

Summary of the Evaluation Study

1 . Outline of the Project	
Country: Indonesia	Project title: Tuberculosis Control Project in the Republic of Indonesia
Issue/Sector: Health	Cooperation scheme: Technical Cooperation Project
Division in charge: Human Development Department, JICA	310 million yen (Three hundred and ten million yen)
Period of Cooperation (R/D) : October, 2008 - October, 2011	Partner country's Implementing Organization: NTP, Airlangga University/Dr.Soetomo Hospital, West Java Provincial Health Office
	Supporting Organization in Japan: Japan Anti-Tuberculosis Association (JATA)
<p>1-1 Background of the Project</p> <p>Indonesia ranks fifth on the list of 22 high-burden tuberculosis (TB) countries in the world. According to the World Health Organization's (WHO's) <i>Global Tuberculosis Control Report 2010</i>, there were an estimated 292,754 new and relapse cases and an estimated incidence rate of 189 cases per 100,000 population. TB is responsible for 27 of the mortality (excluding HIV) per 100,000 in Indonesia in 2009.</p> <p>DOTS (Directly Observed Treatment, Short course chemotherapy) strategy adopted in 1992 and has been expanded to 98 percent of the country by 2005. In 2007, DOTS coverage reached 100 percent in Indonesia. Indonesia has exceeded WHO's target of 85 percent for DOTS treatment success, reaching 91 percent. The DOTS case detection rate has more than doubled over the past six years, from 30 percent in 2002 to 68 percent in 2007 (in 2006, Indonesia surpassed WHO's target of 70 percent for DOTS case detection for the first time, reaching 73 percent). This was due to the collaboration of both public and private health care providers and the expansion of community-based TB care.</p> <p>However, there remain challenges in providing quality DOTS in the country. With the expansion of the DOTS coverage, it has been recognized that the diagnostic system for TB case detection should be improved. In order to improve the TB case detection, quality of laboratory services needs to be strengthened. In this backdrop, the Indonesian Strategic Plan to Stop TB 2006-2010 maintains the necessity to improve laboratory services at all levels through better internal and external quality control mechanisms, training and supervision and updating of guidelines on TB control.</p> <p>Based on the request of the Indonesian government, the Project started October 2008 with three years cooperation period. The objective of the Project is to assure the quality of TB laboratory services through strengthening of laboratory network. To achieve this purpose, the Project aims to enhance the training capacity, assuring QA as well as the monitoring and supervision capabilities of laboratories at all levels. Considering the geographical aspect of Indonesia, cascading system of training is adopted for enhancing the capacity of laboratory personnel and improving the diagnostic system.</p>	

1-2 Project Overview

<Overall Goal>

Quality National Tuberculosis Program (NTP) is sustainably managed.

<Project Purpose>

Quality laboratory service for TB is assured through strengthening of laboratory network at the Project site for nationwide expansion.

<Outputs>

- 1) National TB Reference Laboratory on Human Resource Development (the National Training Center of TB Microscopy Laboratories) is established at the Department of Microbiology, School of Medicine Airlangga University/Dr. Soetomo Hospital Surabaya.
- 2) The Provincial TB Reference Laboratory functions well as a model of functional quality assurance and training laboratory network in Project site (West Java Province).
- 3) Quality Assurance, Recording and Reporting amongst the diagnostic centers and District Health Department including intermediate laboratories is strengthened as a model of functional laboratory network in the Project site (West Java Province).

<Inputs>

(1) Japanese side:

Short-term Expert: 6 persons

Trainees received in Japan: 5 persons

Trainees received in the Philippines: 6 persons

Equipment: 1,127,362,471IDR (approx. 10 million yen)

Local cost: 65,353(thousand yen)

(2) Indonesian side:

Assignment of counterpart personnel

Land, building, and facilities necessary for the Project

Local cost included expenses for training, regular meeting and supervision

2. Evaluation Team

Members of Evaluation Team	Team Leader: Dr. Mitsuo ISONO, Senior Advisor (health sector), Japan International Cooperation Agency (JICA)	
	Evaluation Planning: Mr. Seiji KATO, Advisor, Human Development Department, JICA	
	Evaluation Analysis: Ms. Junko SATO, TAC International Inc., Japan	
Period of Evaluation	12 th June 2011 – 23 rd June, 2011	Type of Evaluation: Final evaluation

3. Results of Evaluation

3-1 Achievement

3-1-1 Achievement of the Project Purpose

“Quality laboratory service for TB is assured through strengthening of laboratory network at the Project site for nationwide expansion.”

Project Purpose has been mostly achieved as shown in Indicator 1 and 2.

As for Indicator 1 “more than 70% of the laboratories of diagnostic centers participate in the EQA under the SOP for EQA with LQAS sampling method including monitoring /supervision,” 471 health centers (93%) currently participate on new EQA.

Regarding Indicator 2 “more than 70% of above mentioned laboratories report no major error,” the target has been almost achieved. Out of 471 health centers, 324 health centers (69%) reported no major error as of the current month of implementation (Feb 2011). If the denominator is 400 (health centers that were directly supported by the Project), the rate reached 81%.

3-1-2 Achievement of Outputs

- (1) Output 1 “National TB Reference Laboratory on Human Resource Development (the National Training Center of TB Microscopy Laboratories) is established at the Department of Microbiology, School of Medicine Airlangga University/Dr.Soetomo Hospital Surabaya.”

Output 1 has been accomplished as all activities were conducted as planned and 4 indicators were all achieved.

The core group was organized in the NTRL Training Unit, which is located in Airlangga University, East Java Province, to manage capacity building activities within the laboratory network. Among its major achievements was the development of training materials and curriculum, which are effectively utilized in the training for master trainers for WASORs and laboratory technicians at the field level.

It has been observed that the core group was effective in the follow-up of training held by the master trainers, however, the group’s capacity needs to be further strengthened especially those concerning supervision activities to be able to sustain their function, which is noted from the fact that some core members do not fully practice course evaluation using training tools.

- (2) Output 2 “The Provincial TB Reference Laboratory functions well as a model of functional quality assurance and training laboratory network in Project site (West Java Province)”

It is confirmed that planned activities have been implemented towards achievement of Output 2.

EQA Task Force Group formulated by staff from West Java Provincial Health Laboratory and Provincial Health Office contributed to promoting EQA activities such as trainings and supporting supervisory visits for and with the district level.

The Project assisted in developing SOP, which is utilized as a training material. In West Java, a total of 364 laboratory technicians, 176 WASORs and 33 controllers were trained using SOP. In addition, EQA coverage reached 100%(26/26) at district level, 100% for intermediate laboratories (24/24) and 93% (471/508) at health center level.

The Project has been trying to increase opportunities to communicate with the Indonesian counterparts as well as other international partners for the effective implementation of project activities. For example, EQA annual report meeting serves as a venue to give feedback on the progress of EQA in pilot and expansion areas and discuss relevant issues with Indonesian counterparts and other stakeholders.

- (3) Output 3 “Quality Assurance, Recording and Reporting amongst the diagnostic centers and District Health Department including intermediate laboratories is strengthened as a model of functional laboratory network in the Project site (West Java Province)”

Output 3 has been largely accomplished.

The Project has provided technical guidance in the form of supervisory visits and regular meeting to achieve sustainable technical proficiency at the field level. Steady progress for quality assurance can be seen in an increasing trend of health centers without major errors.

It has been also observed that an increasing number of intermediate laboratories which are responsible for cross-checking conduct supervision for EQA under the SOP. Twenty one (21) out of 24 intermediate laboratories (88%) conducted supervision for 187 health center from February 2010 April 2011, while only one out of 18 intermediate laboratories (5.6%) conducted supervision under the SOP at the time of mid-term review. The Project will prioritize supervision for districts on cross-checking to further strengthen their capacity in the remaining period.

3-1-3 Implementation Process

Major promoting factors that promoted realization of effects are 1) technical transfer method and 2) commitment to the Project from the Indonesian and Japanese sides.

As for technical transfer method, the Project has successfully operated on capacity building for WASORs and laboratory technicians at different levels by enhancing the

ascades effects of training system. It has been also achieved by ensuring their enabling environment in the combination with the development of SOP/training manuals and the provision of equipments. In addition, the Project has provided opportunities to share the knowledge and experience on new EQA among stakeholders.

The Project conducted EQA annual report meetings based on the

“Annual/semi-annual EQA Report on TB Microscopy in West Java”, which was initially published in 2010. The publication aimed to give feedback, share project

experiences and serve as reference for stakeholders as they tackle EQA

implementation in their respective areas.

Both the Indonesian side and the Japanese side have strong commitment to the Project. Particularly, the strong initiative taken by West Java provincial health office/provincial health laboratory accelerated the EQA expansion in the entire province in the second half of the Project.

On the other hand, suspension of approval on the TB Laboratory Network was pointed out as factor that inhibited realization of effects at the time of mid-term review, and the statement regarding the Regional Reference Laboratory (RRL) was deleted from PDM. Shortage of budget allocation for operational expenditure at provincial and district level was also mentioned as constraints at the time of mid-term review. Although budget for operational expenditure at provincial, district and peripheral levels remains unstable at the time of final evaluation, positive indication for sustainability has been observed from the fact that budget allocation for training and supervision by the Indonesian government has been steadily increased.

3-2 Evaluation by Five Criteria

(1) Relevance

Relevance of the Project is still high at the time of final evaluation.

- 1) The Project is in line with global health policies such as the Global Plan to Stop TB 2006-2015, which emphasizes the quality TB control services.
- 2) The Project is also consistent with national health plan of Indonesia. TB control is prioritized in the Strategic Plan of MOH. In particular, it has been conducted in line with "Five Years Strategic Plan for TB Control (2006-2010)," which addresses the need to improve laboratory services through internal and external quality control.
- 3) Project Purpose and Overall Goal have also consistency with Japan's ODA policies for Indonesia, which prioritize the infectious disease control including TB.
- 4) The Project approach focusing on capacity building for laboratory personnel and establishment of an external quality assurance (EQA) model for TB microscopy responds to the needs for strengthening case detection by improving laboratory services.

(2) Effectiveness

Effectiveness of the Project is very high as three Outputs have been successfully achieved, which contributed to the realization of Project Purpose.

- 1) Effectiveness has been recognized particularly in capacity building for WASORs and laboratory technicians by enhancing the cascade effects. With consultation from the project, the core group developed the training materials/curriculum and initiated related activities to improve the training environment.
- 2) The Project successfully established an effective external quality assurance (EQA) model for TB microscopy in West Java. Standard Operational Procedures (SOP) developed by the Project gave clear instruction and proved to be very effective to

practice new EQA activities.

- 3) Another remarkable achievement by the Project is conducting EQA annual report meetings based on the “Annual/semi-annual EQA Report on TB Microscopy in West Java.”
- 4) Intensifying the monitoring and supervision is also contributing factor to expand new EQA in the entire province. Active involvement of controllers in supervision led to steady progress for quality assurance, which can be seen in the increasing trend of health centers without major errors.
- 5) For nationwide expansion of EQA, developing national guideline and institutionalizing training system are needed.

(3) Efficiency

Overall, the Project has been efficient in terms of quality, quantity and timing of the provision of most inputs being adequate and utilized for the achievement of the Outputs.

1) Inputs by the Japanese side

Japan Anti-Tuberculosis Association (JATA) was assigned as an implementing institution of the Project. Research Institute of Tuberculosis (RIT)/JATA has a wide experience in human resource development in the field of TB control through its international cooperation, which makes it easier to dispatch technical experts to the Project. RIT has also conducted trainings and accepted many participants from abroad. It is very meaningful for the Project to make full use of resources in JICA TB control Project in the Philippines by dispatching a lecturer from the Philippines and sending Indonesian counterparts to the “Study Tour to the Philippines for TB Laboratory Network.” Indonesian counterparts are also satisfied with training and equipments granted by the Japanese side.

2) Inputs by the Indonesian side

The Indonesian side allocated experienced counterparts and provided the office space /necessary equipment to the Project. In addition, the Indonesian side shared the costs of training, quarterly meeting and supervision, which are essential for the Project implementation.

3) Cooperation with other partners

Cooperation with other partners enabled effective and efficient implementation of the Project. For example, project experts participated in district level regular meeting supported by KNCV, and gave lecture on new EQA. EQA annual report meeting serves as a venue to give feedback on the progress of EQA and discuss relevant issues with Indonesian counterparts and other stakeholders.

(4) Impact

Several positive impacts have been observed.

- 1) The Provincial TB Reference Laboratory in West Java is in the process of being designated National TB Reference Laboratory.

2) Training materials were adopted as national standards for TB microscopy training by NTP, MOH.

3) Training materials for laboratory technicians are made available nationwide through MOH homepage.

(5) Sustainability

Sustainability is expected to be high if NTP and other relevant organizations continue quality laboratory service for TB by utilizing trained human resources, transferred technology, developed system and equipment provided by the Project.

1) Indonesian government commitment to TB control is expected to be sustained, which is in line with Next Five Year Strategic Plan 2010-2014 with the theme “Breakthrough toward Universal Access.”

2) Organizational sustainability is high. If the Provincial TB Reference Laboratory in West Java is officially designated National TB Reference Laboratory, it is important for it and national Training Center for TB Microscopy at Airlangga University to cooperate to provide quality laboratory service for TB.

3) Financial sustainability is not very high but expected to some extent. Although NTP/MOH receives the support for TB activities from Global Fund, budget for operational expenditure at Provincial, District and Peripheral levels remains unstable. It is important that NTP work for proper management of the budget to support EQA expansion nationwide.

4) For technical sustainability, roles of skilled supervisors are essential in providing technical support and supportive supervision through regular supervision. In that sense, active involvement of controllers in supervision should be continuously encouraged. It is also expected that training system, training materials, SOP developed by the Project are utilized for expanding EQA nationwide.

3-3 Conclusion

By the strong commitment of both the Indonesian and Japanese sides, the Project activities have been accelerated after the mid-term review upon mutual understandings for the Project purpose. As a result, the Project has for successfully implemented all planned activities, and has not only produced visible outcomes by means of the effective Project approach and efficient inputs, but also brought certain impacts in the related fields of TB control program in Indonesia. The team has also observed the strong initiatives and ownership of the Indonesian side those are crucial for sustaining continuous implementation of the Project outputs after the end of the Project.

The Project has worked in the limited area of the country, but now, the Indonesian side is planning to apply the achievements of the Project to nationwide. Thus, despite short term of the implementation, the team is sure that the Project might bring maximum effects by the ideal way of technical transfer.

3-4 Recommendation

1) Although there has been significant and rapid expansion of the new EQA system in West java Province, still there are certain PRM/PPM to be covered by this system. Thus, The Project is recommended to expand the current EQA system to PRM/PPM as much as

possible in the remaining period. Considering sustainability, the West Java Provincial health laboratory is recommended to take initiatives in this expansion and the Japanese side is recommended to support technically.

- 2) To enhance significance of the new EQA system in West Java province, there are several points to be considered. Among them, it is crucial that there are high incidences of major errors in some districts. Thus, the Project is recommended to analyze the situation in those districts and develop plans to reduce major errors. Also, reporting system on EQA should be strengthened and the Project is recommended to improve timely reporting.
- 3) Now, NTP and the West Java Provincial health laboratory, along with stakeholders, started to develop the SOP for the new EQA system aiming at nationwide application. Thus, the Japanese side is recommended to support technically so that the SOP will be finalized within the remaining period.
- 4) Now, the West Java Provincial health laboratory is planned to be up-graded to the National Reference Laboratory (NRL) for AFB sputum smear examinations. Thus, it is recommended to start to prepare for the functional organization as NRL including human resources. The Japanese side is recommended to provide advices from technical points of view in this regard.
- 5) The School of Medicine Airlangga University is recommended to utilize equipment provided by the Project. Now, the training mechanism for personnel who belongs to public health sector is fully managed by the Ministry of Health. Thus, it is recommended to develop the plan to work as the training institute for personnel in other sectors such as private hospitals.

3-5 Lessons Learned

Despite short term of the implementation, the Project has made significant achievement and impacts. Among several components of the successful implementation, following points are extracted as positive lessons learned.

- ✓ Developing the cascade system for trainings was very useful to develop huge number of human resources in the short term and establish sustainable training system. Also, as judge the facts that all trained personnel at the bottom of this cascade passed the examination, the quality of the training was also ensured by this system.
- ✓ The Project has tried to provide opportunities to share the knowledge and experience on new EQA among stakeholders, as much as possible, including EQA annual report meetings and publishing the “Annual/semi-annual EQA Report on TB Microscopy in West Java”. These activities helped to increase motivation among related staffs in West Java provinces, resulting expansion of new EQA by their own ownership.