

ATTACHMENT

Terminal Evaluation Report
on
National Tuberculosis Control Project Phase II
in
The Kingdom of Cambodia

Phnom Penh

January 19, 2009

Joint Evaluation Team

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ABBREVIATIONS

	6MSCC	6 Months Short Course regimen
	4FDC	Four Fixed-Dose Combination Anti-TB Drugs
A	ACSM	Advocacy, Communication and Social Mobilization
	AIDS	Acquired Immunodeficiency Syndrome
B	BCG	Bacillus Calmette-Guerin
C	CATA	Cambodia Anti-Tuberculosis Association
	CD4	Cluster of Differentiation 4 Counting
	CDC	Council for Development of Cambodia
	C-DOTS	Community DOTS
	CENAT	National Center for Tuberculosis and Leprosy Control
	CHC	Cambodian Health Committee
	CMDG	Cambodia Millennium Development Goals
	CMS	Central Medical Stores
	CPA	Complementary Package of Activities
	CPT	Co-trimoxazole Preventive Treatment
D	DAC	Development Assistance Committee
	DOTS	Directly Observed Treatment with Short-course chemotherapy
	DST	Drug Susceptibility Test
E	EP	Extra-pulmonary
	EPI	Expanded Program for Immunization
	EQA	External Quality Assessment
G	G8	Group of Eight
	GF	Global Fund
H	HC	Health Center
	HCSG	Health Center Support Group
	HIV	Human Immunodeficiency Virus
	HSP	Health Strategic Plan
I	ICC	Inter-Agency Coordinating Committee
	IEC	Information, Education, Communication
	IUATLD	International Union Against Tuberculosis and Lung Disease
J	JATA	Japan Anti-Tuberculosis Association
	JCC	Joint Coordination Committee
	JICA	Japan International Cooperation Agency
M	MDG	Millennium Development Goals
	MDR	Multi Drug Resistant
	MOH	Ministry of Health
	MPA	Minimum Package of Activities
	MSF	Medecins Sans Frontieres
N	NAP	National HIV/AIDS Control Program
	NGO	Non-Governmental Organization
	NIPH	National Institute of Public Health
	NSDP	National Strategic Development Plan
	NTP	National Tuberculosis Programme
O	OD	Operational District

	OECD	Organization for Economic Cooperation Development
	OI	Opportunistic Infection
	OJT	On-the-Job Training
P	PDM	Project Design Matrix
	PHD	Provincial Health Department
	PLHA	People Living with HIV/AIDS
	PO	Plan of Operation
	PPM	Public-Private Mix
	PPPM	Public-Public-Private Mix
R	R/D	Record of Discussions
	RIT	Research Institute of Tuberculosis, Japan
	RMNCH	Reproductive, Maternal, Newborn and Child Health
S	SOP	Standard of Operation
T	TB	Tuberculosis
	TICAD	Tokyo International Conference on African Development
	TOT	Training of Trainers
	TQM	Total Quality Management
U	USAID	United States Agency for International Development
	US-CDC	United States Centers for Disease Control and Prevention
V	VCT	Voluntary Counseling and Testing
	VHSG	Village Health Support Group
	VHV	Village Health Volunteer
W	WB	The World Bank
	WHO	World Health Organization

1. Introduction

1.1 Objectives of the Evaluation

The evaluation study was conducted with the purpose of

- (1) To verify the level of achievements and performance of the Project based on the Record of Discussions (R/D), Plan of Operations (P/O), and Project Design Matrix (PDM),
- (2) To evaluate the Project in terms of the five evaluation criteria, and
- (3) To draw useful recommendations to the Project and extract lessons learned from the Project.

1.2 Method of Evaluation

The evaluation was conducted by the Joint Evaluation Team consisting of Cambodian and Japanese members. The Cambodian members were nominated by the Ministry of Health and the Japanese members were nominated by JICA. The evaluation was conducted based on the "JICAs Guideline for Project Evaluation: revised version of March 2004". The evaluation activities included an evaluation workshop widely inviting Cambodian counterparts, documents analysis, field survey and interviews to persons concerned.

The Team reviewed activities and achievements of the Project, and evaluated them based on the five evaluation criteria recommended by the DAC (Development Assistance Committee) of OECD (Organization for Economic Cooperation Development). The five evaluation criteria are as follows:

(1) Relevance

Relevance is a criterion to evaluate the validity of the Project Purpose and Overall Goal in line with development policies of countries concerned and the needs of beneficiaries.

(2) Effectiveness

Effectiveness is a criterion to evaluate how far the Project Purpose is achieved, and to examine if the achievement is brought about by the project, not by the external factors.

(3) Efficiency

Efficiency is a criterion to evaluate the productivity of the project, or to examine if the Inputs of the project has been efficiently converted into the Outputs.

(4) Impact

Impact refers to direct and indirect, positive and negative impact caused by implementing the Project, including the extent to which the Overall Goal has been attained.

(5) Sustainability

Sustainability refers to the extent to which the Cambodian side can further develop the Project, and the benefits generated by the Project can be sustained under Cambodian policies, technologies, systems and financial state of the Cambodian side.

1.3 Members of the Joint Evaluation Team

(1) Japanese Evaluation Team

	Field in Charge	Name	Position/Organization
1	Leader	Dr. Mitsuo ISONO	Senior Advisor (health sector), JICA
2	TB Control	Dr. Hitoshi OSHITANI	Professor, Department of Virology, Tohoku University Graduate School of Medicine
3	Evaluation Planning	Ms. Ayako MATSUOKA	Infectious Disease Control Division, Health Human Resources and Infectious Disease Control Group, Human Development Department, JICA
4	Program Management	Ms. Shoko SATO	Project Formulation Advisor (Health Sector), JICA Cambodia Office
5	Evaluation Analysis	Mr. Masahiro OSEKO	Consultant, Nevka Co., Ltd.

(2) Cambodian Evaluation Team

	Field in Charge	Name	Position/Organization
1	Leader	Dr. Mao Tan Eang	Director, National Center for Tuberculosis and Leprosy Control (CENAT)
2	Member	Dr. Team Bak Khim	Vice Director, CENAT
3	Member	Dr. Tieng Sivanna	Deputy Chief, Technical Bureau, CENAT
4	Member	Dr. Khun Kim Eam	Chief of the Planning Statistics and IEC Unit, CENAT
5	Member	Dr. Pheng Sok Heng	Chief of National TB Reference Lab, CENAT
6	Member	Dr. In Soldhanya	Training Supervision and Research Unit, CENAT

1.4 Schedule of the Evaluation

From January 6 to January 19, 2009

2. Outline of the Project

2.1 Background of the Project

In Cambodia, infectious diseases still a major cause of mortality, and among those, tuberculosis (TB) is one of leading causes of mortality. As most TB patients are aged between 20 and 50 years old, which is productive generation, TB infection directly affects socioeconomic situation. In 1994, National Tuberculosis Control Program (NTP) introduced DOTS in Cambodia. Through NTP, cure rate was greatly improved. However rapid expansion of services caused lack of trained health staff who was engaged in TB control and supervision activities. Spread of HIV/AIDS increased number of TB patients, and there also was difficulty to develop an evidence-based plan of TB control because of insufficient surveillance system.

Responding to the above situation, the Cambodian government requested a technical cooperation project to strengthen capacity of NTP and provided relating training for health staff. Thus, Tuberculosis Control Project Phase 1 had commenced in August 1999 with five years cooperation period.

Having achieved a significant progress in DOTS expansion during the five year period of the first project, the major focus for TB control had shifted to better quality management and increased attention to difficult-to-reach areas and groups. Therefore Tuberculosis Control Project Phase 2 was requested by the Government of Cambodia for a period of five years and commenced in August 2004. The project has been providing technical support to the NTP for improving the TR program with sustainability and quality, and for expanding the improved program nationwide. The project consists of three components. The first aims to prevent the spread of new infections through increased case detection and expansion of DOTS services; the second provides quality TB control service for vulnerable groups of patients; and third strengthens the capacity for research and surveillance to continuously monitor, appraise, evaluate and improve the NTP interventions and their outcome.

2.2 Summary of the Project

2.2.1 Objectives of the Project

(1) Overall Goal

TB morbidity and mortality are reduced.

(2) Project Purpose

Sustainable quality TB Programme is implemented nationwide.

2.2.2 Outputs of the Project

- (1) Management capacity of the NTP is improved.
- (2) Sustainable quality DOTS is expanded nationwide.
- (3) Suitable services and guidelines beyond routine DOTS are developed.
- (4) Quality of laboratory services to support DOTS, TB/HIV activities and surveys is improved.
- (5) Effective IEC/advocacy activities to support TB control program are implemented.
(For the detail refer to the Annex 1: PDM.)

3. Performance of the Project

3.1 Inputs to the Project

3.1.1 Inputs by the Japanese side

(1) Dispatch of experts

Three (3) experts were dispatched as long-term experts while twenty seven (27) were dispatched

as short-term experts. (See Annex 2) Total manmonth (m/m) is 192.41 m/m.

(2) Counterparts training

Twelve (12) Cambodian counterparts participated in counterparts training in Japan including TB Program management, TB laboratory network for DOTS expansion. Fifty (50) Cambodian counterparts participated in third country training courses in Thailand and Philippines on international TB/HIV clinical training, training of trainers for standardized sputum smear microscopy. (See Annex 4)

(3) Provision of equipment

Japanese side has provided necessary equipment such as laboratory equipment, general radiography X-ray system, motorcycle, and computers and computer related equipment. Total amount of expenses for equipment was 518 thousand US\$. (See Annex 5)

(4) Local operation expenses borne by the Japanese side

Total amount of local operation expenses born by the Japanese side was 1,511 thousand US\$. Expense by year is as follows. (See Annex 6)

Year	JFY2004 Aug.-Mar.	JFY2005	JFY2006	JFY2007	JFY2008 Apr.-Dec.	Total
Local operation expenses (Unit: thousand US\$)	264	371	326	371	179	1,511

JFY: Japanese Fiscal Year (from April to March of the next year)

3.1.2 Inputs by the Cambodian side

(1) Assignment of counterpart personnel

A total of 35 counterparts were assigned as planned as per R/D. (See Annex 3)

(2) Provision of consumables and facilities

Cambodian side provided essential materials, reagents, part of drug for NTP, and facilities such as an office space for Japanese experts.

3.2 Progress of Activities of the Project

See Annex 6

3.3 Achievements of the Project

3.3.1 Achievement of the Overall Goal

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
TB morbidity and mortality are reduced.	<ol style="list-style-type: none"> By 2012, incidence of smear (+) TB is reduced from 241/100K in 1997 to 120/100K nationwide. By 2012, prevalence of smear (+) TB is reduced from 540/100K in 1997 to 270/100K nationwide. By 2012, mortality rate of TB is reduced from 90/100K in 1997 to 45/100K nationwide. 	<p>Estimates by WHO WHO Report and National Prevalence Survey (2002, 2007, 2012)</p>	<p>Related Government institutions at all levels continue supports to TB control program.</p> <p>Poverty level of general population does not become worse.</p>

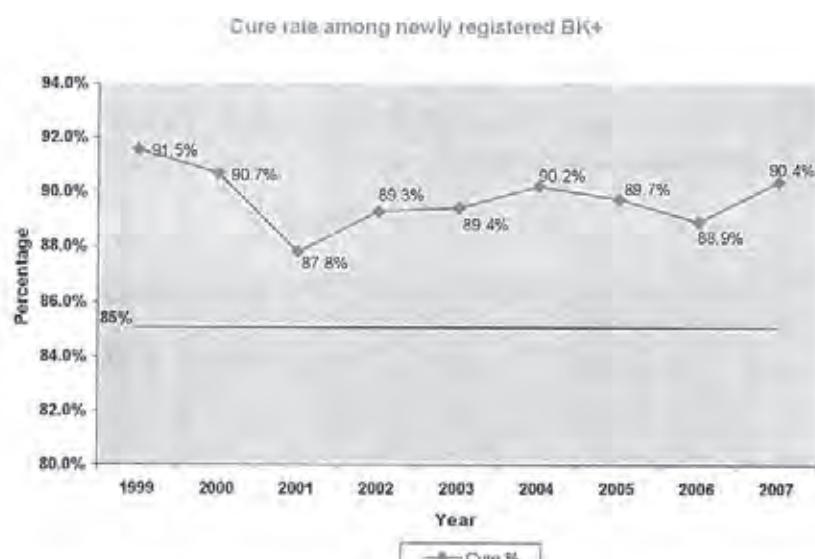
Targets (Objectively Verifiable Indicators) of Overall Goal are based on the global targets of WHO, which are expected to be achieved by attaining 70% of smear (+) detection rate and 85% cure rate of smear (+) TB patients registered. These two targets of detection rate and cure rate were also the targets of Project Purpose of this project, and these targets are accomplished or nearly accomplished as show below (3.3.2). Therefore, necessary conditions to achieve Overall Goal are fulfilled.

3.3.2 Achievement of the Project Purpose

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumptions
Sustainable quality TB Programme is implemented nationwide.	<ol style="list-style-type: none"> Throughout the Project, cure rate among newly registered smear (+) TB patients is maintained at least 85%. By the end of the Project, smear (+) detection rate is increased and maintained at least 70%. By the end of the Project, number of smear (+) registered cases is increased twice as many from the level in 2003. By the end of the Project, number of registered TB cases in children is increased twice as many from the level in 2003. 	NTP Report	<p>Impact of HIV/AIDS on cure rate is maintained at optimal level.</p> <p>Prevalence of HIV/AIDS infection is not worsen.</p>

(1) Achievement of Indicator 1 (Cure rate of smear (+) TB)

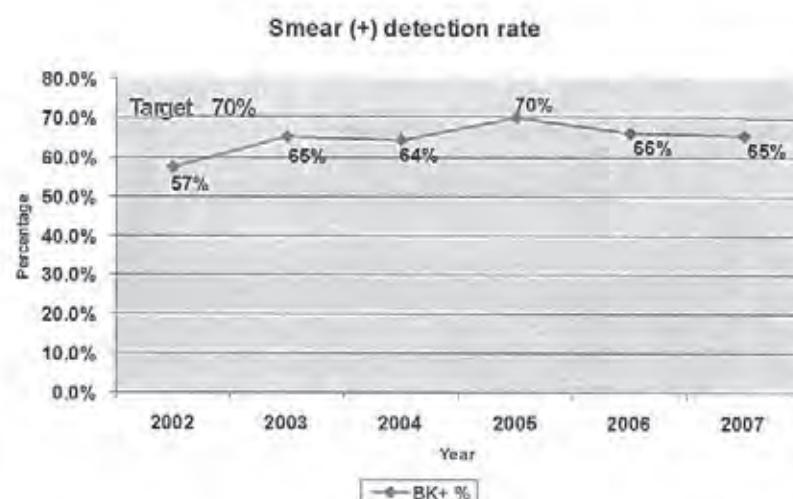
Indicator 1 was fully achieved since the cure rate among newly registered smear (+) TB patients has been maintained over 85% throughout the project period as shown below.



Source: "Annual Statistics of Tuberculosis in Cambodia 1999-2007", NTP

(2) Achievement of Indicator 2 (Detection rate of smear (+) TB)

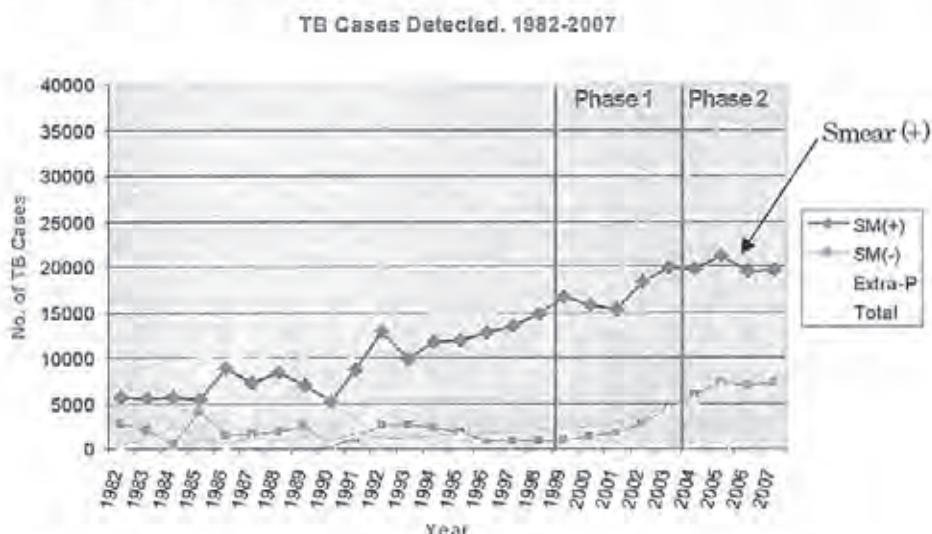
- Indicator 2 was achieved in the year 2005 as shown in the graphic diagram below. Although, thereafter, there was a slight decrease of detection rate with fluctuation¹, this indicator can be judged to have been achieved, considering the absolute value of detected cases as shown in 2) below.



Source: "Annual Statistics of Tuberculosis in Cambodia 2002-2007", NTP

¹ Smear (+) detection rate was 73% in 2005, 68% in 2006 and 68.5% in 2007 when total population estimate of the Cambodian Government's "General Population Census 2008" was applied as a basis of calculation.

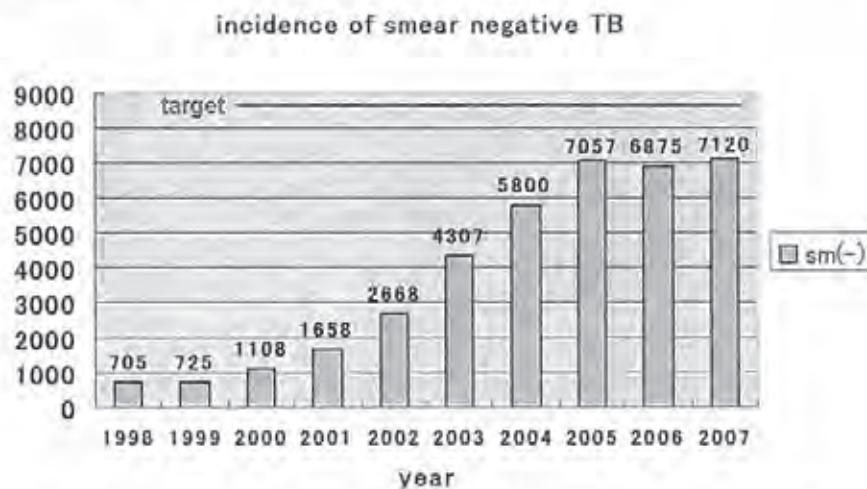
- 2) The *absolute value* of detected cases instead of detection *rate* is considered to be a more reliable indicator due to the difference of total population estimate. The absolute value of detected cases has been steadily increased during the period of phase 1 of the Project, and reached a plateau and maintained during the period of phase 2.



Source: "Annual Statistics of Tuberculosis in Cambodia 1999-2007", NTP

(3) Achievement of Indicator 3 (Number of smear (-) registered cases)

- Indicator 3 was not achieved as shown below.
- While the target was not achieved, the number of smear (-) registered cases has been steadily increased during the period of the phase 1 (1999-2004) of the Project, and reached a plateau in 2005, and maintained during the period of the Project.



Source: "Annual Statistics of Tuberculosis in Cambodia 1999-2007", NTP

- 3) Indicator 3 is a target aiming at increase of registered cases of TB/HIV and childhood TB along with detection of early stage of TB cases. Setting such indicator was appropriate and relevant. But the target level to increase the registered cases "twice as many from the level in 2003" should be reconsidered depending on the reality.
- 4) Concerning the registered cases with TB/HIV, which was one of the main components of this target, more smear (-) cases among HIV+ were detected than smear (+) cases in 2007 as shown in the table below.

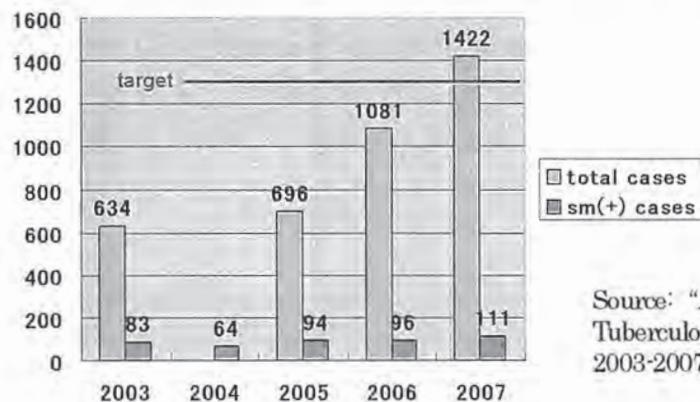
TB among HIV/AIDS				
HIV+ clients come to OI for TB screening	Smear (+)	Smear (-)	EP	Total
5,318	501	625	686	1,801

Source: "Annual Statistics of Tuberculosis in Cambodia 2007"

- 5) Concerning pediatric TB, which is another main component of this target, the number of registered childhood TB cases have been increased and cleared the target as shown below (3.3.2 (4)).
- 6) From these observations on TB/HIV and pediatric TB, although the indicator with no concrete basis was not achieved, it is obvious that the situation concerning detection of smear (-) cases has been significantly improved.
- 7) Further improvement can be expected if the quality of and accessibility to X-ray diagnosis is further improved.

(4) Achievement of Indicator 4 (Number of registered childhood TB cases)

- 1) Indicator 4 is achieved as shown below.
- 2) From the year 2005, at the suggestion of the Project, the NTP started the registration of childhood TB cases separated from the adult registration. Because of this change, it became possible to obtain accurate data on childhood TB cases and to formulate more appropriate TB control measure for children.²



Source: "Annual Statistics of Tuberculosis in Cambodia 2003-2007", NTP

² Total number in 2003 was compiled by the Project from registration.

3.3.3 Achievement of Outputs

Since there are nearly forty (40) indicators for five (5) Outputs, only some important issues from each Output are picked up and summarized below.

For the achievement of each Indicator of Outputs, see Annex 6 "Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009)

(1) Achievement of Output 1

Output 1 "Management capacity of the NTP is improved."

Output 1 was expected to be achieved by improving the capacity of planning, supervision, monitoring & evaluation, survey/research, data analysis and TB drug management. (See Annex 1 PDM for the detail.)

- 1) Most of nine (9) indicators of Output 1 have been achieved.
- 2) Regarding the planning ability in Indicator 1, annual plans of NTP/CENAT were formulated every year between September and December, and annual TB conferences were held in order to review the activities and feedback the results to the planning. However, from the standpoint of program monitoring and evaluation, the quality of the plans should be further improved.
- 3) Regarding the drug management in Indicator 7, though it was reported that the stock out of Ethanbutol at central level occurred in 2006, prompt measures taken by CENAT and partners including JICA did successfully prevent from affecting treatment at HC and OD levels. In addition, OD level became capable to make an accurate request of the adequate quantity of anti-TB drug based on the estimated incidence and existing stock.
- 4) Regarding the capacity to conduct and analyze survey/research in Indicator 8, CENAT still rely on the assistance of external experts. It is necessary to further enhance the capacity particularly of survey/research design and analysis.
- 5) Management capacity of NTP/CENAT has been improved in general. Successful mobilization of resources from other donors, particularly Global Fund (Round 2, 5 and 7) indicated better management capacity of NTP/CENAT.

(2) Achievement of Output 2

Output 2 "Sustainable quality DOTS is expanded nationwide."

Output 2 was expected to be achieved through the activities on DOTS, community DOTS (C-DOTS), 6MSCC and PPM-DOTS. (See Annex 1 PDM for the detail.)

- 1) Nine (9) indicators of Output 2 have been almost achieved.

- 2) PPM-DOTS Guideline has been drafted and will be authorized in March 2009. Indicator 7 is, therefore, expected to be achieved by the end of the project.
- 3) In indicator 9, C-DOTS has been implemented in 502 HCs, which was below the target of 665 HCs. However, this target was not set up on any technical estimation and the exact number of HCs required for necessary provision of C-DOTS is unknown.
- 4) C-DOTS guideline was published during the period of the phase 1 of the Project and now it is put in practice. At the practical levels, however, it is not strictly followed by some partners and there are variations in actual practices of C-DOTS.

(3) Achievement of Output 3

Output 3 "Suitable services and guidelines beyond routine DOTS are developed."

Output 3 was expected to be achieved by introducing services of TB/HIV, pediatric TB and smear (-) detection. (See Annex 1: PDM for the detail.)

- 1) Main components of Beyond DOTS and their indicators are as follows:
 - a. TB/HIV (Indicators 1 and 2)
 - b. Pediatric TB (Indicators 3 and 4)
 - c. Detection of smear (-) cases (Indicator 5)
- 2) TB/HIV services were provided in 67 out of 77 ODs in total, and this brought about significant number of detected TB/HIV case as seen above in 3.3.2 (3).
- 3) Concerning pediatric TB, it was difficult to evaluate the achievement level since the Indicator 4 to monitor "pediatric TB services" was not well defined nor well elaborated. The Project has contributed to providing pediatric TB guidance to all TB supervisors nationwide, and pediatric TB specific training courses were held in seven (7) provinces. With these activities, it is considered that there was improvement in the control of TB in children.
- 4) Indicator 5 of "Development of Smear Negative TB Guideline" was not achieved. Since the section of smear negative TB in "TB Management Manual, 2003" is still applicable, the Project decided to suspend developing a new guideline.

(4) Achievement of Output 4

Output 4 "Quality of laboratory services to support DOTS, TB/HIV activities and surveys is improved."

Output 4 was expected to be achieved mainly through the trainings on TQM, CD4, smear examination, bacteriological examination, and EQA for DST. (See Annex 1: PDM for the detail.)

- 1) Nine (9) indicators were mostly achieved.
- 2) Concerning Indicator 1, TQM pilot guideline was formulated only for two (2) pilot ODs in English but not in Khmer.

- 3) Concerning Indicator 2, the Project conducted trainings and laboratory staff became capable to carry out CD4 test. However, the other test method has become a main stream in NAP (National HIV/AIDS Control Program), and the referral system of this testing to NIPH (National Institute of Public Health) was established during the Project period. Therefore CD4 test is not being performed at CENAT.
- 4) Concerning Indicator 3, stock out of reagents occurred at central level (CMS) in 2007. This was out-of-control of the Project since that was caused by the non-disbursement of the budget from MOF. Quickly responding to the situation, the Project conducted training of laboratory staff on in-house production of reagents and the negative effect of this incident was mitigated to the minimum level. In-house production of reagents is still being performed when necessary. This is a noteworthy case as a conversion of a risk into an opportunity.

(5) Achievement of Output 5

Output 5 "Effective IEC/advocacy activities to support TB control program are implemented."

Output 5 was expected to be achieved by developing and implementing strategies for IEC/advocacy. (See Annex 1: PDM for the detail.)

- 1) Three (3) Indicators of Output 5 have been almost achieved.
- 2) The concept of IEC/advocacy was shifted to ACSM as a global trend adopted by the Stop TB Partnership in the middle of the Project period. Due to this change, IEC strategy of Indicator 1 was changed as ACSM strategy.
- 3) Concerning IEC/advocacy or ACSM activities in Indicator 2, the draft of ACSM strategy was prepared, but not authorized yet. However, CENAT/NTP has already started ACSM activities according to the draft of strategy as well as the "National Health Strategic Plan for Tuberculosis Control in the Kingdom of Cambodia 2006-2010."

3.4 Outstanding Achievements

Since this JICA/CENAT Project has been supported almost all the components of TB control in this country, it made difficult to extract and evaluate the contribution particularly made by the Project. Therefore, some noteworthy achievements were picked up here to illustrate the contribution of the Project to NTP.

(1) C-DOTS (Output 2·3)

- 1) HC staff meetings at ODs and VHV meetings at HCs have been periodically conducted by the Project in three (3) pilot provinces in order to expand DOTS to community level. The Project has used these occasions of meetings for education and trainings for VHV. The Project conducted TOT for HC staff in HC staff meetings, and the trained HC staff conducted

- education and training for VHV in VHV meetings.
- 2) Although the meetings were organized for the sake of C-DOTS (Output 2·3), education and training topics addressed in these meetings also included TB/HIV (Output 3·2), pediatric TB (Output 3·4) and ACSM (Output 5·2, 5·3). A wide variety of knowledge and skills were transferred to VHV in same occasion. It also served as an opportunity for VHV to share their experiences and good practices. In addition regular meeting among stakeholders from the different levels strengthened their networking.
- (2) PPM: Referral of TB patient from private to public (Output 2·7, 2·8)
- The Project has taken a leading role in developing the basis for PPM. The Project initiated the activity for PPM by conducting the baseline survey on the health care facilities where suspected TB patients made the first contact. This survey revealed the fact that around 75% of TB suspected patients used private clinics, dispensaries and pharmacies at first. This result raised awareness of the importance of involving private sector into TB control effort. Based on the results of the survey, trainings were conducted to the private sectors (small clinics) in 2005/06 to develop a referral mechanism in Phnom Penh. The Project together with other partners introduced the new type of carbon copy slip for tracking the referral from private to public, and started using it in pilot area in Phnom Penh. This referral slip has been introduced widely in the country and now it is being used nationwide.
- (3) PPPM: Involvement of other sector than health (Output 2·7, 2·8)
- 1) Promotion of PPM in Cambodia tended to focus on the strengthening linkage between private clinic/dispensary and public health facility. The Project played a great role to involve other important sectors outside the MOH.
 - 2) PPPM (Public-Public-Private Mix) TB control has been conducted in collaboration with NTP, Ministry of Labor and selected garment factories in Phnom Penh. PPPM involved trainings of health staff in factory clinics, TB campaign, smear examination, treatment and monitoring. TB suspects found in factories were referred to HCs to diagnose TB, and factory clinics carried out DOTS in factories for TB patients.
 - 3) The Project involved a local NGO, the Cambodia Anti-Tuberculosis Association (CATA) in order to secure the sustainability of this activity.
 - 4) The pilot activities were started in six (6) factories in 2007, and extended to sixteen (16) factories in 2008.
 - 5) Factory owners understanding and cooperation were indispensable to this activity. And for gaining their understanding and cooperation, approach from the Ministry of Labor to them was significantly important. It was notable that the Project successfully facilitated the involvement of these parties of Public-Public-Private, and developed a functional PPPM system in the pilot area.

(3) TB/HIV (Output 3·1, 3·2)

- 1) Increasing number of TB/HIV co-infection drew an urgent attention of both TB and HIV/AIDS Control Programs in Cambodia. Three (3) approaches for referring TB patients to HIV/AIDS service have been developed so far: initially an approach of "referral of TB patients to VCT" was applied. Then, "Mobile VCT, which means VCT visits TB patients" approach was tried out. At this moment, while these two approaches are still valid and applied, "sending blood specimens of TB patient to VCT for HIV testing" is being recommended.
- 2) The Project implemented Mobile VCT in four (4) ODs in Phnom Penh municipality, targeting patients who had difficulties in visiting VCT. This pilot trial implemented by the Project provided useful information to explore more effective referral system of TB to HIV service.
- 3) TB screening for PLHA was encouraged through the Afternoon Clinic³ at CENAT and mobile X-ray screening in Phnom Penh, which detected more TB cases including smear negative cases.
- 4) The coordination mechanism between HIV and TB care providers was constructed by using the stakeholder meeting and periodical workshops in Phnom Penh. This model mechanism was also introduced in several ODs in order to improve accessibility of cross referral between TB and HIV/AIDS services at OD level.
- 5) The standard referral system from TB to HIV service was established as mentioned above. It is now being implemented by other organizations with support from GF.

(5) EQA (Output 4·6~4·9)

- 1) The Project introduced the quarterly EQA in seven (7) pilot provinces and maintained with regular monitoring meetings. By increasing the frequency of EQA from semiannually to quarterly, the feedback became to be provided timely and the quality of test was further improved.
- 2) Given the fact that quarterly EQA was more effective than semiannual one to improve the quality of testing, the Project extended quarterly EQA from four (4) PHD to seven (7) PHD. CENAT also has extended this quarterly EQA further to 16 PHD with financial support from other partners including GF, US-CDC and USAID.

3.5 Implementation Process

3.5.1 Output 1

Through implementing process and activities described below, the Project significantly assisted CENAT to develop its overall capacity.

³ Afternoon Clinic at CENAT implies TB screening service for PLHA. It was conducted in the afternoon to avoid the encounter of PLHA and TB patients. The CENAT is crowded with TB patients in the morning and it increases the risk of TB infection for PLHA to come to such a place.

The Project encouraged coordinating the NTP activities among partners and CENAT became to be able to conduct the ICC meeting periodically (every quarter) and the CENAT-JICA meeting every month. As a kind of subgroup of the NTP, TB/HIV working group and TB laboratory working group were established and their regular meetings accelerated guideline production and partner's contribution.

For data management capacity building, the Project has been providing the on-the-job training on supervision (including drug management) in the field as well as the epidemiological training for analysis of survey/operational research to supervisors at every level. "Annual TB Statistics Report" was published by the Project from 2004 to 2007, however further effort to do detail analysis by using the Report at local level would be necessary.

The technical assistances have been given for research capacity building to carry out several national surveys, but they have not yet reached to the level to independently implement a large scale survey without external technical support.

3.5.2 Output 2

As described in the previous chapter as outstanding activities, the Project has started some initiatives and played significant roles both in C-DOTS and PPM including PPPM. These are crucial components to expand quality DOTS nationwide. In addition to these, in advance to 6MSCC introduction nationwide, the Project introduced the pilot implementation of the therapy in model areas in 2004. The technical know-how in the pilot trials was applied for the actual expansion of 6MSCC in 2005 with technical adjustment such as treatment card revision.

Thus, as the result, the Project played important roles, along with partners, in fundamental components for expansion of quality DOTS.

3.5.3 Output 3

The Project has made significant contribution in providing TB control service beyond routine DOTS by implementing following activities.

TB/HIV is a crucial component in TB control service beyond DOTS. The Project also has made significant contribution in this area as described above. In addition to those, the Project technically led the process of development of the TB/HIV operational guideline by providing technical advice on the contents through the WG meeting. Because of the full contribution of short-term expert, the guidelines were completed to the final draft stage.

The Project also has played initiative roles in pediatric TB. The Project carried out the baseline survey on TB contact children in 2005/06. Thereafter, incorporating the results from this survey, the Project improved the quality of the Pediatric TB Guideline and held working group meetings for the production in 2007/08 with the contribution of short-term experts. In 2008, the Project also conducted trainings for trainers to the CENAT staffs on the tuberculin skin test which is one of the important components to improve the diagnosis of childhood TB cases.

In order to improve the quality of X-ray diagnosis for detecting more cases, such as TB/HIV cases, the Project has been conducting the trainings on X-ray reading and technique for clinical doctors and

radiology technicians respectively. The textbook of chest X-ray diagnosis/technique utilized in the courses was produced in 2008 and provided to maintain skills even at facilities. Although further improvement is needed, these activities resulted in enhanced capacity for X-ray diagnosis which contributed to increased detection of smear negative cases.

3.5.4 Output 4

For this output, the Project has made significant contribution through following implementation. As described in the previous chapter, the Project introduced the quarterly EQA, resulting significant enhancement in quality of smear examination.

Although challenging, the Project assisted CENAT to develop capacity for culture examinations and made significant contribution to develop fundamental basis. TB culture centers were set up at CENAT and two (2) provincial hospitals and utilized for the drug resistance TB survey in 2006. The culture/DST system was already placed after the survey though the algorithms and the criteria for the tests have not been formed yet. The draft of SOP for culture/DST was produced and the Project experts provided technical advices. DST can be carried out at CENAT laboratory after provision of technical assistance, in which quality of test was ensured by success of panel test in 2005/06. The EQA system for DST (panel test) was built up in cooperation with RIT though CENAT laboratory needs to conduct it annually to stabilize the technique and confirm the quality.

3.5.5 Output 5

The Project assisted NTP to improve capacity for ACSM through following activities. The draft of IEC/advocacy strategy was produced by the Project experts with their counterparts at CENAT in 2005 and the Project contributed to coordinating the working group involved many partners to construct the new ACSM strategy. The document is now at the final draft stage. The Project conducted activities for ACSM, including advocacy meetings for factory owners in the factory PPM of Phnom Penh and the ACSM training for VHV's at C-DOTS pilot areas.

4. Evaluation Workshop

4.1 Agenda of the Evaluation Workshop

The evaluation workshop was held in order to integrate stakeholders' opinions and provide qualitative evaluation. The workshop was also expected to provide opportunity for stakeholders to learn about the Project and the project evaluation. For the agenda and workshop participants, see Annex 9 and 10 respectively.

4.2 Outputs of the Evaluation Workshop

In the evaluation workshop, the participants discussed and evaluated the achievements of

Indicators of Project Purpose and Outputs, rated those achievements, discussed/identified hindering and promoting factors in achieving each Output, and finally developed measures to be taken for further improvement of TB control in Cambodia.

Concerning promoting factors common to several Outputs, the participants cited assistance of development partners while the participants did not raise common hindering factors across the various Outputs. Particular hindering factors were pointed out for each Output. As measures to be taken for further improvement, training/refresher training, and enhancement of supervision and monitoring were raised in some Outputs. For the detail of the results of the evaluation workshop, refer to Annex 10.

5. Evaluation Results

5.1 Relevance

Relevance of the Project is evaluated "Very High" from the following perspective.

- (1) Consistency with global health policies and trend
 - 1) TB Control was one of the global priority issues for sustainable development. The fight against the communicable diseases such as TB, AIDS and Malaria is one of the seven (7) targets of MDGs.
 - 2) Following the TICAD IV and G8 Hokkaido Ibyako Summit in 2007, International TB Symposium was held in July 2008 in Tokyo. The symposium confirmed TB as an on-going serious global threat to human and endorsed international strategies to control TB including new issues beyond routine DOTS activities such as TB/HIV and MDR. The Project extensively tackle the TB issues in Cambodia, including TB/HIV, pediatric TB, C-DOTS, and MDR. The Project, thus, is inline with the global directions and the strategies of TB control.
- (2) Consistency with national health plans of Cambodia
 - 1) Cambodia's national development plan, called "National Strategic Development Plan (NSDP) 2006-2010" clearly identified health sector is one of the priority for nation building.
 - 2) "Cambodia Millennium Development Goals (CMDG)," which illustrates long-term development targets of Cambodia, picks up TB as one of the main infectious diseases to be tackled along with HIV/AIDS and Malaria, and establishes quantitative targets on TB for prevalence, mortality rate, detection rate and cure rate.
 - 3) In conjunction with NSDP 2006-2010, "Health Strategic Plan (HSP) 2008-2015" stipulates Cambodian government's health strategies setting up three (3) "HSP Goals", namely (1) Reproductive, Maternal, Newborn and Child Health (RMNCH), (2) Communicable Diseases, and (3) Non-Communicable Diseases and other health problems. Indicators for TB control

in HSP Goals are same as indicators of CMDG^a.

- 4) "National Health Strategic Plan for Tuberculosis Control in the Kingdom of Cambodia 2006-2010" prescribes TB control strategies of Cambodian in detail. Indicators for TB control are also laid down in line with CMDG and HSP Goals^b. Approaches chosen here to attain these targets include nationwide extension of DOTS, Beyond DOTS (C-DOTS, TB/HIV, PPM-DOTS, and etc.), strengthening of laboratories, improvement of quality of TB services, and technical and managerial capacity development of personnel involved in TB control.
- 5) Indicators of Overall Goals and Project Purpose of the Project are consistent with those of Cambodian government strategies stated above, and five (5) Outputs of the Project are also the adoption of approaches of the "National Health Strategic Plan for Tuberculosis Control in the Kingdom of Cambodia 2006-2010." In this respect, the consistency of targets and approaches of the Project with those of Cambodian government is very high.

(3) Consistency with Japanese ODA policy

- 1) In line with the International TB Symposium in July 2008 mentioned above (5.1 (1)), "Stop TB Japan Action Plan" was set up in collaboration with the Ministry of Foreign Affairs, the Ministry of Health, Labour and Welfare, JICA, JATA and Stop TB Partnership Japan (NGO). The action plan declared the intention of further promotion of international cooperation by using Japan's experiences and techniques concerning TB control.
- 2) According to the "Country-Specific Plan for Cambodia, 2006 (JICA)," the assistance for health sector is defined as a high priority area, and TB is one of high priority targets in health sector along with maternal and child health, Expanded Program for Immunization (EPI) and HIV/AIDS.
- 3) "Issue-based Guidelines Tuberculosis Control, April 2007 (JICA)" highlights countries with high TB burden, and suggests promoting quality improvement of DOTS and introduction of Beyond DOTS strategies. In view of above, the targets and approaches of the Project were highly relevant in terms of Japanese international cooperation policies.

(4) Consistency with the needs of target group

According to the "Global Tuberculosis Control 2008, WHO," Cambodia is one of those 22 High Burden Countries of TB with estimated incidence of 500 in 100,000 population per year, prevalence of 665 in 100,000 population per year and mortality rate of 92 in 100,000 population per year. These rates are the highest in the Western Pacific Region. The necessity of TB control for Cambodian people is very high.

^a Among the TB indicators of HSP Goals, only the indicator of TB death rate is different from the one of CMDG to be 60/100K by the year 2010, while the CMDG's indicator of TB death rate is 45/100K by the year 2010.

^b In the "National Health Strategic Plan for Tuberculosis Control in the Kingdom of Cambodia 2006-2010," quantitative indicators of detection rate and cure rate are same as those of MDG and HSP Goals. But indicators of prevalence and mortality rate has no quantitative targets, while those of MDG and HSP Goals have ones.

- (5) The approach and methodology of the Project
 - 1) Japanese technical level of TB control is very high, and international technical cooperation projects had been implemented in Nepal, Philippines and other countries in collaboration with international organizations such as WHO. From the viewpoint of availability of technical expertise, the relevance of providing Japanese assistance on TB control in Cambodia is very high.
 - 2) Besides the Project, Japan extended grant aid assistance for infrastructure construction of CENAT (2001) and procurement of TB drug (2003-2005). These assistances furnished the basis for the Project, and working on this basis the Project has been extending technical and managerial assistances to CENAT/NTP. This kind of long-term cooperation by mobilizing resources through various cooperation schemes can be highly evaluated as a relevant and effective approach.

5.2 Effectiveness

Effectiveness of the Project is evaluated "High" from the following perspective.

- 1) CENAT has successfully achieved the global target in TB, i.e. 85% of cure rate and 70% of smear positive TB detection rate, which are Indicators of Project Purpose of the Project. (See 3.3.2 for details.) The Project has contributed to it from the aspects as follows. (See 3.4 and 3.5 for details.)
- 2) Management capacity of CENAT/NTP was improved through a wide variety of activities as described above. However, the capacity for designing survey and data analysis, particularly concerning a large-scale survey such as the national prevalence survey is required to be developed further.
- 3) Sustainable quality DOTS was expanded nationwide by the DOTS expansion activities including C-DOTS, 6MSCC, PPM and PPPM. Most of these new strategies were piloted under the leadership of the Project as described above. Since there have been variations in practices of C-DOTS, further coordination and management is expected to be provided.
- 4) Guidelines beyond routine DOTS for TB/HIV and pediatric TB, and the algorithm chart for the diagnosis of smear negative TB were prepared by the NTP and the Project together with other partners. Services relating to them also have been extended in conformity to these guidelines and the working paper.
- 5) Quality of laboratory services was improved through the activities implemented under the leadership of the Project introducing quarterly EQA and culture examination as described above. Based on the capacity developed, further enhancement of the quality by EQA and a better utilization of culture examination are expected.

5.3 Efficiency

Efficiency of the Project is evaluated "High" from the following perspective.

- 1) In order to expand DOTS to community level, HC staff meetings at ODs and VHV meetings at HCs have been periodically conducted by the Project. In addition to this, the Project also used these occasions for education and trainings on TB/HIV, pediatric TB and ACSM, intending to involve community level in the implementation of these TB control activities. This can be highly evaluated as efficient implementation by extending activities to achieve several different Outputs in one occasion and in one place.
- 2) Most of the inputs from Japanese side such as dispatch of experts, trainings of counterparts in Japan and in the third countries, provision of equipment and local cost support were executed as planned. Cambodian counterparts highly evaluate the assignment timing, expertise and teaching capacity of Japanese experts. Cambodian counterparts were also mostly satisfied with contents, timing and duration of counterparts trainings. Equipment granted has been put to practical use as so intended.
- 3) Cambodian side assigned counterparts for implementing the project activities and ensuring the sustainability. Only a few counterparts were transferred to other departments or sent to long-term trainings overseas. Therefore, no serious negative effects were encountered for the Project.
- 4) Smooth communication was maintained by systematic information sharing and discussion opportunities as follows: TB Annual Conference [annual], Joint Coordination Committee (JCC) [annual], Interagency Coordination Committee (ICC) [quarterly], CENAT/JICA Project Meeting [monthly]. As a result, communication among NTP stakeholders were interacted with the communication within the Project members.

5.4 Impact

Impact of the Project is evaluated "High" from the following perspective.

(1) Achievement of Overall Goal

As stated above in 3.3.1, Indicators of Overall Goal and Project Purpose are based on the global targets of WHO, and Indicators of Project Purpose have been achieved or nearly achieved. Therefore, necessary conditions to achieve Overall Goal are fulfilled by accomplishing Project Purpose.

(2) Other Impacts

1) From pilot to scaling-up:

Piloting the innovative approaches such as C-DOTS, 6MSCC, EQA, PPM and PPPM was supported by the Project in conjunction with other partners. Based on the experiences and

know-how acquired from these pilot activities. CENAT/NTP has now extended them to other areas and/or nationwide.

2) Attracting further supports due to the improved capacity:

By strengthening the management and technical capacity of the NTP, the Project furnished a satisfactory basis for further development of TB control services. The foundation built by the Project has been attracting further support from other partners. US-CDC and MSF, for example, are now planning to introduce liquid culture, a newly developed technique for TB control, in the TB culture centers set up by the initiative of the Project.

4) No negative impacts are observed.

5.5 Sustainability

While the political, organizational and technical sustainability is "High," the financial sustainability of the Project is evaluated "Fair" as shown below.

(1) Political aspect

The commitment of the Cambodian government for TB control is high and displayed in the form of well-established consistent health policies described by the NSDP followed by the HSP and others as stated in 5.1 (2).

(2) Organizational aspect

- 1) CENAT is and will be the central and only organization responsible for implementing NTP nationwide.
- 2) Strong leadership by the present director of CENAT has contributed to facilitating the smooth implementation of NTP.

(3) Financial aspect

- 1) While the Government of Cambodia has been increasing the budget allocation to the health sector, it would take some more years to provide sufficient amount on her own.
- 2) Along with the termination of financial support from several development partners including WB, CENAT failed to gain GF round 8. In this circumstance, further efforts to mobilize funds for financial sustainability are required. It is recommended to further improve the capacity of CENAT including the capacity of survey, analysis and designing so that it would be possible to write well-elaborated proposals to secure funds.

(4) Technical aspect

- 1) Technical transfer to the Cambodian counterparts has been under favorable progress and the technical sustainability is considered to be high. Most of the training courses organized by the Project have now been facilitated by Cambodian personnel.
- 2) While the technical capabilities have been highly improved, there are some more rooms to be

further strengthened in areas such as supervision and monitoring, designing of survey, data analysis, X-ray diagnosis, EQA and culture examination.

6. Conclusion

	Relevance	Effectiveness	Efficiency	Impact	Sustainability	
					Financial	Others
Results	Very High	High	High	High	Fair	High

5 grade rating: Very High, High, Fair, Low, Very Low

- 1) CENAT has successfully achieved the global target of TB control program, and the Project has made significant contribution to this success. In this respect, the success of the Project is highly evaluated.
- 2) Having the project office inside of the CENAT building, forming the very close relationships with CENAT/NTP, the Project has been assisting in almost all the areas of TB control, targeting the whole country of Cambodia for long-term of ten (10) years by implementing the Project of phase 1 and 2. The effects of such long-term assistance for wide range of technical aspect should be highly evaluated. It enabled for Japanese side to provide their technical assistance step-by-step according to the progress made jointly in all necessary areas. The long-term assistance enhanced human relationship between Japanese experts and Cambodian counterparts, which resulted in the development of mutual and firm trust between them. These approaches have brought about a successful achievement of global target in TB control program. Thus, the approach and methodologies applied of the Project can be highly evaluated.

7. Recommendations

1. CENAT has successfully achieved the global target in TB control program and JICA has made significant contribution to this success through implementing technical cooperation projects for 10 years. Regarding to the current project, since most of the expected outcomes of the project have been achieved, it is recommended that JICA terminate this project in July 2009 as planned.
2. CENAT has successfully developed human resources for TB control at all levels. However, CENAT still needs to improve its capacity, especially for management of human resource and developing new staff to cope with new technical skills.
3. CENAT has established quality DOTS through developing supervision and monitoring system.

However, it is needed to strengthen its capacity of program monitoring and evaluation. Thus, it is recommended that this capacity to be developed at all levels, i.e. CENAT at the central level, PHD, OD and HC at the local levels, upon clarifying their roles for program monitoring and evaluation at each level, especially considering the expected changes due to decentralization policy of the Government.

4. CENAT developed its capacity to conduct and analyze survey/research by technical assistance of the Project. However, still CENAT does not have enough sustainable capacity for designing of survey and adequate data analysis, particularly a large scale survey such as the national prevalence survey. Thus, it is recommended that the Project assist to enhance its capacity through conducting practical survey such as sero-prevalence survey for TB/HIV planned in the remaining project period.
5. CENAT has promoted community DOTS nationwide through technical and financial assistance by several stakeholders. However, at the practical levels, the guideline for community DOTS is not strictly followed by some partners and there are variations in actual implementation in the community. This may result in hampering to maintain quality of DOTS. Thus, it is recommended that CENAT to improve coordination among stakeholders.
6. The project has assisted CENAT to implement quality pediatric TB service in 2 provinces. Further expansion of the service is crucial and it is recommended that the Project enhance quality of services in these 2 provinces as practical model so that CENAT will be able to expand the service to other provinces.
7. CENAT has made tremendous achievement to detect smear negative cases by improving the capacity for X-ray diagnosis. However, as pointed out by the Project expert, the quality of X-ray diagnosis should be further improved. Thus, it is recommended that CENAT make maximum utilization of technical assistance by the Project to develop quality of X-ray diagnosis in the remaining period.
8. The project has initiated to develop EQA system for smear examinations and CENAT started to expand this system nationwide and in 16 provinces the EQA system has been initiated. However, the system is not fully functioning, especially for adequate feedback mechanism of the results and practical instruction to improve the quality of smear examination by on site evaluation. Thus, it is recommended that the Project assist CENAT to enhance quality of EQA in the remaining period.
9. Now CENAT is planning to introduce fluorescence microscopic technique for smear examinations. Thus, it is recommended to develop quality assurance system for this technique, too.
10. The project assisted CENAT to develop capacity for culture examination in 3 major laboratories.

However, culture examinations have not yet been fully utilized according to the criteria. Thus, it is recommended that CENAT promote best utilization of culture examination for diagnosis of smear negative cases and MDR-TB by enhancing practical instruction, including stipulation of the criteria in the guideline for MDR-TB, which is under development.

11. For culture examination in CENAT, it is recommended that adequate bio-safety and infection control be implemented.

Annex 1: Project Design Matrix (PDM)
Project Title: National Tuberculosis Control Project Phase II
Target Group: TB Patients in Cambodia

Implementing Agency: CENAT Target Area: Nationwide (including pilot areas for some activities)		Duration: Aug. 1, 2004 - Jun. 31, 2009	Revised on Oct. 6, 2006 Date issued: Jul. 5, 2006
Objectively Verifiable Indicators		Means of Verification	Important Assumption
Overall Goal			
TB morbidity and mortality are reduced.	<ul style="list-style-type: none"> 1 By 2012 incidence of smear (+) TB is reduced from 24/100k in 1997 to 12/100k nationwide. 2 By 2012 prevalence of smear (+) TB is reduced from 540/100k in 1997 to 270/100k nationwide. 3 By 2012, mortality rate of TB is reduced from 20/100k in 1997 to 45/100k nationwide. 	<ul style="list-style-type: none"> • Related Government institutions at all levels continue supports to TB control program. • Poverty level of general population does not become worse. 	
Narrative Summary			
Sustainable quality TB Programme is implemented nationwide.	<ul style="list-style-type: none"> 1 Throughout the Project, cure rate among newly registered smear (+) TB patients is maintained at least 85%. 2 By the end of the Project, smear (+) detection rate is increased and maintained at least 70%. 3 By the end of the Project, number of smear (-) registered cases is increased twice as many from the level in 2003. 4 By the end of the Project, number of registered TB cases in children is increased twice as many from the level in 2003. 	<ul style="list-style-type: none"> • Impact of HIV/AIDS on cure rate is maintained at optimal level. • Prevalence of HIV/AIDS infection is not worsen. 	
Project Purpose			
	<ul style="list-style-type: none"> 1-1 Throughput of the Project, cure rate among newly registered smear (+) TB patients by NTP Report. 1-2 By the end of the Project, cure rate among newly registered smear (+) TB patients is maintained at least 85%. 1-3 By the end of the Project, number of smear (-) registered cases is increased twice as many from the level in 2003. 1-4 By the end of the Project, number of registered TB cases in children is increased twice as many from the level in 2003. 	<ul style="list-style-type: none"> • Government commitment to TB control programs is maintained. • Staff turnover rate of NTP at central level is not worsen. • Motivation of NTP staff is maintained. • Donor coordination by NTP is maintained. 	
OUTPUTS			
1 Management capacity of the NTP is improved.	<ul style="list-style-type: none"> 1-1 By the end of the Project, all the NTP staff at central and provincial levels has ability to formulate plans based on objective assessment. 1-2 By 2007 "Annual Statistics of Tuberculosis in Cambodia" is published without delay. 1-3 Throughout the Project, the database is updated timely and appropriately. 1-4 By the end of the Project, NTP activities are analyzed and evaluated using computers in selected areas. 1-5 By the end of 2005, the CENAT staff correctly qualify the yearly TB drug needs and request them to the MoH with the specification for the products. 1-6 By the end of 2007, all the TB drugs procured through the national supply system are of high quality, preferably GDF standard. 1-7 By the end of 2006, the quantity of TB drugs received quarterly from all the OUs is consistent with actual TB incidence and existing stocks. 1-8 By the end of the Project, NTP has technical capacity to conduct and analyze survey/research with less assistance of experts. 1-9 Achievements of the Project or Surveys are presented at international conferences every year. 	<ul style="list-style-type: none"> • Annual Estimates of Tuberculosis in Cambodia Update record. • Reports by Project Experts and CENAT Supervisors. • CENAT reports/CMS data. • CENAT reports/CMS data. • Reports by Project experts. • Reports in International Conference. 	
2 Sustainable quality DOTS is expanded nationwide.	<ul style="list-style-type: none"> 2-1 By the end of 2005, number of HCs providing DOTS services is increased from 706 in 2003 to all the MPA-HCs. 2-2 By the end of the Project, at least 95% of TB patients receive correct TB drugs in correct dosage in all the selected target areas (currently 50%). 2-3 By the end of the Project, 80% of TB patients in the continuation phase is observed by someone while swallowing TB drugs in all the selected target areas (currently 40%). 2-4 By the end of the Project, stock records for TB drugs correspond exactly with physical counts in 50% of the government drug stores in all the selected target areas (currently 10%). 2-5 By mid 2007, guidelines for BMSCC are developed. 2-6 By the end of 2007, guidelines for RPM-DOTS is formulated and Health centres. 2-7 By the end of 2007, guideline for RPM-DOTS is formulated. 2-8 By the end of the Project, RPM-DOTS are implemented in selected areas. 2-9 By the end of the Project, community DOTS is implemented in more than 665 HCs among 940 HCs 	<ul style="list-style-type: none"> • CENAT Report. • Reports on drug management survey (CMS). • (date): (date). • (date): (date). • (date): (date). 	

	3. Suitable services and guidelines beyond routine DOTS are developed.	3-1 By mid of 2007, a guideline for TB/HIV services is formulated. 3-2 By the end of the Project TB/HIV services are available at selected OEs. 3-3 By the end of 2007 a guideline [initial] TB manual in 2003 for pediatric TB is revised. 3-4 By the end of the Project, pediatric TB services are available at all Provincial RHs. 3-5 Guidance (draft) for smear(-) is developed.	CENAT Report (diao)
4. Quality of laboratory services to support DOTS, TB/HIV activities and surveys is improved.	4-1 By the end of 2007, a guideline for TGM of bacteriological examination for TB is formulated. 4-2 By the end of 2005, CD4 testing service is available in CENAT. 4-3 Throughout the Project, it does not face shortage of reagents and materials at all TB laboratories; 4-4 Trainings for smear examination are conducted biannually based on QA results. 4-5 QC circle activities are set up at selected province	CENAT Report Censat evaluation report Record of laboratory's training Record of laboratory's training	Annual Statistics of TB in Cambodia Censat evaluation report
5. Effective IEC/advocacy activities to support TB control program are implemented.	4-6 Throughout the Project, evaluation indicators (ex. Agreement ratio >95% etc.) for bacteriological examination are maintained in the expected range; 4-7 By the end of the Project, smear (+) rate among suspects is decreased to expected rate (10%-15%); 4-8 Trainings for assessors and cross-checkers are conducted once a year. 4-9 By the end of the Project, EEA system for Drug Susceptibility Test (DST) between supranational reference laboratory and CENAT laboratory is implemented 5-1 By 2007, NfP has an IEC/advocacy strategy to support TB control program. 5-2 By the end of the Project, NTF implements the IEC/advocacy strategy with partner organizations 5-3 By the end of the Project, 70% of DOTS/HIV is supported by HCSCs and NGOs through EC/advocacy activities	CENAT Report (diao) Workshop or reports among IEC/advocacy partners	

Activities	INPUTS	
	Cambodian Side	Japanese Side
1 Management capacity of the NTP is improved.		* National TB drug supply is secured from 2006 to the end of the Project. * National budget is released as planned * Turnover of NTP staff at provincial level is not worsen. * Other projects continue to support NTP
1-1 Activities relating to program management	Assignment of suitable Counterparts to each long-term experts	Dispatch of long-term experts
1-1-1 Conduct training for planning, monitoring and evaluation	Essential materials, reagents, and drugs for NTP	Chief Advisor
1-1-2 Conduct training for research and other technical areas	Salary of the staff of CENAT	Project Coordinator
1-2 Activities relating to information management		TB/HIV Control (Care)
1-2-1 Revise database for TB information system		
1-2-2 Analyze and evaluate national surveillance data	Operation and running cost	Dispatch of short-term experts
1-2-3 Pilot introduction of centralized monitoring information system for DOTS activities at provincial level in selected areas		Epidemiology
1-3 Activities relating to logistics management		TB control
1-3-1 Quantity TB drug needs to MoH		Laboratory management
1-3-2 Monitor stock of TB drugs at CMS		HIV examination
1-3-3 Conduct training to staff involved in TB control		Radiological examination
1-3-4 Supervise staff at OD and HC levels		Radiological diagnosis
1-4 Activities relating to research		
1-4-1 Conduct national surveys on TB prevalence, TB drug resistance and TB/HIV prevalence		Provision of Equipment
1-4-2 Conduct KAP surveys in selected areas on TB		
1-4-3 Utilize results of surveys/researches to improve NTP		
1-5 Activities relating to coordination		
1-5-1 Facilitate regular meetings with national and international partner organizations / Exchange and share opinions / experiences in international conferences / meetings		
2 Sustainable quality DOTS is expanded nationwide		
2-1 Activities relating to quality improvement of routine DOTS		
2-1-1 Review monitoring and supervision of routine DOTS at all levels.		Training in Japan
2-1-2 Revise guidelines for supervision		TB Control Laboratory Management
2-1-3 Conduct refresher training for Provincial and OD supervisors		National TB Control Management
2-2 Activities relating to 6MSCC		
2-2-1 Develop suitable guidelines for 6MSCC		
2-2-2 Conduct workshop and training on 4FDC for PHD, OD, RH and HC staff in collaboration with partner organizations		
2-2-3 Monitor and supervise the implementation of 6MSCC		

2-2 Activities relating to community DOTS

- 2-3-1 Make a guideline for community DOTS (already done)
- 2-3-2 Conduct an assessment in selected areas
- 2-3-3 Conduct TOT for CD supervisors and HC staff in selected areas
- 2-3-4 Conduct trainings for VHV for HC and OD in selected areas
- 2-3-5 Implement logistics, monitor and supervision in selected areas
- Have a bi-monthly meetings, 5 months reviews and an annual evaluation in selected areas
- 2-3-6 selected areas
- 2-3-7 Conduct workshop for community DOTS
- 2-4 Activities relating to public-private mix (PPM)**
- 2-4-1 Conduct survey on TB services in private sector
- 2-4-2 Conduct training and orientation workshop in selected areas
- 2-4-3 Conduct TOT for pharmacy, HC staff / cabinet
- 2-4-4 Conduct the monthly project team meeting, monitoring and outreach education
- 2-4-5 Make field visit for private sector
- 2-4-6 Conduct the public private team meeting
- 2-4-7 Conduct workshop for PPM-DOTS
- 3 Suitable services and guidelines beyond routine DOTS are developed.**
- 3-1 Activities relating to TB/HIV**
- 3-1-1 Formulate suitable guidelines for TB/HIV
- 3-1-2 Develop training module for strengthening TB physicians in RHs
- 3-1-3 Conduct training for beyond DOTS for TB/HIV
- 3-1-4 Conduct HIV counselling (VCCT) in CENAT (for OPD and IPD) and CENAT afternoon clinic activity
- 3-1-5 Conduct TB/HIV coordinating activities, such as mobile VCCT, quarterly stakeholder's meetings in Phnom Penh
- 3-1-6 Screen the TB among target population, such as PLHA
- 3-2 Activities relating to Pediatric TB**
- 3-2-1 Formulate suitable guidelines for pediatric TB
- 3-2-2 Develop training module for strengthening TB physicians in RHs
- 3-2-3 Conduct training for beyond DOTS for pediatric TB
- 3-2-4 Conduct TB contact children survey

3-3 Activities relating to Smear (+) cases	
3-3-1 Formulate suitable guidelines for smear (+) cases	
3-3-2 Develop training module for strengthening TB physicians in RPs	
3-3-3 Conduct training for beyond DOTS for smear (+) cases	
3-3-4 Conduct X-ray training (radiology and radioteknology)	
3-3-5 Formulate suitable guideline for EP	
3-4 Activities relating to Drug Resistant TB	
3-4-1 Support treatment services of drug resistant TB at CENAT	
4. Quality of laboratory services to support DOTS, TB/HIV activities and surveys is improved.	
Develop guidelines of Total Quality Management (TQM) system for bacteriological examination for TB.	
4-2 Conduct training for implementation of TQM at peripheral TB laboratories	
4-3 Support culture network for multi-drug resistance (MDR) monitoring	
4-3-1 Implement routine culture	
4-3-2 Conduct national survey on MDR	
4-3-3 Conduct EQA for DST	
4-3-4 Make SOP of culture	
4-4 Conduct training for CENAT laboratory technicians in order to strengthen and expand laboratory services such as TB/HIV, etc.	
4-5 Conduct training for staff to improve their skills for EQA	
4-5-1 Conduct training for CA (EQA) to assessors and cross-checkers every year	
4-5-2 Conduct training TB lab staff related to EQA result	
5 Effective IEC/advocacy activities to support TB control program are implemented.	
5-1 Organize workshops/meetings periodically with various potential stakeholders such as Ministry of Education, Labor and Vocational Training,	
5-2 Support and facilitate development of IEC strategic plan in collaboration with other partners	
5-3 Develop and print specific IEC materials for TB/HIV, community DOTS, and PRM-DOTS	

Annex 2: Dispatch of Japanese Experts

Long Term Experts

No.	Field	Name	Term	From	To	Day	MM
1	Chief Advisor	Dr. Kosuke Okada	1st Aug. 2004-30 Mar. 2005	2004/8/1	2005/5/30	668	22.27
2	Coordinator	Mr. Kai Yanaka	15 July 2004 - 13 July 2006	2004/7/15	2006/7/13	729	24.30
3	Laboratory Management	Mr. Toshihi Miura	1st Aug. 2004-29 Sept. 2005	2004/8/1	2005/9/29	425	14.17

Short Term Experts

No.	Field	Name	Term	From	To	Day	MM
1	Drug Management	Mr. Yuta Uchiyama	1st Aug. 2004-30 Mar. 2005	2004/8/1	2005/3/30	242	8.07
2	DOTS Expansion	Dr. Ikushi Onozaki	29 Aug. 2004-6 Sept. 2004	2004/8/29	2004/8/29	9	0.30
3	X-ray Diagnosis	Dr. Keiichi Nagao	29 Aug. 2004-7 Sept. 2004	2004/8/29	2004/8/29	10	0.33
4	X-ray Filming	Dr. Shizuo Nakano	3 Sept. 2004-13 Sept. 2004	2004/8/3	2004/8/13	11	0.37
5	HIV Testing System	Ms. Namiko Yoshihara	5 Oct. 2004-12 Oct. 2004	2004/10/5	2004/10/12	8	0.27
6	IEC/Advocacy	Ms. Naomi Obara	1 Dec. 2004-16 Dec. 2004	2004/12/1	2004/12/16	16	0.53
7	TB/HIV Survey	Dr. Kyoko Yamaguchi	18 Dec. 2004-8 Jan. 2005	2004/12/18	2005/1/8	22	0.73
8	X-ray Filming II	Dr. Hidetoshi Iirari	12 Dec. 2004-25 Dec. 2004	2004/12/12	2004/12/25	14	0.47
9	HIV Testing System	Ms. Namiko Yoshihara	20 Jan. 2005-14 Feb. 2005	2005/1/20	2005/2/14	26	0.87
10	TB Children	Dr. Tadatoshi Kuratsuji	1 Feb. 2005-12 Feb. 2005	2005/2/1	2005/2/12	12	0.40
11	Laboratory Technology	Ms. Akiko Fujiki	7 Feb. 2005-19 Feb. 2005	2005/2/7	2005/2/19	13	0.43
12	Drug Sensitivity Examination	Dr. Norio Yamada	13 Mar. 2005-18 Mar. 2005	2005/3/13	2005/3/16	6	0.20
13	DOTS Expansion	Dr. Ikushi Onozaki	13 Mar. 2005-19 Mar. 2005	2005/3/13	2005/3/19	7	0.23
14	TB Control	Dr. Tora Mori	15 Mar. 2005-19 Mar. 2005	2005/3/15	2005/3/19	5	0.17
FY2005						1337	
15	HIV Testing System (CD4)	Ms. Namiko Yoshihara	13 July 2005-5 Aug. 2005	2005/7/13	2005/8/5	24	0.80
16	DOTS Expansion	Dr. Ikushi Onozaki	25 July 2005-10 Aug. 2005	2005/7/25	2005/8/10	17	0.57
17	X-ray Diagnosis I	Dr. Keiichi Nagao	4 Sept. 2005-10 Sept. 2005	2005/9/4	2005/9/10	7	0.23

18	X-ray Diagnosis 2	Dr. Hidetoshi Igari	7 Sept. 2006-17 Sept. 2006	2006/9/7	2006/9/17	11	0.37
19	TB/HIV Survey	Ms. Akiko Endo	3 Oct. 2005-30 Oct. 2005	2005/10/3	2005/10/30	28	0.93
20	TB Management	Mr. Katsunori Osuga	28 Nov. 2005-9 Dec. 2005	2005/11/28	2005/12/9	12	0.40
21	IECA/Advocacy	Ms. Naomi Obara	30 Nov. 2005-14 Dec. 2005	2005/11/30	2005/12/14	15	0.50
22	Beyond DOTS	Dr. Tatsuo Sugiyama	18 Nov. 2005-25 Mar. 2006	2005/11/18	2005/3/25	128	4.27
23	Drug Management	Mr. Yuta Uchimura	21 Nov. 2005-22 Feb. 2006	2005/11/21	2005/2/22	94	3.13
24	Drug Resistance Monitoring	Dr. Norio Yamada	4 Dec. 2005-10 Dec. 2006	2005/12/4	2005/12/10	7	0.23
25	TB/HIV Management	Ms. Yoko Tsurugi	10 Dec. 2005-28 Mar. 2006	2005/12/10	2006/3/28	109	3.63
26	Drug Sensitivity Examination	Mr. Takashi Miura	19 Dec. 2005-25 Mar. 2006	2005/12/19	2006/3/25	97	3.23
27	X-ray Filming	Dr. Takeji Date	6 Jan. 2006-4 Feb. 2006	2006/1/6	2006/2/4	30	1.00
28	TB Children	Dr. Satoshi Mitani	14 Jan. 2006-25 Jan. 2006	2006/1/14	2006/1/25	12	0.40
29	Laboratory Management	Ms. Hiroko Matsumoto	30 Jan. 2006-26 Feb. 2006	2006/1/30	2006/2/26	28	0.93
30	TB Management	Dr. Katsunori Osuga	1 Mar. 2006-11 Mar. 2006	2006/3/1	2006/3/11	11	0.37
31	DOTS Expansion 2	Dr. Ikuhi Onozaki	19 Mar. 2006-29 Mar. 2006	2006/3/19	2006/3/29	11	0.37
FY2006)							
32	Project Management (Leader)	Dr. Tatsuo Sugiyama	20 Apr. 2006-13 Dec. 2006	2006/4/20	2006/12/13	231	7.70
33	TB/HIV (Management)	Ms. Yoko Tsurugi	20 Apr. 2006-8 Sept. 2006	2006/4/20	2006/9/8	142	4.73
34	Drug Sensitivity Examination	Ms. Hiroko Matsumoto	20 Apr. 2006-4 May. 2006	2006/4/20	2006/5/4	15	0.50
35	TB Drug Resistance Monitoring	Dr. Norio Yamada	23 May 2006-2 June 2006	2006/5/23	2006/6/2	11	0.37
36	Coordinator/IECA/Advocacy	Mr. Ryohichiroh Yanagi	12 June 2006-1 Sep 2006	2006/6/12	2006/5/1	82	2.73
37	TB Control	Dr. Katsunori Osuga	28 Aug 2006-8 Sep 2006	2006/8/28	2006/9/8	12	0.40
38	Hospitalized DOTS/Nesocomial Infection Control	Dr. Hidetoshi Igari	11 Sep 2006-20 Sep 2006	2006/9/11	2006/9/20	10	0.33
39	Radiography: Diagnosis 1	Dr. Keiichi Nagao	11 Sep 2006-20 Sep 2006	2006/9/11	2006/9/20	10	0.33
40	Coordinator/IECA/Advocacy	Mr. Ryohichiroh Yanagi	25 Sep 2006-19 Mar 2007	2006/9/25	2007/3/19	169	5.63
41	TB/HIV (Management)	Ms. Yoko Tsurugi	1 Oct 2006-23 Mar 2007	2006/10/1	2007/3/23	158	5.27
42	Drug Sensitivity Examination	Ms. Hiroko Matsumoto	25 Nov 2006-29 Nov 2006	2006/11/25	2006/11/29	5	0.17
43	Drug Management	Mr. Yuta Uchimura	30 Nov 2006-25 Feb 2007	2006/11/30	2007/2/25	88	2.93
44	Epidemiology/statistics/investigation of actual conditions	Mr. Kazuhiro Uchimura	27 Nov 2006-14 Dec 2006	2006/11/27	2006/12/14	18	0.60

45	Project Management (Leader)	Dr. Tatsuo Sugiyama	5 Jan 2007-19 Mar 2007	2007/1/5	2007/3/19	74	2.47
46	X-Ray Filming	Mr. Takashi Miura	2 Jan 2007-18 Feb 2007	2007/1/2	2007/2/18	48	1.60
47	Drug Sensitivity Examination	Ms. Hiroko Matsumoto	8 Jan 2007-29 Jan 2007	2007/1/8	2007/1/29	22	0.73
48	HIV Testing System (CD4)	Ms. Nanako Yoshihara	15 Jan 2007-11 Feb 2007	2007/1/15	2007/2/11	28	0.93
49	TB Children	Dr. Jinichi Kato	15 Jan 2007-18 Mar 2007	2007/1/15	2007/3/13	68	1.98
50	Lab Management	Ms. Akiko Fujiki	15 Jan 2007-21 Jan 2007	2007/1/15	2007/1/21	7	0.23
51	TB Control	Dr. Nobukatsu Ishikawa	5 Mar 2007-8 Mar 2007	2007/3/5	2007/3/8	4	0.13
52	TB Control	Dr. Ikushi Onozaki	11 Mar 2007-23 Mar 2007	2007/3/11	2007/3/23	13	0.43
			40,17				

FY2007

53	Project Management (Leader)	Dr. Tatsuo Sugiyama	26 Apr 2007-22 Dec 2007	2007/4/26	2007/12/22	220	7.33
54	Coordinator/TEC/Advocate	Mr. Ryohichiro Yanagi	25 Apr 2007-31 Aug 2007	2007/4/26	2007/8/31	128	4.27
55	TB/HIV (Management)	Ms. Yoko Tsurugi	16 May 2007-22 Sep 2007	2007/5/16	2007/9/22	127	4.23
56	Drug Sensitivity Examination	Ms. Hiroko Matsumoto	21 May 2007-19 June 2007	2007/5/21	2007/6/19	10	1.00
57	Lab Management	Ms. Atsuko Fujiki	21 Aug 2007 - 30 Aug 2007	2007/8/21	2007/8/30	10	0.33
58	TB Children	Dr. Jinichi Kato	27 Aug 2007 - 1 Nov 2007	2007/8/27	2007/11/1	60	2.00
59	Radiography Diagnosis	Dr. Kunihiko Ito	16 Sep 2007 - 27 Sep 2007	2007/9/16	2007/9/27	12	0.40
60	Epidemiology/statistics/investigation of actual conditions	Mr. Kazuhiko Uchimura	24 Sep 2007 - 11 Oct 2007	2007/9/24	2007/10/11	18	0.60
61	Coordinator/TEC/Advocate	Mr. Ryohichiro Yanagi	24 Sep 2007 - 19 March 2008	2007/9/24	2008/3/19	166	5.53
62	TB/HIV (Management)	Ms. Yoko Tsurugi	17 Oct 2007 -	2007/10/17	2008/3/25	161	5.37
63	HIV Testing System (CD4)	Ms. Namiho Yoshihara	4 Nov 2007 - 2 Dec 2007	2007/11/2	2007/12/2	31	1.04
64	Drug Management	Mr. Yutaka Uchiyama	17 Dec 2007 - 29 Feb 2008	2007/12/17	2008/2/29	75	2.60
65	TB Control	Dr. Katsuhiro Osuga	18 Dec 2007 - 27 Dec 2007	2007/12/18	2007/12/27	10	0.33
66	X-Ray Filming	Mr. Takashi Murai	2 Jan 2008 - 18 Feb 2008	2008/1/2	2008/2/18	48	1.60
67	Project Management (Leader)	Dr. Tatsuo Sugiyama	7 Jun 2008 - 25 March 2008	2008/1/7	2008/3/25	79	2.63
68	Drug Sensitivity Examination	Ms. Hiroko Matsumoto	14 Jan 2008 - 12 Feb 2008	2008/1/14	2008/2/12	30	1.00
69	TB Control	Dr. Hironobu Nishiyama	1 Feb 2008 - 11 March 2008	2008/2/1	2008/3/11	46	1.33

FY2008

70	TB Control	Dr. Hironobu Nishiyama	16 April 2008 - 6 Aug 2008	2008/4/16	2008/8/5	112	3.73
71	Coordinator/TEC/Advocate	Mr. Ryohichiro Yanagi	16 April 2008 - 1 July 2008	2008/4/16	2008/7/1	77	2.57
72	Project Management (Leader)	Dr. Tatsuo Sugiyama	25 April 2008 - 7 May 2008	2008/4/25	2008/5/7	13	0.43
73	Lab Management	Ms. Hiroko Matsumoto	28 April 2008 - 26 June 2008	2008/4/28	2008/5/26	60	2.00
74	Project Management (Leader)	Dr. Tatsuo Sugiyama	7 June 2008 - 23 June 2008	2008/5/7	2008/5/23	17	0.57
75	TB/HIV (Management)	Dr. Yoko Tsurugi	28 July 2008 - 10 Sep 2008	2008/7/28	2008/9/10	45	1.50
76	Drug Sensitivity Examination	Dr. Satoshi Mitarai	3 Aug 2008 - 17 Aug 2008	2008/8/3	2008/8/17	15	0.50
77	Project Management (Leader)	Dr. Tatsuo Sugiyama	2 Sep 2008 - 22 Sep 2008	2008/9/2	2008/9/22	21	0.70
78	Radiography Diagnosis	Dr. Kunihiko Ito	11 Sep 2008 - 22 Sep 2008	2008/9/11	2008/9/22	12	0.40
79	TB Children	Dr. Jinichi Kato	8 Sep 2008 - 21 Sep 2008	2008/9/8	2008/9/21	14	0.47
80	Epidemiology/statistics/investigation of actual conditions	Mr. Kazuhiko Uchimura	16 Nov 2008 - 29 Nov 2008	2008/11/16	2008/11/29	14	0.47
81	TB Children	Dr. Jinichi Kato	1 Dec 2008 - 14 Dec 2008	2008/12/1	2008/12/14	14	0.47

82	Project Management (Leader)	Dr.Tatsuji Sugiyama	26 Dec 2008 - 7 Feb 2009	2008/12/26	2009/2/7	44	1.47
83	TB Control	Dr.Hiroaki Nishiyama	26 August 2008 -	2008/8/26			
84	Coordinator/EC/Advocacy	Ms.Kiyomi Yamamoto	2008/7/28-	2008/7/28			
85							

Annex 3: Assignment of Counterpart Personnel

LIST OF CAMBODIAN COUNTERPARTS

No.	Plan as per R/D	Name	Position
1.	Project Manager	Prof. Eng Hout	Director General of Health, MoH
2.	Counterpart personnel in the following fields		
1)	Management of NTP	Dr. Mao Tan Eang	Director of CENAT
		Dr. Team Bak Khim	Vice Director of CENAT
		Dr. Uong Mardy	Vice Director of CENAT
		Dr. Suong Sarun	Vice Director of CENAT
		Dr. Koeut Pichchenda	Vice Director of CENAT
		Dr. Huot Chan Yuda	Vice Director of CENAT
		Dr. Keo Sokonth	Chief of T. Bureau
		Dr. Tieng Sivanna	Deputy Chief of T. Bureau
2)	Training and supervision & Research	Dr. Khloeung Phally	Deputy chief of Training, Supervision & Research
		Dr. Ten Kundara	Deputy chief of Training, Supervision & Research
		Dr. Inn Sokhanya	Technical Officer
		Dr. Chhov Kry Kolabrat	Technical Officer
		Dr. Nguon Chandara	Technical Officer
		Dr. Long Ngeth	Technical Officer
3)	Statistics, planning and IEC	Dr. Khun Kim Eam	Chief of Statistics, Planning and IEC Unit
		Dr. Chay Sokun	Technical Officer
		Dr. Kien Sorya	Technical Officer
		Dr. Nou Chanly	Technical Officer
		Dr. Chea Manith	Technical Officer
		Dr. Seng Saorith	Technical Officer
4)	Radiology section	Dr. Peou Satha	Chief of Radiology section
		Dr. Karim Chamroeum	Vice chief of Radiology section
5)	Laboratory	Dr. Pheng Sok Heng	Chief of TB laboratory
6)	Pharmacy	Ph. Phoeung Bunva	Pharmacy Sect.
		Ph. Uon Narom	Deputy Chief of Pharmacy Sect.
7)	Ambulatory DOTS	Dr. Yous Bun Heng	Dispensary Sec.
		Ms. Mao Nisay	Dispensary Sec.
		Dr. Prum Chhom Sayoem	Hospital
		Dr. Karim Chamroeum	X-ray Sect.
8)	Administration	Mr. Onn Phann	Chief of Administrative Bureau
		Ms. Iv Chhon Ros	Administrative staff
9)	Accountant	Mr. Nep Sok	Financial Bureau
		Mr. Tek Sophoeun	Financial Bureau
10)	Maintenance	Mr. Chhor Kim Sreng	Maintenance Sect.
		Mr. Nep Sok	Administrative Bureau
		TOTAL	35 Persons

Note: * = Counterparts who have left, due to moving to other organization or on long-term study abroad.

Annex 4: Training of Counterpart Personnel

Record of Counterparts Training in Japan

No	Course Subject	Training Institution	Period	Name	Position
1	Management Tuberculosis Intermediate Level	The Research Institute of Tuberculosis(RIT).Japan	May.17.2004 – Aug. 6. 2006	Dr. Chandara Keo	Provincial Health Department of Kampong Cham
2	"	"	May.17.2004 – Aug. 6. 2006	Dr. Kien Sorye:	Medical Officer, Planning Statistic & Technical Unit, CENAT
3	Leadership Training Tuberculosis Program Management	"	Jan. 12, 2005 – Feb. 5, 2005	Dr. In Sokhanya	Dep. Of Supervisor Training
4	Stop TB Action Training	"	Aug 2, 2005 – Oct.8, 2005	Dr. Sean Ly	Provincial Health Department, Kampong Thom Province
5	"	"	"	Dr. Chay Sokun	Technical Bureau Officer, Planning Statistic & Technical Unit, CENAT
6	Tuberculosis Laboratory Network for DOTS Expansion	"	Sep. 27, 2005 – Dec.3, 2005	Mr. Phann Vuth	Provincial TB Laboratory Supervisor, Kandal Provincial Health Department
7	National Tuberculosis Programme Management	"	Jan. 10, 2006 – Feb. 25, 2006	Dr. Huot Chan Yuda	Deputy Director, CENAT
8	Stop TB Action Training	"	Mar.21.2006 – Aug.4, 2006	Dr. Kousoum Marty	Technical Bureau Officer, CENAT
9	Tuberculosis Laboratory Network for DOTS Expansion	"	Sep.30, 2006 – Oct.19, 2006	Mr. Yang Sam Ol	Lab Technologist, Laboratory Unit, CENAT
10	Tuberculosis Laboratory Network for DOTS Expansion	"	Sep.25.2007 – Dec.1, 2007	Mr. Chay Many	Provincial Lab TB Supervisor, PhD of Prey Veng
11	Stop TB Action Training	"	May. 6. 2008 – Aug.2, 2008	Dr. Nou Chanly	Technical Bureau Officer, CENAT
12	Tuberculosis Laboratory Network for DOTS Expansion	"	Sep. 23, 2008 –Nov. 29, 2008	Mr.Pheng Sok Heng	Chief of TB Laboratory Unit, CENAT

Annex 5: Provision of Equipment

Provided Equipments

Equipments for JFY2004

No	Item of equipments	unit : US\$			Delivery time	Place of installation	Stock Control No.
		Unit	QTY	Amount			
1	Shuttle Compact Desktop Computer SB6GGC240	2,300	20	46,000	Feb. 2005	Provinces	JICA E001
2	Smear Making Kit	70	100	7,000	Mar. 2005	GENAT and provinces	JICA E002
3	Child X-ray Stand Naké Finez FD-21	8,175	5	40,875	Mar. 2005	GENAT and 4 provinces	JICA E003
4	Biological Microscope OLYMPUS CX21-12L05	2,500	10	25,000	Feb. 2005	Provinces	JICA E004
5	Motorcycle SUZUKI SMASH FD-110 XGS001	995	20	19,900	Mar. 2005	Provinces	JICA E005
6	General Radiography X-ray System TOSHIBA KX0-12R/FBI-	56,448	1	56,448	Mar. 2005	West OD, Phnom Penh	JICA E006
total				195,223			

Equipments for JFY 2005

No	Item of equipments	unit : US\$			Delivery time	Place of installation	Stock Control No.
		Unit	QTY	Amount			
1	Motorcycle SUZUKI SMASH	1,095	15	16,425	Aug. 2005	Provinces	JICA E007
1	FD110XGSD	1,095	20	21,900	Aug. 2005	Provinces	JICA E008
2	Shuttle Compact Desktop Computer SB6GGC240	1,500	1	8,400	Aug. 2005	CEVAT	JICA E009
3	LCD Projector AVID Multimedi	8,400	1	8,400	Aug. 2005	CEVAT	JICA E010
3	Projector NP-S50E	8,400	1	8,400	Oct. 2005	Provinces	JICA E011
4	CX21FS1	1,073	20	21,865	Oct. 2005	CEVAT	JICA E012
5	Analytical Semic Micro Balance AAD	2,585	1	2,585	Oct. 2005	CEVAT	
5	GR-200	31,000	4	124,000	Nov. 2005	CEVAT	
6	AWD Wagon Vehicle Mitsubishi Pajero 2.8GLS 5door Wagon AWD	31,000	1	31,000	Nov. 2005	CEVAT	
total				120,209			

No	Item of equipments	unit : US\$			Delivery time	Place of installation	Stock Control No.
		Unit	QTY	Amount			
1	Motorcycle SUZUKI SMASH FK10SD	1,165	8	\$3,765	Jun. 2007	Provinces	JICA E013(1-8)
1	AWD Wagon Vehicle Mitsubishi Pajero 2.8GLS	31,000	1	31,000	Mar. 2007	CEVAT	JICA E014
3	Dell Dimension E520 Desktop Printer	1,427	10	14,270	Jun. 2007	GENAT / Provinces	JICA E015(1-10)
4	Incubator SANYO MIR-2B2	2,520	2	5,040	Mar. 2007	BB, Ng Chum	JICA E016(1-2)
5	Microscopy Olympus CX31	1,839	20	37,780	Mar. 2007	CEVAT / Provinces	JICA E017(1-20)
total							

Total				97,407	
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Equipments for JFY 2007

No	Item of equipments	unit	QTY	Amount	Delivery time	Place of installation	Stock Control No.
1	Desktop PC		1,398	10	13,980.00	Jan 2008	JICA E018(1-10)
2	Lip Toe PC		2,809	2	5,618.00	Jan 2008	JICA E19(1-2)
3	High Temperature oven SANYO MOV 112F		2,946	1	2,946.00	Feb. 2008	JICA E20
4				0.00			
5				0.00			
6							
Total				22,524			

Equipments for JFY 2008 #We apply to MoH

Equipments for JFY 2008 #We apply to MoH

No	Item of equipments	unit	QTY	Amount	Delivery time	Place of installation	Stock Control No.
1	Desktop PC		1,031	10	10,310.00	October 2008	JICA E21(1-10)
2	LCD Projector		9,995	1	9,995.00	December 2008	JICA E22
3	Microscopy Olympus CX21		1,265	30	38,550.00	not yet	金剛山中醫藥科
4	Coagulator		15,953	1	15,953.00	not yet	金剛山中醫藥科
5	Autoclave		8,128	1	8,128.00	not yet	金剛山中醫藥科
6							
Total				82,396			
	US\$			516,298			

Annex 6: Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009)

Dr Mao Tan Eang, CENAT Director Dr. Tatsuo Sugiyama, Chief Advisor	OBJECTIVELY VERIFIABLE INDICATORS (OVI)	MEANS OF VERIFICATION	Achievement	Project progress	Reasons of non achievement/ Commitment
(project Purpose) Sustainable quality TB Programme is implemented nationwide.	<p>1.Throughout the Project, cure rate among newly registered smear (+) TB patients is maintained at least 83%.</p> <p>2.By the end of the Project, smear (+) detection rate is increased and maintained at least 70%.</p> <p>3.By the end of the Project, number of smear (+) registered cases is increased twice as many from the level in 2003.</p> <p>4.By the end of the Project, number of registered TB cases in children is increased twice as many from the level in 2003.</p>	<p>NTP Report (dito)</p> <p>Trend of cure rate: 90%(03), 90%(04), 89%(05), 90%(06)</p> <p>Trend of detection rate: 65%(03), 64%(04). Target was achieved in 2005. 70%(05), 66%(06), 65%(07)</p> <p>Trend of case number: 4307 (03), 5800 (04), 7058 (05), 6875 (06), 7120 (07, 65% increase from 2003)</p> <p>Trend of cases: 624(03), 695 (05), 1081 (06), 1472 (07)(125% increase from 2003)</p>	<p>Trend of cure rate: 90%(03), 90%(04). Target was achieved.</p> <p>Training on X-ray technique and diagnosis were given. The target (8614 cases) double of the number in 2003 has not been achieved yet.</p> <p>The target (1268 cases, double of the number in 2003) has been achieved in 2007.</p>	<p>Throughout the project period, target was achieved.</p> <p>Increase of smear negative TB could be obtained through the improvement of X-ray technique and diagnosis capacity. But accessibility to X-ray examination is limited since X-ray is only available at around 70 facilities in the country.</p> <p>The data of total child TB would be summed up from 2005, which enhanced electric database at CENAT. The baseline data of total child TB 2003 was recalculated by using registration by the Project.</p>	
(output 1) Management capacity of the NTP is improved.	<p>1.By the end of the Project, all the NTP staff at central and provincial levels has ability to formulate plans based on objective assessment.</p> <p>2.By 2007 "Annual Statistics of Tuberculosis in Cambodia" is published without delay.</p> <p>3.Throughout the Project, the database is updated timely and appropriately.</p> <p>4.By the end of the Project, NTP activities are analyzed and evaluated using computers in selected areas.</p> <p>5.By the end of 2005, the CENAT staff correctly qualify the yearly TB drug needs and request them to the MoH with the specification for the</p>	<p>1. Reports by Project Experts and CENAT Supervisors</p> <p>2. Annual Statistics of Tuberculosis in Cambodia</p> <p>3. Update report</p> <p>4. Reports by Project Experts and CENAT Supervisors</p> <p>5. CENAT reports/CMS data Calculation and order have been done every year at CENAT</p>	<p>Annual NTP/CENAT plan is made at planning conferences in every Sep-Dec.</p> <p>Annual TB Statistics 2004-07 were completed.</p> <p>Data updated regularly at CENAT is used for CENAT has been done by using PC software regularly.</p> <p>System was changed in order to adapt to the national report.</p> <p>Revision of Pilot PC system was completed.</p>	<p>Publication of the books 2004-2007 has been done.</p> <p>The summary statistical data has been put on the Annual National TB Report since 2006.</p> <p>Data input should be done regularly in every area. i.e. human resource/time allocation are necessary</p>	<p>The summary statistical data has been put on the Annual National TB Report since 2006.</p> <p>Technical support for needs assessment has been given by the expert</p>

	6.CENAT reports CMS data TB medicine procured by using Global Fund is GDF standard. Some drugs procured by government were not in the list of the GDFs qualified.	Procurement was done by counterpart.
	7.By the end of 2006, the quantity of TB drugs requested quarterly from all the DDCs is consistent with actual TB incidence and existing stocks.	Procurement was done by counterpart.
	8.By the end of the Project, NTF has technical capacity to conduct and analyze survey/research with less assistance of experts.	TB/HIV prevalence survey (05, 07) and National Drug Resistance Survey (06) were carried out.
	9.Achievements of the Project or Surveys are presented at (international) conference every year.	Achievements have been presented in the international conferences every year.
(output2)	1.By the end of 2005, number of HCs providing DOTS services is increased from 706 in 2003 to all the MPA HCs. 2.By the end of the Project, at least 95% of TB patients receive correct TB drugs in correct dosage in all the selected target areas (currently 3.(ditto)) 3.By the end of the Project, 90% of TB patients in the continuation phase is observed by someone while swallowing TB drugs in all the selected target areas (currently 40%). 4.By the end of the Project, stock records for TB drugs correspond exactly with physical counts in 50% of the government drug stores in all the selected target areas (currently 10%). 5.By mid 2007, guidelines for 6MSCC are developed.	DOTS was expanded to all HCs (~900) by 2005. Patients received correct dosage: 93% (Jan07), 94% (Jan08) C-DOTS study from registration: 97% (07). 99% (08). Drug management study by interview: 92% (Jan08) Trend of data: 12% (05), 24% (06), 58% (08).
	6.By the end of 2005, 6MSCC is implemented in all existing referral hospitals and health centres.	Guidelines of 4PDC treatment for 6MSCC were published in 2008.
	7.By the end of 2007, guideline for PPM-DOTS is formulated.	Three pilot areas had introduced 6MSCC in 2004 prior to the expansion by the end of 2005. Final draft of PPM guideline was produced in 2008.
	8.By the end of the Project, PPM services are implemented in selected areas.	The Project joined the production/revision processes. PPM services including supervision were introduced in Phnom Penh (OD) in 2005.

	9.By the end of the Project, community DOTS is implemented in more than 665 HCs among 950 HCs.	9.(d) (a)	Trend of HCs with C-DOTS support: 29 (03), 164 (04), 255 (05), 381 (06), 497 (07), 502 (08).	Trend of C-DOTS in pilot areas is handed over to MoH Da in 2008/09. More HCs will receive C-DOTS support by using the Global Fund support in 2009.
(output 3) Suitable services and guidelines beyond routine DOTS are developed.	1.By mid of 2007, a guideline for TB/HIV services is formulated. 2.By the end of the Project TB/HIV services are available at selected CDs. 3.By the end of 2007, a guideline (national) TB manual in 2003 for pediatric TB is revised. 4.By the end of the Project, pediatric TB services are available at all Provincial RIs. 4.Guideline (draft) for smear(-) is developed.	CENAT Report (d) (b)	Final drafts of operational & clinical guideline were completed. Training for TB/HIV services was carried out in 67 CDs. Child TB guideline was published in 2008. Guidance of child TB was given to all TB supervisors nationwide (07). Specific training for child TB was held in 2 provinces. Smear negative TB guideline is not produced.	The Project contributed to production of both guidelines. Project supports follow-up meeting in 8 ODs. Production process and contents were supported by the expert. PPD training for nursing staff at CENAT and pilot area was provided. X-ray Diagnosis Technique "checkbook" for smear (-) TB diagnosis was constructed in 2007.
(output 4) Quality of laboratory services to support DOTS, TB/HIV activities and surveys	1.By the end of 2007, a guideline for TQM of bacteriological examination for TB is formulated. 2.By the end of 2005, CD4 testing service is available in CENAT. 3.Throughout the Project, it does not face shortage of reagents and materials of all TB laboratories. 4.Trainings for smear examination are conducted strategically based on QA results. 5.QC circle activities are set up at selected provinces.	CENAT Report (d) (b)	Pilot TQM guideline only for project area was formulated in 2007. CD4 test can be carried out at CENAT. Censal evaluation report	Guideline for pilot use has finalized and utilize for the project activities. Referral system is established between NCHADS when the test is carried out by using defined machines. So, CENAT is now sending samples to the diagnostic laboratory such as NPHI.
		CENAT Report (d) (b)	Potential shortages at central level (CMS) occurred in 2007. Trainings of smear test are carried out several times every year. The activity was set up and maintained in 2 CDs	Procurement of lab material was not sufficient in 2006/07. In order to fill the shortage the Project and partners supported. The Project supported reagents production and released the stocks at CENAT. Smear preparation trainings were also done at poor performance provinces. Training and regular meetings were supported.

6.Throughout the Project, evaluation indicators (ex: Agrement rates >95%, etc.) for bacteriological examination are maintained the same.	Annual Statistics of TB in Cambodia	62.1% of MCa shows acceptable performance (no error) in 2007
7.By the end of the Project, smear (+) rate among suspects is decreased to expected rate (10%-15%).	Create evaluation report	13% positivity in smear examination in 2007 (10-15%)
8.Trainings for assessors and cross-checkers are conducted once a year.	Trainings including the refresher's were done (to expand quarterly EQA, 11 provinces)	Smear positive rate is reduced to expected rate.
9.By the end of the Project, EQA system for Drug Susceptibility Test (DST) between supranational reference laboratory and CENAT Laboratory is developed.	EQA system for DST (panel test) was set up with RIT in 2005.	Expansion of quarterly EQA is planned by NTP and training methods/materials follow the methodology introduced by the Project.
(output 5) Effective IEC/advocacy activities to support TB control program are implemented.	<p>1.CENAT Report</p> <p>2.By 2007, NTP has an IEC/advocacy strategy to support TB control program.</p> <p>2.By the end of the Project, NTP implements the IEC/advocacy strategy with partner organizations.</p> <p>3.By the end of the Project, 70% of DOTS HC is supported by HCSG and VHSC through IEC advocacy activities.</p>	<p>Draft of ACSM strategy was produced in 2008.</p> <p>Revision meeting for ACSM strategy has been held.</p> <p>IEC meeting for factory workers has been held with .</p> <p>502 HCx with C-DOTS, to be increased, IEC materials, provided to all VHSCs regularly.</p> <p>More HCx will receive C-DOTS support by using the Global Fund support in 2009 and start ACSM activities.</p>

Annex 7: Evaluation Grid: Terminal Evaluation of the CENAT/JICA National Tuberculosis Control Project Phase II

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Verification of the results	Inputs (human, physical, financial) were provided as planned? Outputs are realized as planned?	Inputs from Japanese side Inputs from Cambodian side Indicators of Outputs are achieved? "Quality" of Outputs achieved are satisfactory levels? How much does the project attribute to the achievements of Outputs	<ul style="list-style-type: none"> • Inputs list. • Inputs list. • Achievements of indicators of Outputs <ul style="list-style-type: none"> • Opinions of parties concerned • Opinions of parties concerned • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Project documents, Project Progress Reports, other related documents • Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) <ul style="list-style-type: none"> • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop <ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop <ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Project Purpose is realized as planned?	Indicators of Project Purposes are achieved?	Indicators of Overall Goals are expected to be realized?	<ul style="list-style-type: none"> • Achievements of indicators of Project Purpose • Opinions of parties concerned 	<ul style="list-style-type: none"> • Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) <ul style="list-style-type: none"> • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Overall Goal is expected to be realized as planned?	Activities were implemented as planned?	Were there any obstacles in the progress of activities? If any, what were the causes?	<ul style="list-style-type: none"> • Achievements of Overall Goal • Opinions of parties concerned 	<ul style="list-style-type: none"> • Documents of MOH, WHO, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Verification of the process			<ul style="list-style-type: none"> • Progress of activities compared with the plan 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Technology transfer was adequately realized?	Were there any obstacles in the process of technology transfer? If any, what were the causes and what are the solutions overcoming those obstacles?	<ul style="list-style-type: none"> • Progress of technology transfer, technology requirements of Cambodian project members • Opinions of parties concerned • Opinions of other donors 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Project management was properly performed?	Monitoring of the project achievements and progress was implanted in the project management?	<ul style="list-style-type: none"> • Ways of monitoring and frequency 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Internal communication of the project has been smoothly realized?	Communication channels and system	<ul style="list-style-type: none"> • Problem solving • Opinions of parties concerned 	<ul style="list-style-type: none"> • M/M of regular meetings • Monitoring System • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Communication and collaboration with JICA HQs and JICA Cambodia office was adequate?	Communication and collaboration with Cambodian organization concerned was adequate?	<ul style="list-style-type: none"> • Communication and collaboration 	<ul style="list-style-type: none"> • M/M of regular meetings • Monitoring System • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
Verification of the process (cont'd)	MOH has a high ownership on the project?	<ul style="list-style-type: none"> • Budget for the project • Communication and collaboration • Opinions of parties concerned • Opinions of other donors 	<ul style="list-style-type: none"> • Budgetary inputs from the MOH • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Pertinent counterparts are assigned?	The number, capacity and status of counterparts are adequate to the project?	• Counter part list • Opinions of parties concerned	• Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop	
Cambodian organizations and parties concerned highly recognize and participate in the project?	MOH, CENAT and other related organizations and parties highly recognize and participate in the project?	• Opinions of parties concerned	• Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	
What were the hindering and promoting factors affected the progress of the project?	What were the hindering and promoting factors affected the progress of the project?	• Project progress records • Opinions of parties concerned	• Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop	
Communication and collaboration with other projects and programs were appropriate?	Communication and collaboration with projects and programs related to the NTP were appropriate?	• Communication and collaboration • Project progress records • Opinions of parties concerned	• Project documents, Project Progress Reports, other related documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	
Relevance	Development effects targeted by the project are aligned with the Cambodian national policies?	What are targeted by the TB control strategies in the nation health policies and strategies?	• National health policies and strategies • CMDGs • National Health Policies and Strategies for TB Control 2006 - 2010 • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview	
	Development effects targeted by the project are aligned with the Japanese international cooperation policies?	What are targeted by JICA's country-specific aid implementation policy for Cambodia?	• Percentage of TB control budget in the overall national health budget • Japan's aid implementation policy for TB control in Cambodia • Budget Paper of MOH • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview	
	Development effects	Necessity of TB control	• Incidence, prevalence,	• National Health Policies and Strategies for TB Control	* Literature Survey

Evaluation Criteria	Evaluation Questions	Data Required	Data Sources	Data Collection Methods
targeted by the project, meet the needs of the target group?	Secondary Questions for Cambodian people is high?	mortality rate of TB and other TB related data • Opinions of parties concerned	2006 - 2010 • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Interview
Approach adopted by the project is relevant for achieving the Project Purpose and the Overall Goal?	Approach such as DOTS and Beyond DOTS combination was relevant for achieving the Project Purpose and the Overall Goal. ¹⁹	• Opinions of parties concerned	• National Health Policies and Strategies for TB Control 2006 - 2010 • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview
Japan has a predominant TB control technology and experiences?	Japan's TB control experiences are properly employed in the project? Experiences of the Phase I are effectively employed in the project?	• Opinions of parties concerned • Experiences in the Phase I	• Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Final Evaluation Report of NTCP Phase I • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Interview • Literature Survey • Interview
Cooperation and with other Japan's project such as loan, grant and technical cooperation projects?	• Cooperation and their results and effects • Opinions of parties concerned	• Staff of JICA • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Interview	• Interview
Indicators of Project Purpose are achieved?	• Achievements of indicators of Project Purpose • Opinions of parties concerned	• Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop
Effectiveness	Project Purpose is achieved by the attribution of the Outputs?	Achievements of indicators of Project Purpose were realized by the achievements of Outputs? • Opinions of parties concerned	• Achievements of indicators of Project Purpose • Achievements of indicators of Outputs • Opinions of parties concerned	• Literature Survey • Interview • Evaluation Workshop

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
	What are the factors hindered and/or promoted the achievement of the Project Purpose?	Cause and effect relationships between Outputs and Project Purpose are logical and relevant?	<ul style="list-style-type: none"> • PDM • Opinions of parties concerned 	<ul style="list-style-type: none"> • Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop
	Important Assumptions and/or other external factors affected negatively or positively the project?	Personnel changes and/or job leaves affected the project activities?	<ul style="list-style-type: none"> • Separation rate, separation reasons, number of the counterparts • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview
Efficiency	Quality, quantity and timing of the Inputs were appropriate for achieving Outputs?	Donor coordination and harmonization relating to the NTP is adequate?	<ul style="list-style-type: none"> • Opinions of parties concerned 	<ul style="list-style-type: none"> • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Interview • Evaluation Workshop
	The number, specifications, timing and quality of equipment granted were relevant and appropriate?	The number, capacity, timing and duration of dispatch of Japanese experts were relevant and appropriate?	<ul style="list-style-type: none"> • List of experts • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview
			<ul style="list-style-type: none"> • Equipment list • Status of usage • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
	The number of participants, contents, duration and timing of trainings in Japan were relevant and appropriate?	* Participants list * Opinions of parties concerned	* Project documents * Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	* Literature Survey * Interview	
	The number, capacity and assignment timing of the counterparts were relevant and appropriate?	* Counterparts list * Opinions of parties concerned	* Project documents * Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	* Literature Survey * Interview	
	Buildings and facilities provided by the Cambodian side were relevant and appropriate?	* List of buildings and facilities provided * Opinions of parties concerned	* Project documents * Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. ¹²	* Literature Survey * Observation * Interview	
	Project cost is appropriate compared with projects alike?	* Project cost * Opinions of parties concerned	* Project documents * Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	* Literature Survey * Interview	
	How the collaboration with other projects and programs and with other donors affected the efficiency of the project?	* Opinions of parties concerned	* Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. * Staff of other donors and supporters such as WHO, US-CDC and NGOs	* Interview * Evaluation Workshop	
	What are the hindering and/or promoting factors affected efficiency of the project?	* What are the issues for further better collaboration with them? ⁹	* Opinions of parties concerned	* Interview * Evaluation Workshop	
	How the decentralization affected the efficiency of the project? * What are the issues for further better collaboration with them? * What countermeasures would be effective?	* How the decentralization affected the efficiency of the project? * What are the issues for further better collaboration with them? * What countermeasures would be effective?	* Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. * Staff of other donors and supporters such as WHO, US-CDC and NGOs	* Interview * Evaluation Workshop	
	Project management such as regular meeting	* Opinions of parties concerned	* Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	* Interview * Evaluation Workshop	

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Impact	Overall Goal is expected to be realized as planned?				
	Indicators of Overall Goals are expected to be realized?	Achievements of indicators of Overall Goal • Opinions of parties concerned	• Documents of MOH, WHO, etc. • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	
	What negative factors could be expected hindering the realization of the Overall Goal?	• Impact of HIV/AIDS in cure rate • Prevalence of HIV/AIDS infection • Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Interview • Evaluation Workshop	
	Achievements of Overall Goal were realized by the achievements of the Project Purpose?	Cause and effect relationships between Overall Goal and Project Purpose are logical and relevant? How PPM-DOTS influenced the public and private sectors?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Interview • Evaluation Workshop
	Are there any other impacts and influences of the project?	How community DOTS influenced communities?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop
	How TB/HIV control activities influenced the national HIV/AIDS program?	How the collaboration with NGOs influenced NGOs?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop
			• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop
				• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	
				• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	
				• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods
	Primary Questions	Secondary Questions			
Sustainability	The government will support NTP to retain its activities, outputs and outcomes?	Are there any other positive/negative impacts?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop
CENAT	CENAT is capable of continuing implementation of the NTP effectively and efficiently?	The national health policies will continue to support the NTP to retain its activities, outputs and outcomes?	• National health policies • Opinions of parties concerned	• National Health Policies and Strategies for TB Control 2006 - 2010 • Staff of MOH	• Literature Survey • Interview • Evaluation Workshop
		Management capacities of CENAT, laboratories and other organizations concerned are high enough to retain its activities, outputs and outcomes?	• Manpower supply • Management capacities of CENAT, laboratories and other organizations • Opinions of parties concerned	• Project Progress Reports • Assignment of the staff • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop
		CENAT laboratories and other organizations concerned are capable of preserving and disseminating the necessary technologies?	• Technical capacities of CENAT, laboratories and other organizations • Opinions of parties concerned	• Project Progress Reports • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop
		Budget for the NTP including recurrent budget will be adequately prepared?	• Budget of MOH • Opinions of parties concerned	• Budget Paper of MOH • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop
		Cambodian counterparts are capable enough to retain its activities, outputs and outcomes?	• Opinions of parties concerned	• Project Progress Reports • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop
		Maintenance and operation of granted equipment will be properly carried out in future?	• Opinions of parties concerned	• Project Progress Reports • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop

Annex 8: Interviewees List

Ministry of Health (MOH)

H.E Prof. Eng Huot Secretary of State for Health, Ministry of Health

National Center for Tuberculosis and Leprosy Control (CENAT), MOH

Dr. Mao Tan Eang Director, CENAT

Dr. Team Bak Khim Vice Director, CENAT

Dr. Tieng Sivanna Vice Chief of Technical Bureau, CENAT

Dr. Khun Kim Eam Chief of Statistics, Planning & IEC Sect., CENAT

Dr. Pheng Sok Heng Chief of National Tuberculosis Reference Laboratory, CENAT

Bttambang Provincial Health Department (PHD), CENAT, MOH

Dr. Thont Charan Vice-director, Bttambang PHD, CENAT

Dr. Tan Vutha TB Medical Supervisor, Bttambang PHD, CENAT

Mr. Huot Uong TB Lab Supervisor, Bttambang PHD, CENAT

Tomakol OD, CENAT, MOH

Dr. Sain Khim Han Chief, Tomakol OD, CENAT

Mr. Seng Sam Ang TB supervisor, Tomakol OD, CENAT

Bovel OD, CENAT, MOH

Ms. Sain Sovat TB supervisor, Bovel OD, CENAT

US-CDC (United States Centers for Disease Control and Prevention)

Dr. Jim McLaughlin Diplomat, American Board of Medical Microbiology,
Microbiology Laboratory Advisor, National Laboratory of Public
Health, US-CDC

Cambodian Anti-Tuberculosis Association (CATA)

Dr. Mom Ky Assistant Executive Director, CATA

Japanese Experts

Dr. Tatsuo Sugiyama Short Term Expert, CENAT/JICA National Tuberculosis Control
Project Phase 2

Dr. Hiroyuki Nishiyama Short Term Expert, CENAT/JICA National Tuberculosis Control
Project Phase 2

Ms. Kiyomi Yamamoto Short Term Expert, CENAT/JICA National Tuberculosis Control
Project Phase 2

Annex 9: Evaluation Workshop Agenda

AGENDA
for the Evaluation Workshop
on the National Tuberculosis Control Project Phase II

The National Tuberculosis Control Project Phase II (NTCPII), which has been undertaken by the National Center for Tuberculosis and Leprosy Control (CENAT) in collaboration with the Japan International Cooperation Agency (JICA) with a view to improving the sustainability and quality of Cambodian TB Program nationwide, is now approaching to the termination of its cooperation period. Making use of this opportunity, in order for all of the stakeholders to contribute themselves to review the progress of activities and evaluate the outputs and outcomes of the project, and consequently withdraw recommendations and lessons learned for further betterment of the TB Program in future, the evaluation workshop will take place with venue and agenda as stated below.

Date & Time: 1. January 8 (Thu) 8:30 a.m. – 4:30 p.m.
 2. January 9 (Fri) 8:30 a.m. – 12:00 a.m.

Venue: Class Room (2F), CENAT

Participants: Officers of CENAT and other organizations involved in activities and administration of NTCPII
 Japanese experts and JICA staff involved in activities and administration of NTCPII

Facilitator: Mr. Oseko, a member of the JICA Terminal Evaluation Team

Main themes to be discussed:

- Review of the achievement (Overall Goal, Project Purpose, Outputs) of the project
- Finding of hindering and contributing factors for the project activities
- Finding measures to be taken for further improvements of TB Programme
- Overall evaluation of the project with DAC five evaluation criteria

Agenda:

Day	Time	Proceedings	Person in Charge
Day 1 Jan. 8 (Thu)	8:00 a.m.	Start of registration	CENAT
	8:30 a.m.	Opening of the workshop	CENAT
	8:40 a.m.	Introduction of participants	Facilitator
	8:50 a.m.	What is the terminal evaluation?	Facilitator
	9:00 a.m.	Review of the achievement of the project (1.5h)	CENAT
	10:30 a.m.	Break (15m)	
	10:45 a.m.	Finding of hindering and contributing factors for the project activities (1.5h)	Facilitator
	12:00 a.m.	Lunch (12:00 a.m. – 2:00 p.m.)	
	2:00 p.m.	Finding measures to be taken for further improvements of TB Programme (1.5h)	Facilitator
	3:30 p.m.	Break (15m)	
Day 2 Jan. 9 (Fri)	3:45 p.m.	Presentation of the Results of the Group Work (1h)	Facilitator
	4:30 p.m.	Day 1 close	
Day 2 Jan. 9 (Fri)	8:30 a.m.	Overall evaluation of the project with DAC five evaluation criteria (1.5h)	Facilitator
	10:00 a.m.	Break (15m)	
	10:45 a.m.	Overall evaluation of the project with DAC five evaluation criteria (1.0h)	Facilitator
	11:30 a.m.	Review of the workshop	Facilitator
	12:00 a.m.	Closing of the workshop	CENAT

Annex 10: Evaluation Workshop Participants List

**Participant List of the Workshop for the Final Evaluation of
CENAT/JICA National Tuberculosis Control Project Phase II**

Date: January 8th -9th, 2009 (full day meeting)

Venue: CENAT, Phnom Penh

Name	Position, Designation	Remark
Output (1) –management capacity of the NTP		
1 Dr. Keo Sokonth	Chief of Technical Bureau	
2 Dr. Tieng Sivanna	Vice chief of Technical Bureau	
3 Dr. Tan Kun Dara	Vice chief of Training Sup. & Research Unit	
4 Dr. Chay Sokun	Technical Bureau Officer	
5 Dr. Kou Sum Mardy	Technical Bureau Officer	
6 Dr. Chea Manith	Technical Bureau Officer	
7 Dr. Saint Saly	RIT/JATA	Moderator
Output (2)- Sustainable quality DOTS-Community DOTS/PPM-DOTS		Output (5)- IEC/ Advocacy
1 Dr. Team Bak Khim	Deputy director of CENAT	
2 Dr. Khloeung Phally	Vice chief of Training Sup. & Research Unit	absent 8th
3 Dr. In Sokhanya	Vice chief of Training Sup. & Research Unit	
4 Dr. Kien Soriya	Technical Bureau Officer	
5 Ms. Saint Sovat	TB Supervisor (Bovel), Thmorkol OD, BTB	
6 Mr. Sok Serey Vuthy	Provincial TB Supervisor, Sihanouk Ville	
7 Mr. Men Chansothy	TB Supervisor, OD Kg Tralach	
8 Dr. Mom Ky	Assistant director of CATA	
9 Dr. Leng Chheng Lay	CENAT/JICA Officer	Moderator
Output (3) –Beyond routine DOTS-TB/HIV		
1 Dr. Khun Kim Eam	Chief of statistics, Planning and IEC unit	
2 Dr. Prum Chhom Sayouen	Chief of Hospital Unit	
3 Dr. Yos Bun Heng	Chief of Dispensary Unit	
4 Dr. Nou Chanly	Technical Bureau Officer	
5 Dr. Mao Nisay	Vice chief of Dispensary Unit	
6 Dr. Chhum Chheng Kong	Chief of TB unit, Russey Keo, North OD PP	
7 Mr. Seak Kunrath	TBCAP/JATA	Moderator
Output (4) – quality of laboratory service		
1 Dr. Pheng Sok Heng	Chief of TB Laboratory Unit	
2 Mr. Yang Samol	Chief of Culture Section,	
3 Phar. Huot Uong	Provincial Lab. TB Supervisor, Battambang	
4 Mr. Chey Vichet Mony	Provincial Lab. TB Supervisor, Kg. Cham	
5 Ms. An Sokheng	EQA section	
6 Mr. Boy Sambo	WHO/TB-lab	
7 Mr. Veasna	JICA Cambodia office	Moderator

Resource Person: Dr. Mao Tan Eang, Director of CENAT
Dr. Tatsuo Sugiyama, Chief Advisor
Dr. Hiroyuki Nishiyama
Mr. Yuta Uchiyama
Ms. Kiyomi Yamamoto, Project coordinator
Ms. Shoko SATO, Project Formulation Advisor, JICA Cambodia Officer

Annex 11: Evaluation Workshop Outputs

Final Evaluation Sheet for National Tuberculosis Control Project Phase II (2004-2009)

Narrative Summary	Objectively Verifiable Indicators	Achievement	Achievement Rate				Hindering Factors	Promoting Factors	Measures to be taken for Further Improvement	Sustainability
			1	2	3	4				
<Project Purpose> Sustainable quality TB Programme is implemented nationwide.	1 Throughout the Project, cure rate among newly registered smear (+) TB patients is maintained at least 85%.	Trend of cure rate: 89% (03), 90% (04), 89% (05), 90% (06)	X				-High HIV epidemic -Poor staff behaviour -Poor TB patient awareness about TB -Definition geographical area -MDR-TB -Recording and Reporting	-Accessibility of TB patient to health facility -Regular DOTS implementation -High Quality TB drives available -Awareness raising in Community -Encouragement by local government -Monitoring and Supervision are strengthened -Free of charge policy for TB -Secure budget as plan	-Motivation (incentive, study tour, ws, training, conference) -Technical support -Upgrading skill and strategy -Budget mobilization based on plan -Training for staff (HR development and strategy plan) -Supervision and monitoring from central and provincial level to TB unit -Data management (surveillance, analysis and improving) -Secure budget as plan	
	2 By the end of the Project, smear (+) detection rate is increased and maintained at least 70%	Trend of detection rate: 65% (03), 64% (04), 70% (05), 66% (06), 65% (07)	X				-Over estimation of TB incidence -Over estimation of population -Poor identification of TB suspect at DPD -FN rate 1.5% (07)	-DOTS service available at all HCs -TB detection is free of charge -Commitment of TB staff -NGO and private sectors' involvement	-Reconsider TB incidence estimate -Refreshes training of Staff -Strengthen TB lab staff -Supervision -Improve lab-quality -Continue supply of laboratory or materials	
	3 By the end of the Project, number of smear (+) registered cases is increased twice as many from the level in 2003	Trend of case number: 9307 (03), 5800 (04), 7053 (05), 6875 (06), 7120 (07, 6.5% increase from 2003)	X				-X-ray technician and reading -Knowledge of HC staff -Capacity of staff to diagnose -Lack communication between X-ray and TB service in RH compound -Low communication with BK(-) patient -HC far from RH	-Referral mechanism of RH and HC Training in CENAT -Provide communication fee -Improving quality of X-ray -Increasing of TB/HIV	-Expanding the diagnosis of Smear (-) -Supply X-ray machine -Support transportation fee to poor patients	
	4 By the end of the Project, number of registered TB cases in children is increased twice as many from the level in 2003	Trend of cases: 634 (03), 696 (05), 1031 (06), 1422 (07) (12.3% increase from 2003)	X				-Diagnosis and treatment have only in provincial RIs -Capacity of diagnosis of TB in children is limited -Diagnostic materials is limited	-Recording system of TB child is in place	-Expand diagnosis and treatment services to OPRH -Strengthen RIs of TB child -Quality of diagnosis and treatment service for child TB -Supply enough diagnostic materials -Regular supervision and monitoring	

Narrative Summary	Objectively Verifiable Indicators	Achievement	Achievement Rate 1 2 3 4	Hindering Factors		Promoting Factors	Measures to be taken for Further Improvement		Sustainability
<Output 1> Management capacity of the NTP is improved.	I-1. By the end of the Project, all the NTP staff at central and provincial levels has ability to formulate plans based on objective assessment.	Annual NTP/CENAT plan is made at planning conferences in every Sep/Dec. Planning conference from 2006-2007 for provincial level. Quality of plans is satisfactory high	X	-Short duration of WS (1.5days) -Number of Participants is limited (NGO not enough)	-All stockholders participated -Good support during WS (JICA) (funding participating)	-Prolong the duration of WS (3days)	-Capacity: OK -Fund: ? -HR: ?	-Capacity: OK -Fund: ? -HR: ?	
I-2. By 2007 "Annual Statistics of Tuberculosis in Cambodia" is published without delay.	Annual TB Statistics 2004-07 were completed. (Published)		X			-Standardized form/Routine work -Good collaboration CENAT/JICA (Technical and Financial Assistant)	-Maintain -Use the standardized format -Make this publication routine responsibility of NTP-HR.		
I-3. Throughout the Project, the database is updated timely and appropriately.	Data updated regularly at CENAT is used for the TB statistics. PPM, TB in prison, TB in factory, MDR, C-DOTS, TB/HIV (2005), TB-Lab (format/data) not updated		X	-High commitment all levels -Quarterly WS		-High commitment all levels -Quarterly WS		Rate 4	
I-4. By the end of the Project, NTP activities are analyzed and evaluated using computers in selected areas.	Revision of Pilot PC System was completed All selected area can analyze evaluate with PC (10Ds)		X	-PC maintainant (virus)	-Only 7 ODs good support	-Training -Using GF/D or patient kit	Rate 2 -IT Staff -Collaboration of JICA from now -More involvement of CENAT staff		
I-5. By the end of 2005, the CENAT staff correctly qualify the yearly TB drug needs and request them to the MOH with the specification for the products.	Calculation and order have been done every year at CENAT.		X		-Technical Assistant from JICA -Good formulation for calculation	-Maintain -Monitor the stock -Estimate number of patients based on the previous year's statistics -Include buffer stock	Rate 4		
I-6. By the end of 2007, all the TB drugs procured through the national supply system are of high quality, preferably of GDF standard	TB medicine procured by using Global Fund is GDF standard		X		-GF support	-Secure budget for further support (Gov?, GF or other?) -Visit big private pharmacies	Rate 4		
I-7. By the end of 2006, the quantity of TB drugs requested quarterly from all the ODs is consistent with actual TB incidence and existing stocks.	65% of all ODs are acceptable level of accurate in drug request		X	-Lack of collaboration between TB supervision and storekeeper	-TBDM survey and annual WS (raise awareness, share the actual situation, share good practice)	-Training -Using GF/D or patient kit	Rate 4		

Narrative Summary	Objectively Verifiable Indicators	Achievement	Achievement Rate				Hindering Factors	Promoting Factors	Measures to be taken for Further Improvement	Sustainability
			1	2	3	4				
1-8. By the end of the Project, NTP has technical capacity to conduct and analyze survey/research with less assistance of experts	TB/HIV prevalence survey (05, 07) and National Drug Resistance Survey (06) were carried out TB prevalence and XA/H survey	X					-TB Epidemiology course -Master/TB course in international and country	-Maintain and request -Research and prevalence survey	-Capacity OK -Fund	
1-9. Achievements of the Project are presented at international conferences every year	Achievements have been presented in the international conferences every year	X					-Good support from donor	-Maintain	-Capacity OK -Fund	
<Output 2> Sustainable quality DOTS is expanded nationwide.	2-1. By the end of 2005, number of HC's providing DOTS services is increased from 706 in 2003 to all the countries 2-2. By the end of the Project, at least 95% of TB patients receive correct drugs in correct dosage in all the selected target areas (currently 90%)	DOTS was expanded to all HC's (>200) by 2005. Patients received correct dosage: 93% (Jan07), 95% (Jan08)	X				-Budgeting support -Enough resources -Strong commitment	-Monitoring/Supervision		
	2-3. By the end of the Project, 90% of TB patients in the continuation phase is observed by someone while swallowing TB drugs in all the selected target areas (currently 40%)	C-DOTS study (from registration: 97% (07), 99% (08). Drug management study by interview: 96% (Jan08))	X				-Commitment from community -Training VHSGs -Incentive -IE to patient -Training in HC staff (JAT)	-Monitoring & Evaluation		
	2-4. By the end of the Project, stock records for TB drugs correspond exactly with physical counts in 50% of the government drug stores in all the selected target areas (currently 10%)	Trend of data: 1.2% (05)/ 2.4% (06) 5.2% (08)	X				-Blister batch -Drug management survey and workshop -COT training to store keeper	-Monitoring & Evaluation -Refresher training -DHD supervision and ATC		
	2-5. By mid 2007, guidelines for GMSCC are developed	Treatment booklet of 4PDC published Guideline for GMSCC were developed in 2005	X				-WHO/ICAN support	-Budget is needed for publishing		
	2-6. By the end of 2005, GMSCC is implemented in all existing referral hospitals and health centers	GMSCC had been introduced nationwide by the end of 2005	X				-Strong support from partners	-Refresher training in new HC		
	2-7. By the end of 2007, guideline for PPM-DOTS is formulated	Final draft of PPM Guideline was produced in 2008	X				-Show TWC -ACSM (ISTC)			
	2-8. By the end of the Project, PPM services are implemented in selected areas	PPM services have been introduced in 38 ODS by the end of 2008.	X				-Strong support from partners -Commitment from private and public	-PPM workshop and supervision		

Narrative Summary	Objectively Verifiable Indicators	Achievement Rate	Hindering Factors	Promoting Factors	Measures to be taken for Further Improvement	
					1	2
2.9. By the end of the Project, community DOTS is implemented in more than 665 HC's among 950 HC's	Trend of HC's with C-DOTS support: 29 (63), 164 (64), 255 (65), 381 (66), 497 (67), 502 (68)	X	-Lack of financial resources	-ACSM		
<Output 3> Suitable services and guidelines beyond routine DOTS are developed.	3-1. By mid of 2007, a guideline for TB/HIV services is formulated. 3-2. By the end of the Project TB/HIV services are available at selected ODS CMC		-Final drafts of operational & TB/HIV clinical guideline were completed.	-Lack approval from director	-Commitment from CENAT -Commitment from partners' partners -Good collaboration of different partners -Clear direction	-Need to follow up with director to speed up the process of approval
3-3. By the end of 2007, a guideline (national TB manual in 2003) for pediatric TB is revised.	Training for TB/HIV services was carried out in 67 ODS - TB/HIV services available in 67 ODS	X	-Recording and reporting is not perfect -Not all TB patients get referred to AIDS testing and PXTA to TB screening -Not all confirmed TB/HIV patients treated by ARV	-Importance of TB/HIV collaboration -Lessons learned from pilot sites -Fund available -Partners collaboration	-There is a need of refresher training -Supervision -Expansion of VCTT service -Funding support for referral -Strengthening the collaboration with NAP	Rac 3 -Capacity is OK -Fund depends -donors
3-4. By the end of the Project, pediatric TB services are available at all Provincial RHs	Child TB guideline was published in 2008.	X	-Limitation of implementation of guidelines -WHO Guideline of TB in Children 2006	-Commitment from CENAT -Commitment from Partners -Good collaboration of different partners	-Training and expanding TB in children services to all RH	Rac 3 -Capacity is OK -TB in children included in pediatric service in RII (it will exist)
3-5. Guideline (draft) for smear+ is developed	Guidance of child TB was given to all TB supervisors nationwide (07). Specific training for child TB was held in 7 provinces (>24 RHs)	X	-Diagnosis and treatment have only in some provincial RHs -Capacity for diagnosis of TB children is limited -Diagnostic materials is limited	-Guideline was developed and approved for use -Training curriculum was developed and trained -Fund supported by different partners available	-There is a need of more training for refresher RHs -Supply diagnostic materials "PPD, X-ray, gastric aspiration tube" -Clinical training in TB in child diagnosis should be added -Training of using materials -Strengthen supervision on TB in children activities	Rac 3 -Capacity is OK -TB in children included in pediatric service in RII (it will exist)
<Output 4> Quality of laboratory services to support DOTS, TB/HIV seroconversion	4-1. By the end of 2007, a guideline for TCM of bacteriological examination for TB is formulated		-There is time constraint -Lack of commitment -Lack of leading partners -Lack of technical working group to start the job -No WHO guideline	-Thru 3 initiative	-Set up technical working group TCM to start working (on second 1-7 TB)	-TCM guideline has to be translated in Kimer and sign approved from NTP -Have to develop a good plan to expand to more sites and increase budget from other donors

Narrative Summary	Objectively Verifiable Indicators	Achievement	Achievement Rate				Hindering Factors	Promoting Factors	Measures to be Taken for Further Improvement	Sustainability
			1	2	3	4				
4.2. By the end of 2005, CD4 testing service is available in CENAT.	CD4 test can be carried out at CENAT	X					-Take long time to get results -High workload for TB lab staff -No standard	-Cost effective -Trained by JICA	-Strengthening transferring system to send the blood to NIPH	
4.3. Throughout the Project, it does not face shortage of reagents and materials at all TB laboratories.	Potential shortage at central level (CMS) occurred in 2007. Change to Enough supply even though potential shortage at all levels occurred in 2007.						-Procurement is not in NTP level -Poor logistic system management -There is no buffer stock system	-NTP/CENAT can prepare reagents and materials for the shortage -JICA supported some raw materials and ready-made reagents, and materials, so did other partners	-Logistic system should be improved -Half or one year buffer stock policy at central level -Procurement process should involve by CENAT	
4.4. Trainings for smear examination are conducted strategically based on QA results.	Trainings of smear test are carried out several times every year. Change to Trainings for smear examination are carried out several times every year.						-Budget for training is limited -Lack of microscope for teaching -Lack of lab tech at microscope centers	-Have enough teaching materials and qualified trainers -Support from JICA and other partners	-Mobilize budget to train more staff -Revise training modules -Microscope training should be installed	
4.5. QC circle activities are set up at selected province.	The activity was set up and maintained in 2 ODs						-Project sites have only 2 ODs	-Full commitment of all level in that 2 ODs	-Have to develop a good plan to expand more sites and mobilize budget from other donors	
4.6. Throughout the Project, evaluation indicators (ex. Agreement rates >95%, etc.) for bacteriological examination are maintained the expected ranges.	62.1% of MCs shows acceptable performance (no error) in 2007. Change to 58% (semester 1), 86% (quarterly, 2) of MCs acceptable performance (no error) in 2008.						-EQAs still perform in quarterly and Semester base -Limited budget and different budget sources -Some provinces did not perform OSE and WS	-SOP for EQA has already finished -Strong commitment from NTP, partners, and staff	-EQAs should perform quarterly base -All sources of budget should be integrated and follow EQA SOP	
4.7. By the end of the Project, smear (+) rate among suspects is decreased to expected rate (10%-15%).	13% positively in smear examination in 2007 (10-15%)						-High workload for lab -Lack of human resource and supply	-Staff commitment is high -Good collaboration between lab, OPD, community, and other agencies	-Train more staff for smear making and smear reading -Continue to cooperate with OPD, community and other agencies	
4.8. Trainings for assessors and cross-checkers are conducted once a year.	Trainings including the refresher's were done to expand quarterly EQAs. (16 provinces in 2008)						-Workload for cross-checker is very high -No refresher training for cross-checker	-There are 9 TOT for EQA -Technical support from JICA -Commitment from NTP, partners, and staff -Should have study tours to exchange experience (in country or abroad)	-Train more assessors and cross-checkers to expand more EQA centers -Conduct refresher training for cross-checkers and assessors	

Narrative Summary	Objectively Verifiable Indicators	Achievement	Achievement Rate				Hindering Factors	Promoting Factors	Measures to be taken for Further Improvement	Sustainability
			1	2	3	4				
4.9. By the end of the Project, EQA system for DST (panel test) was set up with RIT in 2005.	EQA system for DST (panel test) was set up with RIT in 2005.						-No MoU between RIT and CENAT -Panel test for DST did not send regularly -Complicated procedure for clearing bacteriological cargo	-Good cooperation and communication between RIT and CENAT -NRL has attended training on DST at RIT	-Should formulate MoU between RIT and CENAT -Panel test for DST should perform regularly as schedule -Should have some budget to send and receive bacteriological goods -Refresher training for DST	
<Output 5> Effective IEC/advocacy activities to support TB control program are implemented.	5-1. By 2007, NTP has an IEC/advocacy strategy to support TB control program 5-2. By the end of the Project, NTP implements the IEC/advocacy strategy with partner organizations.	Final draft of ACSM strategy produced late 2008 Revision meeting for ACSM strategy has been held. ToT ACSM	X				-Strategy was changed from IEC to ACSM -TWG not yet concious on the final draft	-Focal person -Technical support from partners	-Meeting (round table discussion) -Evaluate (for lessons learned)	
5-3. By the end of the Project, 70% of DOTS HCs is supported by HC/SG and VHSGs through IEC/advocacy activities	DOTS HC (61/77 QDs)					X		-Strong commitment from partners -Key persons from CENAT -JICA contributes for IEC materials -Pilot area implementation -TB/HIV publication for IEC materials	-Strong support from partner -Refresher IEC/BCC for HC staff	-M&E, IEC&BCC- advocacy activities

Achievement Rate

- 1 : Not satisfactory
- 2 : Not very satisfactory
- 3 : Satisfactory
- 4 : Highly satisfactory

3. PDM ver.1

プロジェクト期間：2004年8月1日～2009年7月31日
修正案作成日：2006年9月11日

作成日：2004年4月30日

プロジェクト名：カンボジア国結核対策プロジェクト(フェーズ2)
実施機関：CENAT
対象者：結核患者

対象地域：カンボジア国全域（一部はハイロット地域のみ）

プロジェクトの要約		指標	指標入手手段	外部条件
上位目標				
結核の死亡数、患者数が減少する		1 2012年までに、塗沫陽性結核の罹患率が、1997年の10万対241から120万に減少する 2 2012年までに、塗沫陽性結核の有病率が、1997年の10万対540から270人に減少する 3 2012年までに、結核患者の死亡率が、1997年の10万対90から45に減少する	WHO レポート、及び全国結核有病率調査（2002, 2007, 2012年）	*あらゆるレベルの政府機関が結核対策計画の支持を継続する *一般人口の貧困水準が現状より悪化しない *HIV/AIDSが結核治療率に及ぼす影響が現状より悪化しない *HIV/AIDSの感染拡大が悪化しない
プロジェクト目標		1 プロジェクト期間を通して、新塗沫陰性結核患者の治癒率85%が維持される 2 プロジェクト終了時までに、新塗沫陽性結核患者の発見率70%が達成される 3 プロジェクト終了時までに、塗沫陰性肺結核の報告数が2003年の2倍に増加する 4 プロジェクト終了時までに、小児結核の報告数が2003年の2倍に増加する	保健省の統計 (同上) (同上) (同上)	*結核対策計画への政府の強いコミットメントが継続する *HIV/AIDSが結核治療率に及ぼす影響が現状より悪化しない *HIV/AIDSの感染拡大が悪化しない
アウトプット	プログラム管理	1-1 NTPの運営管理能力が改善される 1-2 プロジェクト終了時までに、NTPスタッフがより少ない支授で調査を実施し、結果を分析することができる 1-3 2007年までに、「結核年次統計」が定期的に発行される	専門家、またはCENATスタッフによる報告書 専門家による報告書 結核年次統計	*NTPにおけるNTP職員の離職率が著しく悪化しない *NTP職員のモチベーションが維持される
	情報管理	1-4 プロジェクト終了時までに、中央／地方のNTPスタッフが客観的データに基づいた計画立案ができる 1-5 プロジェクト終了時までに、NTPスタッフがより少ない支授で評価と分析することができる 1-6 2005年までに、「結核年次統計」が定期的に発行される	CENATの資料 専門家、またはCENATスタッフによる報告書 CENATの資料、またはCMSのデータ	
	薬剤管理等	1-7 さらに、2007年までに、GDF標準に基づいた薬剤調達ができる 1-8 2006年までに、四半期ごとの薬剤必要量が、実際の結核患者数と在庫量に基づいて医療團體からリクエストされる 1-9 フィールド調査の実施、結果分析、対策ワーキングショップを開催する	CENATの資料 CENATの資料 (同上)	
	調査研究	1-10 TB/HIV全国実態調査、全国薬剤感受性調査、薬剤モニタリング調査、全国有病率調査、KAP調査が実施される 1-11 調査結果の反映のためのワーキングショップが実施される 1-12 プロジェクトの成果や調査結果が、毎年、国際会議で発表される	(同上) (同上) 会議抄録集	
	協調・調整	1-13 四半期ごとにCCが適切に実施される	CENATの資料	

DOTSの質の向上	2-1 2005年までに、すべてのMPAヘルスセンターにDOTSが導入される	CENATの資料
	2-2 2004年までに、6ヶ月短期化學療法のガイドライン・トレーニングモジュールが策定される	(同上)
PPM-DOTS	2-3 2005年までに、全国的な6ヶ月短期療法への切り替え(再研修、モニター、巡回指導が終了する	(同上)
	2-4 発見される塗抹陽性患者数がブラート化する	(同上)
	2-5 治療成功的割合が85%以上に維持される	(同上)
C-DOTS	2-6 2006年までに、官民連携(PPM)によるDOTSガイドラインが策定される	(同上)
	2-7 プロジェクト終了までに、特定の地域でPPMによるサービスが実施される	(同上)
	2-8 モデル地区におけるDOTSの指標データが收集され、成績と同一化する	(同上)
	2-9 モデル地区におけるC-DOTSによる患者数などの治療成績が改善され、公的医療施設における成績と同一化する	(同上)
	2-10 モデル地域での活動及びNGO支援による活動報告等の情報共有を行う	(同上)
	2-11 プロジェクト終了までに、4分の1以上の医療圏都道府県にてDOTSが実施される	(同上)
薬剤管理・処方状況の改善	2-12 プロジェクト終了までに、結核患者の95%が適切な結核薬を処方される(現行では90%)	薬剤管理状況調査報告書
	2-13 繼続期間における結核患者の90%がDOTSによる薬剤投与を受けている(現行では40%)	(同上)
	2-14 プロジェクト終了までに、50%以上の薬剤保管庫で結核薬の保管記録が正しく行われる(現行10%)	(同上)
TB/HIV対策	3-1 TB/HIV対策のガイドラインが策定される	CENATの資料
	3-2 プロジェクト終了までに、HIV高蔓延地域における州都リファラル病院でTB/HIVサービスが利用できる	(同上)
小児結核	3-3 2005年までに、小児結核のガイドラインが策定される	(同上)
啓発塗抹陰性対策	3-4 プロジェクト終了までに、すべての州都リファラル病院で小児結核のサービスが利用できる	(同上)
	3-5 降級塗抹陰性対策ガイドライン(案)が策定される	(同上)
多剤耐性結核患者治療支援	3-6 多剤耐性結核患者経験・検査手法ガイドラインが策定される	(同上)
ガイドライン策定	4-1 2004年までに、細菌学的検査に関する包括的精度管理についてのガイドラインが策定される	CENATの資料
CD4検査	4-2 2005年までに、CENATにおいてCD4検査が可能となる	(同上)
物品管理	4-3 プロジェクト期間を通じて、すべての締約当事者において評議、物品の不足が起こらない	巡回指導の報告書
トレーニング	4-4 各種々のトレーニングが精度評価の結果に基づき順次的に実施される	結核予防連絡会議のトレーニング報告書
検査の質の改善	4-5 特定の州で、結核ラボのQCサーチャー活動が実施される	CENATの資料
	4-6 プロジェクト期間を通して、細菌学検査の評価指標が評容範囲内に維持される	結核年次統計
	4-7 プロジェクト終了までに、結核疑い患者における塗抹検査陽性率が望ましい水準までに低下する	(同上)
	4-8 プロジェクト終了までに、薬剤感受性検査に関する外部精度アセスメントシステムがCENATラボと国際フランソワのEC/Advocacyの戦略を策定する	CENATの資料
職員実施活動	5-1 2007年までに、NTPが結核対策のためのEC/Advocacyの戦略を策定する	CENATの資料
	5-2 プロジェクト終了までに、NTPが他機関と連携しながらEC/Advocacy戦略を実施する	(同上)
普及	5-3 プロジェクト終了までに、DOTS実施ヘルスセンターの70%がEC/Advocacy NTPスタッフの報告書	

活動		投入	日本側
	カンボジア側		
1 NTPの運営管理能力が改善される	長期専門家に対するカウンターパート	長期専門家 チーフアドバイザー 業務調整 TB/HIV対策	* 結核薬の供給がプロジェクト終了まで確保される * 国家予算が計画通り執行される
1-1 プログラム管理に関する活動 1-1-1 計画、モニタリング及び評価に関するトレーニングを行う 1-1-2 調査と他の技術分野に関するトレーニングを実施する 1-2 情報管理に関する活動 1-2-1 全国レベルにおいてデータベースの構築を行う 1-2-2 中央レベルにおいてコピュータを用いて結核情報システムを運用する 1-2-3 特定の州において結核情報を用いて適切なデータベースの構築を行う 1-2-4 州、医療團體レベルにおいて疫学に関するトレーニングを実施する 1-3 薬剤管理ロジックに関する活動 1-3-1 薬剤現況調査、及びフェーズ1にて開発された薬剤管理計画に従った活動を展開する 1-4 調査研究に関する活動 1-4-1 全国的な結核実態調査、薬剤耐性、結核患者におけるHIV/粟胞調査を実施する 1-4-2 特定の地域においてTBに関するKAPサーベイを実施する 1-4-3 NTPを改善するために、調査研究の結果を有効利用する 1-5 地域調整に関する活動 1-5-1 國内外のデーターとの定期的なミーティングを促進する 1-5-2 國際的なカンファレンス、会議を通して意見の交換と経験の共有を行う	CENATスタッフの入件費 管理、運営費 試薬、消耗品、結核薬等	* 他のプロジェクトがNTPへの支援を継続する * 医療團體レベルで十分な質と量のスタッフが維持される	
2 緊持可能で質の高いDOTSサービスが全国に広がる	DOCS質の向上に関する活動 2-1 すべてのレベルにおけるDOTSのモニタリングと巡回指導の見直しを行う 2-1-1 巡回指導に則するカーボラインを見直す 2-1-2 州及び医療團體結核担当官に対する再研修を実施する 2-2 6ヶ月短期化学療法に関する適切なガイドラインを策定する 2-2-1 6ヶ月短期化学療法に関する適切なガイドラインを作成する 2-2-2 他機関と連携しながら、6ヶ月療法に関するワークショップ、トレーニングを実施する 2-2-3 6ヶ月短期化学療法実施に関するモニタリング、巡回指導を行う 2-3 コミュニティDOTSに関する活動 2-3-1 特定の地域にコミュニティDOTSを導入する 2-4 PFM(官民連携)における結核サービスに関する調査を行う 2-4-1 民間セクターにおける結核サービスに関する調査を行う 2-4-2 特定の地域でPPM-DOTSを導入する	頭微鏡 X線開連機械 OA機器 塗沫標本作製キット CP研修 結核ラボ管理 塗沫標本作製キット	前堤条件 * フェーズ1プロジェクト終了時評価報告書にて指摘された活動が完了する
3 緊存のDOTSを継続した適切な結核サービスとそのガイドラインが開発される	3-1 TB/HIV対策、小児結核、塗沫陰性結核などの特殊分野に関する適切なガイドラインを作成する 3-2 州都別ファラル病院に従事する結核専門医を強化するためのトレーニング用モジュールを開発する 3-3 Beyond DOTSTB/HIV、小児結核および塗沫陰性結核などに対するトレーニングを実施する 3-4 CENATにおける薬剤耐性結核の治療を支援する	細菌学的検査における包括的精度管理についてのガイドラインを作成する 多育耐性結核のモニタリングに関する培養検査ネットワークを実施する TB/HIV対策などに対する検査サービスの強化と拡大のためにCENATラボスタッフに対するトレーニングを実施する	
4 DOTs、TB/HIV対策、調査活動に必要な機材が収着される	4-1 末梢の結核がにおける包括的精度管理を実践するためのトレーニングを実施する 4-2 多育耐性結核のモニタリングに関する培養検査ネットワークを実施する 4-3 TB/HIV対策などに対する検査サービスの強化と拡大のためにCENATラボスタッフに対するトレーニングを実施する	DOTs、TB/HIV対策、調査活動に必要な機材が収着される ヘルスセントラースタッフ、およびヘルスセンター支援グループへのトレーニング用モジュールを教育省、労働省などの関係機関との定期的なワークショップや会議を計画する 他のドナーと協力IEC/Advocacy戦略計画策定を支援、促進する	
5 締結対策計画を支えるための効果的なIEC/Advocacy活動が実施される	5-1 ヘルスセントラースタッフ、およびヘルスセンター支援グループへのトレーニング用モジュールを教育省、労働省などの関係機関との定期的なワークショップや会議を計画する 5-2 他のドナーと協力IEC/Advocacy戦略計画策定を支援、促進する		

4. 評価グリッド（和・英）

カンボジア国 結核対策プロジェクト（フェーズ2）終了時評価調査 評価グリッド

項目 実績の 検証	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
投入は計画どおりか、 カンボジア側投入	日本側投入	・投入実績データ	・プロジェクト作成資料、プロジェクト事業進捗報告書、その他の報告書	・文献調査	・文献調査	計画通り
アウトプットは計画 どおり産出されたか、 ・関係者の意見	・同上	・アウトプットの指標は達成 成度	・Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) ・保健省、保健省地方管区等関係者、C/P、専門家	・文献調査 ・インタビュー ・評価ワークショ ップ	・文献調査 ・インタビュー ・評価ワークショ ップ	・アウトプット2-2、2-7、2-9、 3-4、3-5、4-3、5-2、5-3は未達成
アウトプットの「質」は満足のいくレベルに達してい るか、 ・関係者の意見	・同上	・関係者の意見	・保健省、保健省地方管区等関係者、C/P、専門家	・評価ワークショ ップ ・インタビュー	PDMの指標に「質」の要素が 含まれていないため、質に關し ては評価ワークショップで意見 を聞いたが、質に關する問題意 識は提起されなかつた。	
アウトプット達成における 本プロジェクトの貢献度は どの程度か、 ・他ドナーの意見	・WHO、USAID等他ドナー、NGO	・関係者の意見	・保健省、保健省地方管区等関係者、C/P、専門家	・評価ワークショ ップ ・インタビュー	特にパリオロット事業の導入にお いて貢献度が高い。	
プロジェクト目標は 達成されたか、 ・関係者の意見	・同上	・プロジェクト目標の指標は 達成されたか、 ・関係者の意見	・Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークショ ップ	・プロジェクト目標指標3（塗 沫陰性的報告数）は未達成だが、 目標値の根拠が曖昧。TBHIV、 小児結核の発見数は増加してい る。	
上位目標は達成され る見込みか、 ・上位目標は達成される見込 みか、	・上位目標指標達成度 ・関係者の意見	・上位目標は達成される見込 みか、	・カンボジア保健省資料、WHO資料 ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークショ ップ	・WHOのグローバルターゲッ トは達成しており、将来的に上 位目標が達成される基盤は整っ た。	

項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
実施プロセスの検証	活動は計画通りに実施されたか、	進捗に問題はないか。ある場合、それは何で、その原因は何か、	・当初スケジュールと実際の進捗状況の比較データ	・プロジェクト事業進捗報告書、プロジェクト作成資料、その他の報告書 ・保健省、保健省地方管区等関係者、C/P、専門家	・文献調査 ・インタビュー	JICA直営型から業務委託型に契約が移行した際に、事務的混乱から多少活動が遅れた。
	技術移転の方法に問題はなかったか、	問題がある場合、どのような技術移転方法に問題があったか。その解決方法は何か、	・技術移転の遅れの有無、C/P の理解、習得度 ・関係者の意見 ・他ドナーの意見	・プロジェクト活動進捗報告書、プロジェクト作成資料、その他の報告書 ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・文献調査 ・インタビュー ・評議会シヨップ	特に問題はない。
	プロジェクトのマネジメント体制に問題はなかったか、	モニタリングの仕組みが構築されているか、	・モニタリングの方法、頻度	・モニタリング・システム ・プロジェクト活動進捗報告書、プロジェクト作成資料、その他の報告書 ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・文献調査 ・インタビュー ・評議会シヨップ	PO が作成され、活動の進捗および達成度がモニターされている。
	プロジェクト内のコミュニケーションは、円滑に行われているか、	・コミュニケーションの機会の設定 ・問題解決状況 ・関係者の意見	・コミュニケーション・システム ・モニタリング・システム ・定例会議事録 ・WHO、USAID 等他ドナー、NGO	・文献調査 ・インタビュー ・評議会シヨップ	CENAV/JICA Project Meeting が毎月開催されている。	
	JICA本部、JICAカンボジア事務所との連絡・協力は円滑だったか、	・連絡・協力状況	・定例会議事録 ・モニタリング・システム ・保健省、保健省地方管区等関係者、C/P、専門家	・文献調査 ・インタビュー	特に問題はない。	
	カンボジア側との連絡・協力は円滑だったか、	・連絡・協力状況	・定例会議事録 ・モニタリング・システム ・保健省、保健省地方管区等関係者、C/P、専門家	・文献調査 ・インタビュー ・評議会シヨップ	TB Annual Conference, ICC, JCC など、緊密なコミュニケーション管理が行われている。	

項目	評価設問		情報源	データ収集方法	調査結果	
	大項目	小項目				
実施プロセスの検証(つづき)	実施機関やカウンターパートのプロジェクトに対する認識は高いか、	カンボジア保健省は高いオーナーシップをもつて取り組んでいるか、	・プロジェクト予算 ・連絡・協力状況 ・関係者の意見 ・他ドナーの意見	・保険省からプロジェクトへの予算 ・保健省、保健省地方管区等関係者、CP、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークシヨウ ・ツブ	予算は毎年増加している。 NTPとプロジェクトがほぼ一體化しているため、CENATのプロジェクトに対するオーナシップは高い。
適切なカウンターパートが配置されたか	カウンターパートの人数、能力、立場は適切だったか	・カウンターパートリースト ・関係者の意見	・プロジェクト作成資料、プロジェクト事業進捗報告書、その他の報告書 ・保健省、保健省地方管区等関係者、CP、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークシヨウ ・ツブ	フェーズ1を通じて能力強化されており、適切だった。	
関係機関のプロジェクトへの参加度や認識に対する認識は高いか、	保健省等の関係者の参加度や認識は高いか、	・関係者の意見	・プロジェクト作成資料、プロジェクト事業進捗報告書、その他の報告書 ・保健省、保健省地方管区等関係者、CP、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークシヨウ ・ツブ	高い。	
プロジェクトの実施過程で生じている問題や、効果発現に影響を与えた要因は何か、	プロジェクトの阻害要因、促進要因は何か、	・プロジェクトの活動記録 ・関係者の意見	・プロジェクト作成資料、プロジェクト事業進捗報告書、その他の報告書 ・保健省、保健省地方管区等関係者、CP、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークシヨウ ・ツブ	促進要因：無償との連携。広範で長期的な支援アプローチ。 自立発展性を見越した関係者の巻き込み(CATA等)	
他プロジェクトとの協力・連携は適切だったか、	NTP関連プロジェクトとの協力・協調は効果的に行なわれたか、	・協力・連携状況 ・プロジェクトの活動記録 ・関係者の意見	・プロジェクト作成資料、プロジェクト事業進捗報告書、その他の報告書 ・保健省、保健省地方管区等関係者、CP、専門家 ・WHO、USAID等他ドナー、NGO	・文献調査 ・インタビュー ・評価ワークシヨウ ・ツブ	多くのドナー、NGO等と連携しており、プロジェクトがその中心的な調整役を果たしている。	

5項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
妥当性	本プロジェクトが目指す効果は、カンボジアの国家政策に合致しているか、	国家開発計画における結核対策の位置づけ	・カンボジアの保健政策 ・CMIDGs ・National Health Policies and Strategies for TB Control 2006 - 2010 ・保健省、保健省地方管区等関係者、CP、専門家 ・保健省予算における結核対策予算の割合	・文献調査 ・インタビュー	・文献調査 ・インタビュー	・プロジェクトは National Health Policies and Strategies for TB Control 2006-2010と目標および戦略を共有している。 毎年増加している。
日本の援助政策に合致しているか、	国別事業実施計画等との関連性はあるか、	・我が国のカンボジアの結核対策に対する支援方針	・JICA 国別事業実施計画 ・JICA 課題別指針「結核対策」2007年4月 ・保健省、保健省地方管区等関係者、CP、専門家	・文献調査 ・インタビュー	・文献調査 ・インタビュー	・JICA 国別事業実施計画ではカンボジア支援において結核対策を優先課題としている。
ターゲットグループのニーズに合致しているか、	カンボジア国民は結核対策を必要としているか、	・発生率、有病率等、結核関連情報 ・関係者の意見	・National Health Policies and Strategies for TB Control 2006 - 2010 ・保健省、保健省地方管区等関係者、CP、専門家	・文献調査 ・インタビュー	・文献調査 ・インタビュー	・カンボジアは依然としてTB22 高負担国のひとつである。(21位)
プロジェクトのアプローチはプロジェクト目標・上位目標達成のための手段として妥当か、	DOTS と Beyond DOTS の関係など、プロジェクトのアプローチは適切だったか、	・関係者の意見	・National Health Policies and Strategies for TB Control 2006 - 2010 ・保健省、保健省地方管区等関係者、CP、専門家 ・WHO、USAID 等他ドナー、NGO	・文献調査 ・インタビュー	・文献調査 ・インタビュー	非常に適切。
日本の技術の優位性はあるか、	日本の結核対策の経験は有効に活かされているか、	・関係者の意見	・保健省、保健省地方管区等関係者、CP、専門家	・インタビュー	・文献調査 ・インタビュー	非常に活かされている。
	フェーズ1の経験は有効に活かされているか、	・フェーズ1の経験 ・関係者の意見	・フェーズ1終了時評価報告書 ・保健省、保健省地方管区等関係者、CP、専門家	・文献調査 ・インタビュー	・文献調査 ・インタビュー	非常に活かされている。
	円借、無償等、技プロ等、日本その他プロジェクトとの連携は適切か、	・協力・連携の状況 ・実績、効果 ・関係者の意見	・JICA 関係者 ・保健省、保健省地方管区等関係者、CP、専門家	・インタビュー	・国立結核センタ一施設改修(1999年)、抗結核薬調達(2003-2005)等の無償あり。	

5項目	評価設問		必要なデータ	情報源	データ収集方法	調査結果
	大項目	小項目				
有効性	プロジェクト目標は本プロジェクトの貢献によって達成されたか、	・プロジェクト目標の指標達成度 ・関係者の意見	・Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・文獻調査 ・インタビュー ・評価ワークシヨップ	・プロジェクト目標指標達成度 ・インタビュー ・評価ワークシヨップ	・プロジェクト目標指標達成度 ・未達成だが、目標値の根拠が曖昧。TB/HIV、小児結核の発見数は増加している。 プロジェクト目標とアクトの関係は緊密。
	プロジェクト目標達成は本プロジェクトのアウトプットによるものか、	・プロジェクト目標達成度 ・アウトプット指標達成度 ・関係者の意見	・Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・文獻調査 ・インタビュー ・評価ワークシヨップ	・文獻調査 ・インタビュー ・評価ワークシヨップ	同上。
	アウトプットによってプロジェクト目標が達成されるという論理は適切だったか、	・PDM ・関係者の意見	・Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・文獻調査 ・インタビュー ・評価ワークシヨップ	・文獻調査 ・インタビュー ・評価ワークシヨップ	同上。
	中央におけるNTP職員の移動・離職による影響はあるた要因は何か、	・離職率、離職理由、C/Pの人数 ・関係者の意見	・プロジェクトの記録 ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・文獻調査 ・インタビュー ・評価ワークシヨップ	・文獻調査 ・インタビュー ・評価ワークシヨップ	移動、離職は少ない。
	NTPにおけるドナー協調は適切だったか、	・関係者の意見	・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID 等他ドナー、NGO	・インタビュー ・評価ワークシヨップ	適切。ドナー調整の中心的な役割を本プロジェクトが担っていた。	
	その他の外部条件、外部要因の影響(正、負)はあるか、	・関係者の意見	・プロジェクト事業進捗報告書 ・保健省、保健省地方管区等関係者、C/P、専門家	・文獻調査 ・インタビュー ・評価ワークシヨップ	財務省からの予算の不執行による薬剤、試薬の欠品。	

5項目	評価設問		情報源	データ収集方法	調査結果
	大項目	小項目			
効率性	達成されたアウトプットからみて、投入の質・量・タイミングは適切か、	専門家派遣人数、専門分野・能力、派遣時期・期間は適切か	・派遣実績 ・関係者の意見	・プロジェクト資料 ・保健省、保健省地方管区等関係者、C/P、専門家	・文献調査 ・インタビュー
	供与機材の種類、量、設置時期は適切か、研修員受け入れ人数、研修内容、研修期間、受け入れ時期は適切か、カウンターパートの人数、配置時期、能力は適切か、	機材供与実績、利用状況 ・関係者の意見 ・研修員受け入れ実績 ・関係者の意見 ・C/P配置状況 ・関係者の意見 ・建物、施設の現状 ・関係者の意見	同上	・文献調査 ・インタビュー	適切
	プロジェクトの予算是適正規模か、効率性を促進・阻害した要因は何か、	コスト実績 ・関係者の意見 他プロジェクト・他ドナーとの連携は、効率面においてどのような効果があったか、また、連携における課題・問題点はあるか、	同上	・文献調査 ・インタビュー	？？
		地方分権化は効率性にどのような影響を及ぼしたか。今後の課題はなにか。どのような取り組みが必要か、定例会議、JCC等、プロジェクト運営管理体制はプロジェクトの効率的運営に貢献したか、	・関係者の意見 ・保健省、保健省地方管区等関係者、C/P、専門家 ・WHO、USAID等他ドナー、NGO ・WHO、USAID等他ドナー、NGO ・保健省、保健省地方管区等関係者、C/P、専門家	・評価ワークショップ ・評価ワークショップ ・評価ワークショップ	他ドナーと連携は緊密。ドナーアジャストの中心的な役割を本プロジェクトが担っていた。
					州の位置づけが弱くなっている。
					ICC、JCC、CENAT/JICA Project Meetingなど、階層化された緊密な会議体が構成されている。

5項目	評価設問		情報源	データ収集方法	調査結果	
	大項目	小項目				
インパクト	上位目標は達成される見込みか、	上位目標は達成される見込みか、 ・関係者の意見	・上位目標指標達成度 ・関係者の意見	・カンボジア保健省資料、WHO資料 ・保健省、保健省地方管区等関係者、CP、 専門家 ・WHO、USAID等他ドナー、NGO	・文書調査 ・インタビュー ・評価ワークショ ップ	・WHOのグローバルターゲット は達成しており、将来的に上位 目標が達成される基盤は整つ た。
	上位目標の達成を阻害する要因 はあるか、	・HIV/AIDS が結核合癒 率に及ぼす影響 ・HIV/AIDS の感染拡大 ・関係者の意見	・保健省、保健省地方管区等関係者、CP、 専門家 ・保健省、保健省地方管区等関係者、CP、 専門家	・インタビュー ・評価ワークショ ップ	プロジェクト目標が達成され る上位目標が達成されない指標 になつてゐる (?)	
	上位目標とプロジェクト目標の 論理的関係は適切か、	・関係者の意見	・保健省、保健省地方管区等関係者、CP、 専門家	・インタビュー ・評価ワークショ ップ	プロジェクト目標が達成され る上位目標が達成されない指標 になつてゐる (?)	
	その他他の波及効果は あるか、	官民連携 PPM-DOTS は、官、民 の双方にどのような影響を及ぼ したか、 コミニティ DOTS はコミニユニ ティにどのような影響を及ぼし たか、	・関係者の意見	・保健省、保健省地方管区等関係者、CP、 専門家 ・WHO、USAID等他ドナー、NGO	・インタビュー ・評価ワークショ ップ	NA
	TBHIV 対策は国家エイズプログ ラムにどのような影響を及ぼし たか、 NGO との協調は NGO にどのよ うな影響を及ぼしたか、	・関係者の意見	・保健省、保健省地方管区等関係者、CP、 専門家 ・WHO、USAID等他ドナー、NGO	・インタビュー ・評価ワークショ ップ	NA	
	その他の影響（正負）はあるか、	・関係者の意見	・保健省、保健省地方管区等関係者、CP、 専門家 ・WHO、USAID等他ドナー、NGO	・インタビュー ・評価ワークショ ップ	負のインパクトは見られない。	

5項目	評価設問		情報源	データ収集方法	調査結果
	大項目	小項目			
自立発展性	政策面での支援は継続するか	保健省による政策面での支援は継続するか	・関係者の意見 ・保健省関係者	・インタビュー ・評価ワークショーッ	政策は結核対策を重視している。 プロジェクトの指標は国家政策の指標と同じ。
	事業を継続するだけの能力が組織に備わっているか	協力終了後も効果を上げていくための活動を実施するに足る運営管理能力が、保健省、ラボ等にあるか	・スタッフの配置、定着状況 ・スタッフの運営管理能力 ・関係者の意見	・プロジェクト事業進捗報告書 ・スタッフ配置状況 ・保健省、保健省地方管区等関係者、CP、専門家	CENATだけで研修その他の事業を行なっている。
	協力終了後も効果を上げていくための活動を実施するに足る技術力が、保健省、ラボ等にあるか	・スタッフの技術力 ・関係者の意見	・プロジェクト事業進捗報告書 ・保健省、保健省地方管区等関係者、CP、専門家	・文献調査 ・インタビュー ・評価ワークショーッ	同上。
	経常経費を含む予算の確保は行なわれているか？	・予算 ・関係者の意見	・予算計画書 ・保健省、保健省地方管区等関係者、CP、専門家	・文献調査 ・インタビュー ・評価ワークショーッ	WBの支援が終了するなか、GFR8の取得に失敗するなど、財政面に不安が残る。
	移転された技術は定着していくか	C/Pは結核対策に係る活動を実施するに必要な能力を有しているか	・関係者の意見	・プロジェクト事業進捗報告書 ・保健省、保健省地方管区等関係者、CP、専門家	レントゲン検査、調査デザイン能力、データ分析能力などはさらなる向上が必要。
	機材の維持管理は適切に行われる見通しがあるか	・機材の維持管理は適切に行われる見通しがあるか	・関係者の意見	・プロジェクト事業進捗報告書 ・保健省、保健省地方管区等関係者、CP、専門家	適切。

Evaluation Grid: Terminal Evaluation of the CENAT/JICA National Tuberculosis Control Project Phase II

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Verification of the results were provided as planned?	Inputs (human, physical, financial) were provided as planned?	Inputs from Japanese side Inputs from Cambodian side	• Inputs list • Inputs list	• Project documents, Project Progress Reports, other related documents • Project documents, Project Progress Reports, other related documents	• Literature Survey • Literature Survey	
Outputs are realized as planned?	Indicators of Outputs are achieved?		• Achievements of indicators of Outputs concerned • Opinions of parties concerned	• Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop	• Outputs indicators of 2-2, 2-7, 2-9, 3-4, 3-5, 4-3, 5-2, 5-3 are not achieved.
“Quality” of Outputs achieved are satisfactory levels?	How much does the project attribute to the achievements of Outputs		• Opinions of parties concerned • Opinions of concerned • Opinions of other donors	• Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Evaluation Workshop • Interview	
Project Purpose is realized as planned?	Indicators of Project Purpose are achieved?		• Achievements of indicators of Project Purpose • Opinions of parties concerned	• Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) • Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	• Indicator 3 of the Project Purpose (the number of smear (-) registered) is not achieved. (further investigation is necessary)
Overall Goal is expected to be realized as planned?	Indicators of Overall Goals are expected to be realized?		• Achievements of indicators of Overall Goal • Opinions of parties concerned	• Documents of MOH, WHO, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	• Indicator 1, 2 and 3 of Overall Goal are not expected to be realized. (further investigation is necessary)

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Verification of the process	Activities were implemented as planned?	Were there any obstacles in the progress of activities? If any, what were the causes?	• Progress of activities compared with the plan	• Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview	
Technology transfer was adequately realized?	Were there any obstacles in the process of technology transfer? If any, what were the causes, and what are the solutions overcoming those obstacles?	• Progress of technology transfer, technology requirements of Cambodian project members • Opinions of parties concerned • Opinions of other donors	• Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	• Literature Survey • Interview • Evaluation Workshop	
Project management was properly performed?	Monitoring of the project achievements and progress was implanted in the project management?	• Ways of monitoring and frequency	• Monitoring System • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Monitoring System • Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	
Internal communication of the project has been smoothly realized?	• Communication channels and system • Problem solving • Opinions of parties concerned	• M/M of regular meetings • Monitoring System • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• M/M of regular meetings • Monitoring System • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• M/M of regular meetings • Monitoring System • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop	
Communication and collaboration with JICA HQs and JICA Cambodia office was adequate?	• Communication and collaboration	• M/M of regular meetings • Monitoring System • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• M/M of regular meetings • Monitoring System • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Literature Survey • Interview • Evaluation Workshop	• Literature Survey • Interview • Evaluation Workshop	
Communication and collaboration with Cambodian organization concerned was adequate?	• Communication and collaboration					

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Verification of the process (contd.)	Cambodian government and parties concerned highly recognize the project?	MOH has a high ownership on the project?	<ul style="list-style-type: none"> • Budget for the project • Communication and collaboration • Opinions of parties concerned • Opinions of other donors 	<ul style="list-style-type: none"> • Budgetary inputs from the MOH • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	
	Pertinent counterparts are assigned?	The number, capacity and status of counterparts are adequate to the project?	<ul style="list-style-type: none"> • Counter part list • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	
	Cambodian organizations and parties concerned highly recognize and participate in the project?	MOH, CENAT and other related organizations and parties highly recognize and participate in the project?	<ul style="list-style-type: none"> • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	
	What were the hindering and promoting factors affected the progress of the project?	What were the hindering and promoting factors affected the progress of the project?	<ul style="list-style-type: none"> • Project progress records • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	
	Communication and collaboration with other projects and programs were appropriate?	Communication and collaboration with projects and programs related to the NTP were appropriate?	<ul style="list-style-type: none"> • Communication and collaboration • Project progress records • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents, Project Progress Reports, other related documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Literature Survey • Interview • Evaluation Workshop 	

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Relevance	Development effects targeted by the project are aligned with the Cambodian national policies?	What are targeted by the TB control strategies in the nation health policies and strategies?	<ul style="list-style-type: none"> National health policies and strategies 	<ul style="list-style-type: none"> CMDGs National Health Policies and Strategies for TB Control 2006 - 2010 Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview 	<ul style="list-style-type: none"> The project shares the objectives and strategies with “National Health Policies and Strategies for TB Control 2006-2010.”
Development effects targeted by the project are aligned with the Japanese international cooperation policies?	What are targeted by the JICA’ s country-specific aid implementation policy for Cambodia?	Percentage of TB control budget in the overall national health budget	<ul style="list-style-type: none"> Japan’ s aid implementation policy for TB control in Cambodia? 	<ul style="list-style-type: none"> Budget Paper of MOH Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview 	
Development effects targeted by the project meet the needs of the target group?	Necessity of TB control for Cambodian people is high?		<ul style="list-style-type: none"> Incidence, prevalence, mortality rate of TB and other TB related data Opinions of parties concerned 	<ul style="list-style-type: none"> National Health Policies and Strategies for TB Control 2006 - 2010 Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview 	<ul style="list-style-type: none"> Cambodia is still one of the TB 22 high burden countries.
Approach adopted by the project is relevant for achieving the Project Purpose and the Overall Goal?	Approach such as DOTS and Beyond DOTS combination was relevant for achieving the Project Purpose and the Overall Goal?		<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> National Health Policies and Strategies for TB Control 2006 - 2010 Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> Literature Survey Interview 	
Japan has a predominant TB control technology and experiences?	Japan's TB control experiences are properly employed in the project?		<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Interview 	
	Experiences of the Phase I are effectively employed in the project?		<ul style="list-style-type: none"> Experiences in the Phase I Opinions of parties concerned 	<ul style="list-style-type: none"> Final Evaluation Report of NTCP Phase I Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview 	
	Cooperation and with other Japan's project such as loan, grant and technical cooperation projects?		<ul style="list-style-type: none"> Cooperation and their results and effects Opinions of parties concerned 	<ul style="list-style-type: none"> Staff of JICA Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Interview 	<ul style="list-style-type: none"> Grant assistance such as CENAT facility improvement in 1999 and TB drug procurement (2003-2005) prepared the foundation for the project.

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Effectiveness	Project Purpose is achieved by the attribution of the Outputs?	Indicators of Project Purpose are achieved?	<ul style="list-style-type: none"> Achievements of indicators of Project Purpose Opinions of parties concerned 	<ul style="list-style-type: none"> Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	<ul style="list-style-type: none"> Indicator 3 of the Project Purpose (the number of smear (-) registered) is not achieved. (further investigation is necessary)
	Achievements of indicators of Project Purpose were realized by the achievements of Outputs?		<ul style="list-style-type: none"> Achievements of indicators of Project Purpose Achievements of indicators of Outputs Opinions of parties concerned 	<ul style="list-style-type: none"> Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
	Cause and effect relationships between Outputs and Project Purpose are logical and relevant?		<ul style="list-style-type: none"> PDM Opinions of parties concerned 	<ul style="list-style-type: none"> Achievement and Target for National Tuberculosis Control Project Phase II (2004-2009) Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
	What are the factors hindered and/or promoted the achievement of the Project Purpose?		<ul style="list-style-type: none"> Separation rate, separation reasons, number of the counterparts Opinions of parties concerned 	<ul style="list-style-type: none"> Project documents Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview 	
	Donor coordination and harmonization relating to the NTP is adequate?		<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> Interview Evaluation Workshop 	
	Important Assumptions and/or other external factors affected negatively of positively the project?		<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Project Progress Reports Staff of MOH and ODS, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Efficiency	Quality, quantity and timing of the Inputs were appropriate for achieving Outputs?	The number, fields, capacity, timing and duration of dispatch of Japanese experts were relevant and appropriate? The number, specifications, timing and quality of equipment granted were relevant and appropriate? The number of participants, contents, duration and timing of trainings in Japan were relevant and appropriate? The number, capacity and assignment timing of the counterparts were relevant and appropriate? Buildings and facilities provided by the Cambodian side were relevant and appropriate?	<ul style="list-style-type: none"> • List of experts • Opinions of parties concerned • Equipment list • Status of usage • Opinions of parties concerned • Participants list • Opinions of parties concerned • Counterparts list • Opinions of parties concerned • List of buildings and facilities provided • Opinions of parties concerned • Project cost • Opinions of parties concerned 	<ul style="list-style-type: none"> • Project documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Project documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Project documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Project documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Project documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Project documents • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Literature Survey • Interview • Literature Survey • Observation • Interview • Literature Survey • Interview 	
	Scale of the project cost is appropriate?	Project cost is appropriate compared with projects alike?	<ul style="list-style-type: none"> • Opinions of parties concerned 	<ul style="list-style-type: none"> • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Interview • Evaluation Workshop 	
	What are the hindering and/or promoting factors affected efficiency of the project?	How the collaboration with other projects and programs and with other donors affected the efficiency of the project? What are the issues for further better collaboration with them? What countermeasures would be effective?	<ul style="list-style-type: none"> • Opinions of parties concerned 	<ul style="list-style-type: none"> • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs 	<ul style="list-style-type: none"> • Interview • Evaluation Workshop 	
	Project management such as regular meeting and JCC contributed the efficiency of the project?		<ul style="list-style-type: none"> • Opinions of parties concerned 	<ul style="list-style-type: none"> • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> • Interview • Evaluation Workshop 	

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
Impact	Primary Questions	Secondary Questions				
Overall Goal is expected to be realized as planned?	Indicators of Overall Goals are expected to be realized?	• Achievements of indicators of Overall Goal • Opinions of parties concerned	• Documents of MOH, WHO, etc. • Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Literature Survey • Interview • Evaluation Workshop	• Indicator 1, 2 and 3 of Overall Goal are not expected to be realized. (further investigation is necessary)	• Overall Goal are not expected to be realized. (further investigation is necessary)
What negative factors could be expected hindering the realization of the Overall Goal?	What negative factors could be expected hindering the realization of the Overall Goal?	• Impact of HIV/AIDS in cure rate • Prevalence of HIV/AIDS infection • Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Interview • Evaluation Workshop		
Achievements of Overall Goal were realized by the achievements of the Project Purpose?	Cause and effect relationships between Overall Goal and Project Purpose are logical and relevant?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc.	• Interview • Evaluation Workshop		
Are there any other impacts and influences of the project?	How PPM-DOTS influenced the public and private sectors?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop		
	How community DOTS influenced communities?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop		
	How TB/HIV control activities influenced the national HIV/AIDS program?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop		
	How the collaboration with NGOs influenced NGOs?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop		
	Are there any other positive/negative impacts?	• Opinions of parties concerned	• Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. • Staff of other donors and supporters such as WHO, US-CDC and NGOs	• Interview • Evaluation Workshop		

Evaluation Criteria	Evaluation Questions		Data Required	Data Sources	Data Collection Methods	Survey Results
	Primary Questions	Secondary Questions				
Sustainability	The government will support NTP to retain its activities, outputs and outcomes?	The national health policies will continue to support the NTP to retain its activities, outputs and outcomes?	<ul style="list-style-type: none"> National health policies Opinions of parties concerned 	<ul style="list-style-type: none"> National Health Policies and Strategies for TB Control 2006-2010 Staff of MOH 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
	CENAT is capable of continuing implementation of the NTP effectively and efficiently?	Management capacities of CENAT, laboratories and other organizations concerned are high enough to retain its activities, outputs and outcomes?	<ul style="list-style-type: none"> Manpower supply Management capacities of CENAT, laboratories and other organizations Opinions of parties concerned 	<ul style="list-style-type: none"> Project Progress Reports Assignment of the staff Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
		CENAT, laboratories and other organizations concerned are capable of preserving and disseminating the necessary technologies?	<ul style="list-style-type: none"> Technical capacities of CENAT, laboratories and other organizations Opinions of parties concerned 	<ul style="list-style-type: none"> Project Progress Reports Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
		Budget for the NTP including recurrent budget will be adequately prepared?	<ul style="list-style-type: none"> Budget of MOH Opinions of parties concerned 	<ul style="list-style-type: none"> Budget Paper of MOH Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
	Transferred technologies will be firmly rooted in the organizations?	Cambodian counterparts are capable enough to retain its activities, outputs and outcomes?	<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Project Progress Reports Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	
		Maintenance and operation of granted equipment will be properly carried out in future?	<ul style="list-style-type: none"> Opinions of parties concerned 	<ul style="list-style-type: none"> Project Progress Reports Staff of MOH and ODs, Cambodian members of the project team, Japanese experts, etc. 	<ul style="list-style-type: none"> Literature Survey Interview Evaluation Workshop 	

5. インタビュー記録

CENAT 所長

カンボジア結核対策プロジェクトフェーズ2終了時評価 インタビュー記録

日時：2009年1月6日（火）10:00-11:00

場所：CENAT

面談者：Dr. Mao Tan Eang, Director of CENAT (CENAT 所長)

1. 上位目標について

- 1.1 上位目標の達成見込みが低いように見えるのには、ふたつ理由がある。ひとつは目標（指標）が確固とした根拠に基づかない過度に野心的（over ambitious）なものであること、ふたつ目は WHO のデータの信頼性（reliability）の問題。
- 1.2 上位目標の指標は WHO のコンサルテーションを受けて NTP で立てたもの。現在、2010 年から 2011 年の計画の見直しを行なっており、これらの目標値も見直されることになる。
- 1.3 指標 2 (prevalence) については、NTP の “National TB Prevalence Survey 2002” では 269/100K で、目標値 (270/100K) に達しているはず。（“Global TB Control 2004, WHO”では 311/100K。）

2. プロジェクト目標について

指標 2 (detection rate) の達成度は母数の人口が正しくない。カンボジア政府による “Population Survey 2008” では人口は 1340 万人で、それで計算すると、73%('05), 68%('06), 68.5%('07) となるはず。

Detection Rate は、人口比ではなく、絶対数で評価するのが望ましいと思う。絶対数で見ると、2005 年以降、安定期（Plateau）に達している。

指標 3 (smear(-) registered) も確固とした根拠に基づかない過度に野心的（over ambitious）な目標値ものである。これは NTP の目標ではない。プロジェクトで立てたもの。実数で見れば、2005 年以降、確実に増えてきている。

指標 3 (smear(-) registered) 達成の制約になっていると思われる X 線施設数に関しては、X 線施設の予算が MOH の所掌であり NTP の管轄外であるため思うようにならない。HSSP 2(2008-2015)に保健施設強化のための予算が盛り込まれることになっているので、それに期待している。NTP としては、放射線技師やテクニシャンの能力強化を図っている。WB、GF、JICA などの支援を受けてトレーニングを行なっている。フィルムの購入には JICA と GF の資金援助を受けている。

3. JICA の貢献について

JICA は、フェーズ 1 で DOTS を decentralize し、フェーズ 2 で全国展開してくれた。

そのなかで、すべてのレベルでのキャパシティビルディングを行なってくれた。キャパシティには、policy guideline, policy planning, policy M/E が含まれる。 guideline, planning, M/E などは、これらに関する活動を日本人専門家も含めたチームで行なっているので、それによって「質」は担保されていると考える。 M/E (supervision)は“Guidelines on Supervision for NTP 2003”があるので、それに従って行なっている。CENAT から PHD、PHD から OD、OD から HC というカスケード式の ME と平行して、CENAT が直接 OD や HC を直接指導にいくこともある。 チームでいくので、ME の質も問題ないと考えている。

その他、JICA は顕微鏡、コンピューター、薬剤など、インフラを整えてくれた。他にも、TB/HIV、C-DOTS、ラボ、MDR など、すべての面でキャパシティビルディングを行なってくれた。

4. 今後の課題について

JICA の協力終了後の NTP の課題は資金。WB の 10 年に及ぶ支援が終了し、JICA のプロジェクトも終わり、そのうえ GF round 8 を獲得できなかつたので、今後の資金難が懸念される。NTP としては、GF、USAID、JICA、WHO、US-CDC、TB-CAP、WFP、NGO 等の資金を探っていきたい。

NTP の今後のビジョンは“Interim Policy & Strategy 2009-2015”を現在作成中で、そこに今後のビジョンが盛り込まれる。MDG の達成に焦点が当てられることになる。

日時：2009年1月6日（火）11:00-12:00

場所：CENAT

面談者：Dr. Jim McLaughlin, Diplomat, American Board of Medical Microbiology, Microbiology Laboratory Advisor, National Laboratory of Public Health (US-CDC)

1. US-CDCについて

- 1.1. US-CDCはGAP（Global AIDS Program）の推進に関わっていて、カンボジアではGAPとNTPのリエゾン役を果たしている。また、北西3州（Pursat, Battambang, Palin）でHIV/AIDSの予防と治療を行なっている。JICAとはラボの能力強化で協力している。

2. JICAの貢献について

- 2.1. JICAはEQAのシステム作りにすばらしい貢献をした。6ヶ月ごとから3ヶ月ごとのEQAに移行するために、組織作り、トレーニング、資金提供という貢献を行なった。
 - 2.2. WHOの基準では人口5百万人当たり1件のTB培養ラボを設置することが勧められているが、カンボジアではJICAのおかげでその基準を満たす3件のラボが設置され、スタッフの能力強化も図られた。これは今後の展開のための基盤（foundation）を作ったという意味で非常に重要な意味がある。
 - 2.3. この基盤を元に、US-CDCでは今後、BattambangとKampong Cham（要確認）で液体培養を導入する計画がある。また、MSFもKampong Chhang（要確認）で液体培養を検討している。これらはJICAによるラボの基盤作りがあって初めて計画できること。
 - 2.4. MRD（Output 4-9）に関しても、JICAは訓練と資金提供を通して、カンボジア側の能力強化に大きな貢献を果たしている。
 - 2.5. “National TB Lab Strategic Plan 2007-2010”はNTPをUS-CDCとJICAが協力支援して策定した。
 - 2.6. 他のドナーと比べて特にJICAが優れていると思われる点は2点。まず長期にわたるコミットメント。TB対策はある程度の年数、腰をすえてかかる必要がある。JICAは10年という長期にわたり、長期・短期の専門家を多数派遣して大きな改善効果を挙げた。もうひとつの長所は開放的であること（openness）。多くのドナーは秘密主義的な傾向があるが、JICAは率直で協力的。
3. 今後のTBラボの課題としては、人材養成と薬剤管理。人材養成は重要な課題であり、今後も現場でのトレーニングを続けていく必要がある。薬剤管理・調達は現在進行形の問題であるが、政治的レベルでしか解決できない問題と思われる。

日時：2009年1月6日（火）14:00-14:30

場所：CENAT

面談者：Dr. Team Bak Khim, Vice Director of CENAT (CENAT 副所長)

1. 上位目標について

- 1.1 上位目標の達成見込みが低いように見えるのには、目標（指標）が過度に野心的（over ambitious）なものであるためで、実際の達成度は高いと考える。
- 1.2 GF が 2009 年度から 10% 削減されるなど、予算の制約が大きく、これらの実績を維持していくには課題が多い。

2. プロジェクト目標について

指標 3 (smear(-) registered) は目標が高すぎたのだと思う。

3. JICA プロジェクトについて

- 3.1 最も重要なのは C-DOTS。全国の HC を通じて DOTS を広めることが最重要。次に、それを支えるラボの機能強化が重要。そして、TB 対策へのアクセスを増やす意味での PPM や TB/HIV が必要であり、これらすべてを適切に運営管理するためのマネジメントと ACSM の強化が全体を支える。自分はこのなかの PPM の key person である。

4. PPM-DOTS について

22TB 高負担国のうち、PPM-DOTS を実施しているのは、カンボジアを含めた 5～6ヶ国のみ。

NTP では、11 の PHD の 38 の OD で PPM-DOTS を実施している。OD 数で見ると 38/77、約半数の OD で PPM が実施されていることになる。

これら 11PHD の PPM を JICA、PATH (USAID)、URC (USAID) 3 者の支援を受けて行なっている。JICA は 11PHD のうちの 1 PHD (プノンペン) の 4 OD を支援してくれている。

PPM-DOTS の内容は、まずドナーと戦略について協議し、それに基づいて民間病院等を対象としたアドボカシーを行ない、協力に合意する機関と MOU を結び、訓練を行ない、実施（患者のリファー）を開始するという流れ。

実施は、関係機関と月例会議および 4 半期会議をもってモニターしている。これまでの実績では、協力機関（民間病院）のうちの約 60% が TB 患者をリファーしている。

PPM-DOTS ガイドライン (Output 2-7) は最終ドラフトが完成し承認待ちの状態。

2009 年 3 月には承認がおりる予定。

5. JICA の貢献

JICA はプノンペンの 4 OD を対象に、4 半期会議の経費負担や IEC 活動の資機材作成などを支援してくれている。

JICA の支援の長所は、確実に定期的に資金提供をしてくれるところ。他のドナーはそうでないところが多い。

6. PPM の今後の課題

支援をしてくれている 3 者のうち、JICA と URC が 2009 年で支援を終了するので、残るのは PATH (USAID) のみになり、今後、財政的継続性が最大の課題になる。GF か PATH に財政的支援を依頼することになるが、両方という選択肢がなく、タイミングが悪いと、1 年間どちらの支援も受けられなくなる可能性がある。

日時：2009年1月6日（火）14:30-15:00

場所：CENAT

面談者：Dr. Tieng Sivanna, Vice Chief of Technical Bureau, CENAT (CENAT 副局長)

1. 目標達成度について

1.1 上位目標およびプロジェクト目標3の達成度が低いのは、ともに目標が高すぎたのだ
と考える。

2. Output 1 (Management capacity) について

自分は JICA プロジェクトのなかの Output 1 (Management capacity) を主に担当
している。

計画（1-1）、統計（1-2）、データベース（1-3）の質に関しては、どれも日本人専門家
を含めたチームで行なっているので、それによって質は担保されていると考える。特
に質を取り上げて評価するようなことはしていない。

3. スーパービジョンについて

スーパービジョンは“Guidelines on Supervision for NTP 2003”に従って行なってい
る。CENAT から PHD、PHD から OD、OD から HC というカスケード式のスуп
ーバイジョンと、4 半期ごとの M&E ワークショップの 2 本立てで行なっている。

カスケード式のスーパービジョンは、CENAT から PHD が 4 半期ごとに 20 名くらい
のスーパーバイザーチームで、PHD から OD が最低 2 ヶ月ごとに 2 程度のチームで、
OD から HC は毎月 1 名のスーパーバイザーで、という形で行なっている。

4 半期ごとの M&E ワークショップは PHD と OD を対象に、両者から TB スーパー¹
バイザーが参加している。

このワークショップにはふたつの目的がある。ひとつは活動の進捗報告。もうひとつ
はこの場を利用した TB スーパーバイザーに対する教育訓練。

どれもチームで行なっているので、スーパービジョンの適切さ（質）には問題ないと
考える。

スーパーバイザーの助言が適切だったか、助言が実行されているかどうかは、次回の
スーパービジョンの時に確認することになっている。

TB 対策総予算が\$30 万で、そのうちスーパービジョンの予算が\$6 万～\$7 万程度。

4. JICA の貢献

JICA の貢献で大きいのは、日本人専門家の技術的サポート (technical support) と
資金援助。

日時：2009年1月6日（火）15:30-16:00

場所：CENAT

面談者：Dr. Khun Kim Eam, Chief of Statistics, Planning & IEC Sect., CENAT (CENAT
課長)

1. TB/HIV の経緯と現状

- 1.1 自分は本プロジェクトでは主にTB/HIVを担当している。
- 1.2 NTPのTB/HIVは、2003年にフレームワークができ、2004年から4州でパイロットを開始した。4州は、JICA(Phnom Penh)、FHI(USAID)、US-CDC、WHO(Sihanoukville)。その後拡大され、2008年には67OD／77ODと、かなり広範に広まった。成功していると言える。
- 1.3 活動内容としては、関係者の教育訓練を行なって、双方紹介の実施を行なう。
- 1.4 モニタリングはTWG会議(不定期)を行なっている。これにはNTP、NGO、ドナーなどの関係者が参加している。

2. TB/HIV の成功要因

成功要因は3つ。①TWGがWHOのフレームワークを基にした明確なTB/HIVフレームワークを作ったこと、②TB、HIV双方の関係者のコミットメントが高かったこと、③TWGによる関係者・関係機関の調整が適切に行なわれていること、などがあげられる。

3. TB/HIV の今後の課題

移動手段(transportation)の問題(資金不足等)で、TB suspectsがVCT(Voluntary Counseling Testing)に来られないこと。HCからRHまでの足の問題。

TB側とHIV/AIDS側で、まだ役割分担と紹介手順が徹底されていないところがある。より明確なフレームワークとその周知徹底が必要。

情報の共有化を強化する必要がある。National TB/HIV Workshopを毎年開催している(資金はGF R7)が、まだ情報共有が不足している。

HIVテストの不足。

4. JICA協力終了後の課題

技術的サポート。たとえばresearch protocolの改善など。
資金援助。

日時：2009年1月7日（水）10:00-11:00

場所：CENAT

面談者：Dr. Mom Ky, Assistant Executive Director, CATA (Cambodian Anti-Tuberculosis Association)

1. CATAについて

- 1.1 CATAは現在、民間工場でのPPMと高齢者のTB対策を中心に活動している。
- 1.2 JICAプロジェクトとは民間工場でのPPMで協力している。

2. PPMについて

- 2.1 本プロジェクトでは、プノンペンの主に縫製工場を中心に、NTP、労働省、工場内クリニックの3者が連携した PPPM (Public-Public-Private Mix) のTB対策を展開している。
- 2.2 2007年に6工場をパイロットとして活動を開始し、2008年には16工場にまで広まった。
- 2.3 カンボジアでは法律により、民間工場には必ず工場内クリニックを設置し、医師および／あるいは看護師を常駐させることになっている。（法の対象となる工場の規模は確認できなかったが、プロジェクトで対象となっている工場はすべて被雇用者数200人以上。）
- 2.4 プロジェクトでは、これらの工場の経営者と協議を行ない、TB対策の重要性を認識してもらい、経営者がTB対策実施に合意した工場を対象に、工場内クリニックのスタッフの訓練、従業員を対象としたTB対策キャンペーンなどを行ない、結核の疑いのある従業員をリファーし、結核患者にはDOTSを実施する、という仕組みになっている。
- 2.5 従業員に対するTB対策キャンペーンは、昼休みの時間を利用して行なう。その際は昼食を提供する。他にテレビ放送を利用したキャンペーンもJICAの経費負担で実施している。
- 2.6 工場内クリニックスタッフの訓練は、2日間の訓練と2回のリフレッシャー訓練からなる。2日間の訓練は年に2回、2回のリフレッシャー訓練は年に1度実施している。
- 2.7 訓練の他に、モニタリング目的でフォローアップ・ミーティングも実施している。
- 2.8 プロジェクトでの分担は、主に訓練をCENATが（経費負担はなし）、キャンペーンをJICAが（経費負担あり）行なっている。
- 2.9 初年度の2007年は40ケースがスクリーニング対象となり、内5名のsmear(+)と1名のEPTB患者が発見された。2008年は149ケースがスクリーニング対象となり、内7名のsmear(+)、6名のsmear(-)、6名のEPTB患者が発見された。これらの数

字から見て、この事業は成功していると言ってよいと考える。

- 2.10 本プロジェクトの貢献は2点。①民間工場を対象とした、民間企業の経営者が関心を持つモデルを PPPM のモデルを開発し、それが有効であることを証明した。②上記の通り、実際に発見率を向上させている。

3. JICA 協力終了後の課題

- 3.1 予算不足が課題。PPM のための資金はこれまで JICA、JATA、オーストラリアから受けている。オーストラリアの資金援助はスクリーニングのための移動 (transportation) にかかる経費が対象であり、それ以外のキャンペーン、訓練、フォローアップミーティング等に係る経費は JICA と JATA から得ている。JICA からの資金援助が終了すると、今後の一層の拡大は難しくなり、現状維持を目標とすることになる。

4. PPM の今後の展望

- 4.1 予算が得られれば拡大。得られなければ現状維持。
4.2 工場内 DOTS がまだ不徹底なので、さらに徹底したい。
4.3 経営者の工場内 TB 対策に対する関心をさらに高めたい。

日時：2009年1月7日（水）14:00-15:00、1月9日（金）14:00-15:30

場所：CENAT

面談者：杉山達郎専門家、山本記代美専門家

1. プロジェクト計画について

- 1.1 プロジェクト計画はほぼ NTP の TB 対策と軌を一にしているが、上位目標の指標値 NTP の目標値でない。達成目標年度が 2012 年というのも、MDG にも符合していないくて中途半端。
- 1.2 プロジェクト目標達成にとって重要でないアウトプットは特に見当たらない。アウトプットに結びつかない活動というのは多少はあるが、大きな問題ではない。（たとえば、PHD および OD の TB 関係者を対象とした performance based support や smear 配送料の負担など、GF がなかったフェーズ 1 の頃の名残があつたが、それらもすべて GF その他に委譲して、現在は行なっていない。）

2. 上位目標について

- 2.1 指標の目標値に根拠が見られず、野心的に過ぎると思われる。
- 2.2 児童の BCG 接種率が 90% を超えるなど、条件は整ってきてているので、prevalence は確実に下がってきてているはず。今後は、TB 対策立案のためにも、適切な prevalence survey の実施が重要。

3. Output について

Output 1-1（計画立案）に関しては、何をいつやるといった年間計画は作られているが、それを実行するための実行計画が作られていない。

また、年間計画も、大雑把に何をいつやるといったことしか書かれていないかったり、昨年のものを焼きなおしただけのものなども散見される。

計画を実施した結果のフィードバックや評価も行なわれていない。

計画策定の手順やフォーマットは標準化されており、フォーマットはドナーとも共有されているが、手順やフォーマットの改善が必要と思われる。

Output 1-8（調査、分析）に関しては、分析力がまだ足りない。

スーパービジョン強化が注目されているが、スーパービジョン強化は PDM 上では、Output にも明示されていないし、活動にも直接それに相当するものも見当たらず、スーパービジョン強化に特化した活動は行なっていない。本プロジェクト全体の活動を通してスーパービジョン能力が向上することが期待されていたと考える。

スーパービジョン能力向上の証左をあげるのは難しいが、GF R7 が承認され disburse されているということは、マネジメント能力が向上しているから GF にアピールできたと言えるのではないか。R2、R5 は MOH が principal recipient だったが、R7 から

は CENAT が principal recipient になっている。

Output 2-9 (C-DOTS) は目標値 (665 以上の HC での実施) を達成していない (2008 年時点 525HC) が、これは中間評価時点で当初の目標値が達成されたので目標値をあげたもの。過度に野心的な目標値であると考える。

Output 4-3 (ラボの試薬・物品不足) に関しては、2006 年、2007 年に CMS で消耗品不足が起こっているが、MOF の予算配分が十分でないことも一因で、CENAT の責任範囲外と考える。

今後の再発防止策としては、CENAT は GF 予算で試薬を購入する方針である。プロジェクトでは、ラボに試薬を自作できるだけの能力をつける方向で訓練を行なってきて、現在すでに試薬を自作している。

Output 5-2 (IEC/Advocacy) は、ACSM 戦略のドラフトが完成し、承認待ちの状態。実施までの具体的なステップは未定。

Output 5-2 (村落組織による支援) は、53% の HC が支援を受けていて、目標値 (70%) に達していないが、80% 以上の HC がトレーニングを受講済みで、今後、数値が上がっていくと思われる。

4. 特筆すべき成果

TB/HIV (Output 3-1、3-2)

- (1) TB/HIV には 3 つのモデルが考えられる。①VCT に患者を搬送する。②Mobile VCT によりこちらから患者に接近する。③血液サンプルのみを HC から VCT に搬送する。
- (2) 本プロジェクトでは、プロンペン州内の 4 OD で、このうちの transitional period に相当する②を実施し、患者紹介の向上に大きく貢献した。
- (3) 現在はモデル③に移行し、GF を使って他団体が実施している。

C-DOTS (Output 2-3)

- (1) C-DOTS に関して、各 OD 毎の HC スタッフ会議と、各 HC 毎の H ボランティア会議が行なわれているが、プロジェクトで HC スタッフに TOT を行ない、HC スタッフが H ボランティア会議でボランティアの教育訓練を行なうという工夫をした。会議の場を教育訓練の場として利用したということ。
- (2) ここでの教育訓練のテーマは C-DOTS, TB/HIV, ACSM, 小児 TB などで、この工夫で、Output 2-3(C-DOTS)、3-2(TB/HIV)、3-4(小児 TB)、5-2、5-3(ACSM)を連携させた効率的な活動が行なわれた。

EQA (Output 4-6~4-9)

- (1) EQA は当初、年 2 回だったものを年 4 回に増やした。これによってフィードバックがタイムリーに行なわれるようになった。
- (2) また、実施州も 4 PHD から 7 PHD に増えている。今後は GF、USAID、TBCAP

などの資金を使って 16PHD に展開する予定。

- (3) これは年 4 回のモデルとその実施のためのトレーニングをプロジェクトで開発したものである。
- (4) トレーニングは CENAT 側だけで実施できるレベルに達しており、GF、USAID の資金を使って CENAT によって拡大されつつある。

PPM (Output 2-7、2-8)

- (1) 民間工場を対象にした PPPM は CATA のインタビューで聞いたとおり。
- (2) 工場内 HC スタッフに対する教育訓練は CENAT だけでできるようになり、Public-Public-Private 間のコーディネーションは CATA ができるようになったので、本プロジェクト終了後も拡大の道筋はついたと考える。
- (3) 本件には企業経営者の理解が必須であり、そのためには労働省産業保健課のアプローチが非常に重要。本プロジェクトで労働省との連携の仕組みができたことは特筆に値する。

5. 阻害要因

CENAT 側の情報開示が十分でなかった。CENAT と JICA のコーディネーションの促進を目的に月例会議を行なっていたが、特にプロジェクト開始当初の頃は CENAT 側からの情報開示が不足した。

徐々に改善され、最近ではトレーニングやワークショップの予定などは知らされるようになった。しかし、スーパービジョンの予定はいまだに知らされないため、スーパービジョンに同行してその改善を図るということができなかつた。

日時：2009年1月9日（水）15:00-15:30

場所：CENAT

面談者：Dr. Phen Sok Heng, Chief of National Tuberculosis Reference Laboratory
CENAT

1. 本邦研修について

1.1 実施時期：2008年9月23日～11月29日

1.2 実施場所：RIT

1.3 研修テーマ：TB ラボ（smear の assessment, reading, culture (solid, liquid), DST など）

1.4 研修員：7名（アジア及び中東）

2. 研修の良かった点

知識と技術が身に付いた。

そのことを通して、ラボのマネジメントについて学べた。

実習で使用する器具が CENAT のものとは多少異なったが、問題になるほどではなかった。

帰国後、部下や同僚に知識と技術を紹介するとともに、ラボのマネジメントを改善することができた。適用度の高い有益な研修だったといえる。

3. 研修の改善点

講義や実習で多少、重複するところがあった。

培養と DST に関して、一貫した研修教材がなく、いろいろな資料を集めて使った。

まとめた教材があると、帰国後の適用がより容易になる。

一部、研修経験の少ない新しい講師がいた。

