by the activities of FC and other donors. Together with the programmes and projects of other donors, the FC programme has, however, made a clear contribution to laying a sustainable foundation for successful TB control. This is also evident in the DOTS coverage rate, which has continued at 100% since 2005. We thus assess the overarching developmental impacts as good (Subrating 2).

Sustainability: Stemming the spread of MDR TB is imperative for the successful containment of the TB epidemic. The sustainability of the TB control programmes is presently generally assured by government grants and external finance (GFATM and KfW). The Uzbek Government has tripled its expenditure under NTP between 2005 and 2009 at about US\$ 30 million. The additional requisite external finance is also largely assured by the donors in the medium term. The GFATM funds from the fourth grant round (US\$ 13.3 million) are expected to be exhausted by the beginning of 2010. GFATM has pledged US\$ 56 million to the Uzbek Government under the eighth round of grants, however. We assess programme sustainability overall as good (Subrating 2).

Weighing up these aspects, altogether, we attest the programme good developmental efficacy (Subrating 2).

### **General conclusions**

Although further improvements are needed in the implementation of the DOTS strategy, efforts must to be stepped against MDR TB, as planned in the follow-on FC programmes. Important here are improved diagnosis and treatment of MDR TB and the implementation of supporting measures to ensure that patients do not break off treatment and continue with it up to completion.

Also important is the specific implementation of measures for treating particularly high-risk groups, such as prison inmates, HIV/AIDS patients and migrant workers. More information and educational material should be prepared and distributed on this (print, radio, TV).

### **List of abbreviations**

CDC	Centre for Disease Control
DOTS	Directly Observed Treatment, Short Course
EU	European Union
FC	Financial Cooperation
GFATM	Global Fund to Fight Aids, Tuberculosis and Malaria
MDR	Multi-drug resistant
NTP	National Tuberculosis Control Programme
PPR	Project progress review
RDC	Republican DOTS Centre
TB	Tuberculosis
WHO	World Health Organisation

## Notes on the methods used to evaluate project success

### Assessment criteria

Projects are evaluated on a six-point scale, the criteria being relevance, effectiveness, overarching developmental impact and sustainability. The ratings are also used to arrive at a final assessment of a project's overall developmental efficacy. The scale is as follows:

Developmentally successful: ratings 1 to 3	
Rating 1	Very good result that clearly exceeds expectations
Rating 2	Good result, fully in line with expectations and without any significant shortcomings
Rating 3	Satisfactory result – project falls short of expectations but the positive results dominate
Developmental failures: ratings 4 to 6	
Rating 4	Unsatisfactory result – significantly below expectations, with negative results dominating despite discernible positive results
Rating 5	Clearly inadequate result - despite some positive partial results, the negative results clearly dominate
Rating 6	The project has no impact or the situation has actually deteriorated

Sustainability is evaluated according to the following four-point scale:

Rating 1	Very good sustainability	The developmental efficacy of the project (positive to date) is very likely to continue undiminished or even increase.
Rating 2	Good sustainability	The developmental efficacy of the project (positive to date) is very likely to decline only minimally but remain positive overall. (This is what can normally be expected.)
Rating 3	Satisfactory sustainability	The developmental efficacy of the project (positive to date) is very likely to decline significantly but remain positive overall. This rating is also assigned if the sustainability of a project is considered inadequate up to the time of the ex post evaluation but is very likely to evolve positively so that the project will ultimately achieve positive developmental efficacy.
Rating 4	Inadequate sustainability	The developmental efficacy of the project is inadequate up to the time of the ex post evaluation and an improvement that would be strong enough to allow the achievement of positive developmental efficacy is very unlikely to occur. This rating is also assigned if the developmental efficacy that has been positively evaluated to date is very likely to deteriorate severely and no longer meet the level 3 criteria.

### Criteria for the evaluation of project success

The evaluation of the developmental effectiveness of a project and its classification during the ex-post evaluation into one of the various levels of success described in more detail above focus on the following fundamental questions:

Relevance	Was the development measure applied in accordance with the concept (developmental priority, impact mechanism, coherence, coordination)?
Effectiveness	Is the extent of the achievement of the project objective to date by the development measures – also in accordance with current criteria and state of knowledge – appropriate?
Efficiency	To what extent was the input, measured in terms of the impact achieved, generally justified?
Overarching developmental impact	What outcomes were observed at the time of the ex post evaluation in the political, institutional, socio-economic, socio-cultural and ecological field? What side-effects, which had no direct relation to the achievement of the project objective, can be observed?
Sustainability	To what extent can the positive and negative changes and impacts by the development measure be assessed as durable?