

## Simplified Ex-Post Evaluation for Grant Aid Project

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Project Name	The Project for Infectious Disease Control Phase II	March 2010 – December 2010

### I Project Outline

Country Name	Republic of Zambia	
Project Period	December 2004 ~ January 2006	
Implementing Agency	Ministry of Health (MoH)	
Project Cost	Grant Limit: 415 million yen	Actual Grant Amount: 255 million yen
Main Contractors	(Procurement Contract) Toyota Tsusho Corporation	
Main Consultants	Japan International Cooperation System (JICS)	
Basic Design	“The Republic of Zambia, the project for infectious disease control phase II : basic design study report : basic equipment study”, JICA, September 2004	
Related Projects (if any)	Technical Assistance “AIDS and Tuberculosis Control (March 2001~March 2006)” had contributed to technically strengthening the Tuberculosis Control Programme. Grant Aid “Infectious Diseases Control (2003) was a predecessor of this Project.	
Project Background	Zambia has a high disease burden of tuberculosis (TB) with 507 TB patients per 100,000 population in 2002 that compares with WHO-designated “high burden countries of TB” in Africa such as Kenya (540), Tanzania (128), and South Africa (558). In addition, Zambia has its pressing needs to contain further expansion of TB infections due to its severe HIV/AIDS epidemic. In order to improve its TB detection rate, and treatment success rate, it was necessary to secure steady provision of laboratory supplies and reagents as well as anti-TB drugs. Concurrently, there also was a pressing need to address common infectious diseases such as malaria, pneumonia, diarrhoea, dysentery, typhus and opportunistic infections due to HIV and Aids.	
Project Objective	<ol style="list-style-type: none"> <li>1) To procure TB laboratory test reagents and supplies in order to equip TB laboratories for Lusaka, Copperbelt and Southern provinces, where they bear 70% of disease burden.</li> <li>2) To procure the Health Centre Kits containing medicines and basic medical consumables in order to equip one-third of health centres in Zambia.</li> </ol>	
Output[s] (Japanese Side)	<ol style="list-style-type: none"> <li>1) Procurement of the TB laboratory test reagents and supplies for Lusaka, Copperbelt and Southern provinces.</li> </ol>	<ol style="list-style-type: none"> <li>2) Procurement of the Health Centre Kits to be used by the country’s primary health facilities, which contain non-TB common infectious diseases such as malaria, pneumonia, diarrhoea, dysentery and typhus.</li> </ol>

### II Result of the Evaluation

Summary of the evaluation
<ul style="list-style-type: none"> <li>• This project has been highly relevant to the country’s development plan and development needs, both at the time of planning and at the time of ex-post evaluation. As well, the Project was in line with Japan’s ODA policy at the time of planning: Therefore, its relevance is rated high. Efficiency is rated high, as several circumstantial evidences point to very high likelihood of donated equipment/supplies having been delivered to the destined facilities and utilised for intended purposes. The Project was also completed within the planned period and costs. Regarding the effectiveness, the TB reagent component part of the Project has reached most of its planned targets, and thus, the effectiveness is also rated high. For the Health Centre Kits component, it is likely that the Project also benefited the clients who visited health facilities, provided that the Kits were distributed to the destined health facilities and utilised properly. In terms of sustainability, it is rated either fair, or low. In the former scenario, while some minor problems have been observed in terms of institutional and technical aspects, provided that foreign assistance for the procurement and supplies for the TB control programme and the Health Centre Kits continue, the sustainability is rated fair. In the latter scenario, should the lift of the Global Fund becomes prolonged, it is highly likely that stock-outs of supplies occur in health facilities, and thus the sustainability of the effects will be interrupted.</li> <li>• In light of the above, this project on the whole can be evaluated to be either highly satisfactory, or satisfactory, depending on the government’s ability to secure external resources for the procurement of supplies.</li> </ul> <p>&lt;Recommendations for the Ministry of Health (MoH)&gt;</p> <ul style="list-style-type: none"> <li>• To make efforts to secure resources for procurement of logistics for the TB Control and for the Health Centre Kits.</li> <li>• To further invest on proper infrastructure and human resource development on logistics management to overcome stock-outs and overstocking of drugs and medical supplies at the peripheral facilities, as well as delays in procurement at the central level.</li> <li>• To improve provincial reporting on the TB control and other related data.</li> </ul> <p>&lt;Constraints of this evaluation study&gt;</p> <ol style="list-style-type: none"> <li>1) This study was conducted based on the document review and the questionnaire survey to the counterparts and the consultant, and did not include data such as those obtained by direct observation or through interviews by the evaluator.</li> <li>2) MoH’s response to the questionnaire did not contain sufficient data in order to assess the effectiveness and sustainability. As such, most of the data used to rate the effectiveness and the sustainability was of secondary nature, i.e. the published documents from</li> </ol>

other donor agencies and observations and facts provided by the JICA country office. Therefore, the overall rating and that of effectiveness are performed with limited data.

- 3) There was no avenue to discuss appropriateness and feasibility of the recommendations with the counterparts.
- 4) The ex-post evaluator did not exercise strict control over who should respond to the questionnaire, nor anonymity of the response.

## 1 Relevance

### (1) Relevance to the Sector Strategy of Zambia

In the National Health Strategic Plan (NHSP: 2001~05) as well as in the renewed NHSP (2006~2010), both strategic plans equally enlisted TB control as one of the “Public Health Priority Interventions,” along with the integrated child health, HIV/AIDS/STI control and malaria. By the same token, essential drugs and medical supplies are also classified as the “Clinical Care and Diagnostic Services Priority Interventions.” Thus, the Project is considered to be highly relevant to Zambia’s health sector strategy both at the time of planning and at the time of the ex-post evaluation.

### (2) Relevance to the Development Needs of Zambia

At the planning stage of this Project, TB disease burden was high, similar to other high burden countries in Africa, at 507 TB patients per 100,000 people (2002). The TB control programme at that time focused on expanding and strengthening the DOTS programme. Thereafter, Zambia achieved nation-wide coverage of the DOTS programme in 2003, and the global standard target of 85% in treatment success rate in 2006. Most recently, the emphasis of the TB control programme has shifted to addressing TB/HIV co-infection and improving upon the low DOTS case detection rate, along with continuation of DOTS strategy nation-wide. Thus, provision of laboratory supplies and reagents are consistent with the needs of the country both at the planning stage and at the time of ex-post evaluation.

By the same token, other infectious diseases such as malaria, acute respiratory infections, opportunistic infections due to HIV and AIDS, diarrhoea, dysentery and typhoid continued having high shares of patient’s visits. Thus, procurement of the Health Centre Kits, which address these communicable diseases and support rural health services, was and is consistent with the needs of Zambia.

### (3) Relevance to Japan’s ODA Policy

At the planning stage, the Japan’s ODA policy towards Zambia (2002) had included “improvement of cost-effective health services” as one of its five (5) priority areas of support, which also emphasised cooperation in the communicable diseases control. Therefore, the Project was relevant to the Japan’s ODA policy at the time of planning this Project.

Given the above, this project has been highly relevant to the country’s sector strategy, development needs, as well as Japan’s ODA policy. Therefore, its relevance is rated high.

## 2 Efficiency

### (1) Project Outputs

According to the Project Completion Report, all the medical equipment/supplies were procured as planned, both in terms of type and quantity specifications, and their receipt was confirmed at the Medical Stores, Ltd. (MDL) by the consultant in January 2006. While the delivery to destined health facilities from MSL could not be confirmed through a questionnaire to MoH/MSL, it is highly likely that the goods were distributed to destined facilities when considering the following factors: 1) The assessment done by the Global Fund in 2005, a major funding body of TB drugs in Zambia, states “the distribution and supply chain management of health products in Zambia have not been the cause of significant delays or issues”; 2) WHO’s TB Country Profile states there had not been stock-outs of laboratory supplies either at central or peripheral levels in 2006 (but some units experienced stock-outs at peripheral in 2007); and, 3) the number of notification cases do not show any significant drop. As for the Health Centre Kits, it is also likely that the supplies were distributed to destined health facilities, considering the fact that “Health Centre stocks, on average, improved from 73% in 2002 to 76% in 2004 (NHSP (2006~2010)).”

### (2) Project Period (Project Inputs)

The Project was executed with slight delay, of actual 14 months as opposed to the planned 13 month-period (108%). The delay was due to the extra time required for the consultant to confirm and ensure that materials used in one of containers of the reagents can endure harsh environment of overseas shipment.

### (3) Project Cost (Project Inputs)

The actual Project Cost was 255 million yen (61%), much lower than the planned 415 million yen. The reason for this under-run is: 1) the estimate at the time of the planning was conducted assuming participation of contractors already-qualified and with excellent track-record; and, 2) a result of competitive bidding, or more specifically, due to participation of new Holland-based competitor(s), who pushed down the price.

In light of the above, the Project had slightly longer period than planned, with significantly lower cost than planned to achieve its planned Outputs, assuming that the procured equipment/supplies were delivered to destined health facilities. Considering that the slight delay is of reasonable cause, the efficiency of the Project is rated high.

## 3 Effectiveness / Impact

#### (1) Quantitative Effects

As an effect and operational indicators, TB case detection rate (new smear positive cases) remained steady at 58% from 2005 to 2006, while notification cases, including new and relapse, were 49,576 (14,857 new; 34,719 relapse) in 2005 and 47,790 (14,025 new; 33,765 relapse) in 2006 in the whole country. Assuming the 70% disease burden of three target provinces combined, roughly estimated 33,500 cases were notified there during 2006, mostly reaching its target of 35,000 cases, 96% of the amount of reagents supplied under this Project. (Actual breakdown of notification cases at provincial levels could not be obtained through questionnaire survey.)

As for the effects of the Health Centre Kits, it is not possible to determine whether they reached the planned number of beneficiaries (the supplied volume) due to unavailability of statistical data such as the total number of health centre visits. (The questionnaire response did not provide such data.) Given that distribution of the Health Centre Kits have been relatively steady, it is highly likely that a certain number of visitors to health centres did benefit from the Kits supplied through the Project. Thus, the rating on effectiveness does not reflect the results of this component.

#### (2) Impacts (Including impacts on the natural environment, Land Acquisition and Resettlement, Unintended Positive/Negative Impact)

The Project has benefited roughly 33,500 people in discovering/confirming their TB infection (70% of 47,790 nation-wide). That in turn lead to successful treatment outcome of 11,324 patients (70% of 16,177 patients nation-wide), given the treatment success rate of 85% and 81% for new and re-treatment cases, respectively, in 2006. Indirect effects of the Health Centre Kits may include decreasing trend in out-of-pocket health expenditures, or improvement in perceived quality of care or clients' satisfaction rating. However, this evaluation study neither conducted beneficiary survey nor was able to obtain such data through questionnaire or from other sources.

In light of the above, one can assume that the Project has largely achieved its objective, provided that TB laboratory reagents were distributed and utilised properly. No negative impacts were reported. Therefore, effectiveness of the TB laboratory component is rated high. On the other hand, procurement of the Health Centre Kits can be considered to have had some effects, provided that the Kits have been properly distributed to and utilised by destined health facilities.

### 4 Sustainability

#### (1) Institutional Aspects of Operation and Maintenance

Medical Stores, Ltd. has received management and technical assistance from the Crown Agents since 2004. The Crown Agents reported there has been improvement in staff compensation package, storing, inventory, ordering and distribution system, while MoH sees room for improvement in the logistics system especially in storage capacity and trained human resources at central and regional MSL stores as well as at district stores.

In terms of institutional sustainability of the TB control programme, the JICA Zambia Office reported there have been many improvements since 2004. In the annual review of the TB control programme, MoH announced that it plans to allocate budget in supervision and monitoring, appointment of a national-level TB-HIV focal point, provincial-level TB/HIV focal points and microscopists by 2012.

#### (2) Technical Aspects of Operation and Maintenance

In terms of technical aspects of operation and maintenance of logistics functions, MoH maintains that MSL and district health stores have sufficient technical capacity to carry out proper storage, management and delivery of necessary drugs and medical supplies to peripheral health facilities, in response to the questionnaire prepared for this evaluation. At the same time, since the response also states that stock-outs and over-stocking still occur due to insufficient storage infrastructure and the lack of staff training, there is room for improvement in the technical aspects of logistics management. MoH continues to strengthen their technical capacity through MSL staff training (85% trained as of 2006), improving the essential drugs list, development of the Pharmaceutical Logistics Management Information System, formulation of a three-year procurement plan (2005 ~ 2007), and so forth. For the management, storage and distribution of the Health Centre Kits that benefited from continuous support by the Netherlands since 1990s, there appear to be few problems: Its supply and distribution is reported to have been steady in 2004.

In terms of the technical sustainability of the operation and maintenance of the TB control programme, many positive factors were observed: 1) Zambia successfully scaled up DOTS operations in 2003; and, 2) Zambia has been receiving support from Japan, the United States and the Global Fund for technical staff training and technical improvement of TB laboratory testing. JICA has contributed to the improvement of laboratory functions in the University Teaching Hospital of Zambia since 1995. At the time of ex-post evaluation, the TB control programme continues its effort in technical advancement, especially in addressing the TB-HIV co-infection, i.e. in provision of HIV testing and counselling services for TB patients, provision of anti-retroviral and introduction of CPT (cotrimoxazole preventive therapy), and so forth.

All in all, MoH appears to have sufficient technical capacity to implement and to maintain its logistics functions as well as the TB control programme, with some room for improvement.

#### (3) Financial Aspects of Operation and Maintenance

While Zambia relied on external resources for 40.5% of its health budget in 2005 and 38.1% in 2006 (WHO), the Basic Design Study conducted in 2004 maintains that sufficient resources for storage and distribution of drugs and medical supplies was safely secured from the recurrent budget. According to the JICA Zambia Office, MSL continues to distribute drugs and medical supplies without interruption despite major limitation in 2010 health sector budget. The government however commits to increase the health sector budget allocation over the next five years, from ZMK802.4 billion (2011), ZMK1,287.5 billion (2012), ZMK1,471.7 billion (2013), ZMK1,755.0 billion (2014) to ZMK1,847.8 billion (2015), a four-year steady increase. Although Zambia's own resources may be far below covering the price of drugs and medical supplies, the above-mentioned conditions indicate government's commitment in this area. Having stated so, the recent freeze on aid by the Netherlands and by the Global Fund<sup>1</sup> in 2009, which stemmed from the mismanagement of the funds by MoH officials, insinuated potential interruption of external aid inflow to Zambia, which would make

<sup>1</sup> However, funds originally meant for the Ministry of Health has been disbursed through the United Nations Development Program (UNDP) to ensure that there is no disruption of lifesaving services (Press Releases, 16 June 2010)

the maintenance of service provision difficult. (Details in health budget/expenditures could not be obtained through the questionnaire survey.)

#### (4) Current Status of Operation and Maintenance

Current status of procurement, supply and distribution of drugs and medical supplies may have some room for improvement. A report by the Global Fund lists in its Grand Score Card (2005) the delay in procurement due to the insufficient communication between the Zambia Tender Board and the Procurement unit of MoH as the bottleneck to achieving higher detection and successful treatment, while the ex-post evaluation summary (2008) on the predecessor project “Infectious Disease Control (E/N 2003)” cites proper supply and distribution of TB reagents and the Health Centre Kits to provinces in accordance with population and demand estimates. In addition, in the annual review meeting of the TB control programme, MoH reported that there were no stock-outs of TB drugs in the target 3 provinces. As for the monitoring and evaluation aspect, TB related data collection may require strengthening, judging from the poor response rate of the questionnaire and the report by the Global Fund.

In terms of the overall performance of the TB control programme, new smear positive case detection rate remained at 58%, while treatment success rate was 85% in 2007 (latest data). The case detection rate falls short of the WHO-defined target of 70%, requiring further improvement in finding TB patients.

In light of the above, some minor problems persist in institutional and technical aspects, while overall capacity and commitment to operate and maintain the logistics management and the TB control programme appears fairly consistent. Thus, so far as external resources are available for procurement of necessary supplies, sustainability of the project effect is considered fair. On the other hand, should the suspension of external funding prolong, a short-term interruption of supplies is highly likely, which, in turn, would limit the effects of this Project. In such case, the sustainability is rated low.