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MINUTES OF MEETINGS
BETWEEN THE JAPANESE MID-TERM EVALUATION TEAM AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE KINGDOM OF CAMBODIA
ON JAPANESE TECHNICAL COOPERATION
FOR THE NATIONAL TUBERCULOSIS CONTROL PROJECT

The Japanese Mid-term Evaluation Team (hereinafter referred to as “the Team”), organized by the Japan International Cooperation Agency (hereinafter referred to as “JICA”) and headed by Dr. Nobukatsu ISHIKAWA, visited the Kingdom of Cambodia from November 3 to November 15, 2002. The purpose of the Team was to monitor the activities and evaluate the achievements made so far in the National Tuberculosis Control Project (hereinafter referred to as “the Project”).

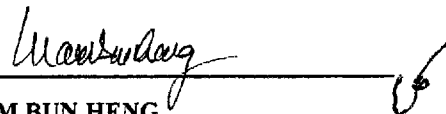
During its stay, both the Team and authorities concerned of the Kingdom of Cambodia (hereinafter referred to as “both sides”) had a series of discussions and exchanged views on the Project. Both sides jointly monitored the activities and evaluated the achievement based on the Project Design Matrix (hereinafter referred to as “PDM”).

As a result of the discussions, both sides agreed to the matters referred to in the documents attached hereto, and the result of evaluation were compiled in the Joint Evaluation Report with mutual understanding.

Phnom Penh, November 15, 2002



Dr. Nobukatsu ISHIKAWA
Leader
The Mid-term Evaluation Team
Japan International Cooperation Agency
Japan



Dr. MAM BUN HENG
Secretary of State for Health
Ministry of Health
The Kingdom of Cambodia

(witnessed by)



Mr. Juro CHIKARAISHI
Resident Representative
Japan International Cooperation Agency
Japan

ATTACHED DOCUMENT

1 Introduction:

The Joint Evaluation Committee (hereinafter referred to as "the JEC") of the Project has reviewed the Mid-term Evaluation Report, initially prepared by the Team, based on the surveys, presentation by the Project, and the discussions with the related authorities.

2 Summary of Evaluation:

The Project has been successfully underway as planned. Remarkable achievements have already been made within the 3 years after its initiation. CENAT staff capacity and NTP functions have been being strengthened under the Project. A pilot model of DOTS at HCs was successfully demonstrated and has been expanded to HCs nationwide. A pilot model for TB/HIV services has been successfully started, and the results have already been contributing to the country policy. National surveys for TB prevalence and drug resistance conducted under the Project must provide scientific grounds for realistic planning and evaluation of NTP. These achievements so far made are fully due to the Cambodian government commitment, strong leadership of the NTP managers and their staff and effective collaboration of the JICA experts. Collaboration and assistance by other donor agencies and NGOs are also to be mentioned as important partners of the Project.

3 Revision of PDM:

Through Mid-term Evaluation, both sides agreed to modify the PDM0 which had been authorized in June 16 1999 by the Record of Discussions. As the Project activities had progressed, the PDM0 needed to be rearranged in accordance with current activity. Therefore, PDM1 was developed and authorized by JEC. The PDM1 are attached in Annex1.

4 Recommendations:

Based on the results of the mid-term evaluation, both sides confirmed the following recommendations.

- 1) NTP with the Project should maintain the high quality services for tuberculosis through further capacity building of the staff concerned, especially at the central, provincial and OD levels.
- 2) NTP should improve basic understanding of quality program expansion among

the health staff at all levels such as avoiding a target oriented approach, not merely to increase the number of patients.

- 3) NTP should keep making efforts to reduce false positive or over-diagnosed patients, which will be an essential basis for scientific planning and evaluation of the national health program.
- 4) NTP should give more focus on sustainable development of the national tuberculosis program in maintaining the services under the existing health system and limited resources, especially within the framework of new health service system (MPA & CPA).
- 5) NTP with the Project should strengthen the logistics and inventory management capacity both for drugs and laboratory materials and reagents.
- 6) NTP should define the future role of the central TB laboratory in CENAT so that reasonable plan for future capacity development can be made.
- 7) NTP should strengthen the collaborative activities with national AIDS program to meet the increasing needs for TB/HIV services in the community.
- 8) NTP with the Project should conduct further operational researches to meet the changing situations such as 6 months short course regimen or childhood tuberculosis.

Annex 1) PDM1

2) Joint Evaluation Report

Project Design Matrix (PDM1) - "The National Tuberculosis Control Project in the Kingdom of Cambodia"

Project Name: The National Tuberculosis Control Project in the Kingdom of Cambodia

Project Area: Whole Country

Duration: 1999. 8.1 ~2004. 7.31

Target Group: Tuberculosis Patients

Date Issued: Nov.14, 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
Overall Goal			
TB mortality and morbidity are reduced so that TB is no longer a threat to the people in Cambodia.	TB morbidity (i.e. prevalence) and mortality is reduced by half within 10 years by 2010.	Result of periodic prevalence surveys	1 The health system reform is smoothly implemented. 2 Big epidemic of HIV does not occur.
Project Purpose			
Quality TB control service with DOTS is expanded nationwide under the new health service structure.	1 The cure rate of 85% is maintained until 2004. 2 The DOTS case detection rate of 70% is achieved by the year 2004.	Statistic data of MOH	1 The political situation stabilizes.
OUTPUTS			
1 Capability of CENAT is improved. 2 NTP functions (planning, training, supervising, monitoring and evaluation) are strengthened. 3 Applications of DOTS suitable for different settings and target groups are developed, and are expanded. 4 TB/HIV pilot project is developed. 5 National network of TB laboratories is strengthened. 6 Surveillance and research activities are strengthened.	1-1 Self evaluation by CENAT staff on their basic capability including medical / public health knowledge 1-2 Evaluation of CENAT capability under NTP by other related organizations 2-1 Result of joint evaluation with donors on NTP achievement 3-1 Result of external evaluation 3-2 All HCs established by 2002 are covered by DOTS by 2004. 4-1 Result of external evaluation for the pilot project on TB/HIV. 5-1 Evaluation Indicators for quality control system 5-2 Number of bacteriological examinations for TB and their results (smear microscopy, culture) 5-3 Inventory management of laboratory materials / reagents in each TB laboratory 6-1 Achievements are reported on international occasions by 2004. 6-2 Planned surveys are conducted by 2004	1-1 CENAT documents (Survey Result) 1-2 CENAT documents (Interview result) 2-1 Evaluation Report with donors 3-1 External evaluation report 3-2 Statistic Data of MOH 4-1 Evaluation report 5-1 CENAT documents 5-2 CENAT documents 5-3 CENAT documents 6-1 Publications and survey reports 6-2 CENAT documents	1 Big changes in nature environment do not occur. 2 Changes in social circumstances do not occur that will influence much on household economy.

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Activities	INPUTS		
	Cambodian Side	Japanese Side	
1 Capability of CENAT is improved. 1-1 Improve basic capacity, including communicating and computer technique. 1-2 Increase management skills, especially in planning, monitoring and evaluation. 1-3 Enhance basic medical /public health knowledge. 1-4 Coordinate related organizations on the central level. 2 NTP functions (planning, training, supervising, monitoring and evaluation) are strengthened. 2-1 Prepare annual plan. 2-2 Organize regular meetings to evaluate the activities. 2-3 Give feedback for supervision. 2-4 Organize trainings for provincial and operational district levels, especially for trainers and supervisors. 2-5 Improve recording and reporting system. 2-6 Develop IEC materials on TB for people. 2-7 Develop modules and training materials for health staff. 2-8 Coordinate donors and related agencies in local level, including GOs, INGOs, and domestic NGOs. 2-9 Monitor logistic schemes, especially on TB drugs and laboratory materials. 3 Applications of DOTS suitable for different settings and target groups are developed and are expanded. 3-1 Conduct the operational research at Health Center under DOTS 3-2 Introduce DOTS to the Model area and expand to the HC level 3-3 Support TB Control development in urban area. 3-4 Support local TB programs assisted by other donor agencies such as local NGO. 4 TB/HIV pilot project is developed. 4-1 Organize workshop and training with special attention to patients/clients rights on TB/HIV control 4-2 Develop the cooperation strategy to cope with TB/HIV. 4-3 Conduct the pilot project for TB/HIV Control 4-4 Conduct the local program for TB/HIV Control 5 National network of TB laboratories is strengthened. 5-1 Develop manuals and modules for TB laboratory staff. 5-2 Organize trainings for laboratory personnel. 5-3 Improve QC(Quality Control) system for TB laboratory. 5-4 Establish referral system of TB laboratory. 6 Surveillance and research activities are strengthened. 6-1 Conduct prevalence survey of tuberculosis and/or TB infection. 6-2 Conduct drug resistance survey among TB patients. 6-3 Conduct HIV seroprevalence survey among TB patients. 6-4 Conduct operational research for any specific issue. 6-5 Conduct other studies / surveys, e.g., KAP study, delay analysis.	1 Counterpart 2 Trainee 3 Facility, Land	1 Long-term Experts Chief-Advisor Coordinators Laboratory Technology 2 Short-term Experts TB Control Epidemiology HIV testing Information Management Drug Management Health Administration 3 Equipment 4 Training in Japan	1 Newly trained personnel do not leave his/her job. 2 NTP staff accept the implementation of the guideline.
			Pre-Conditions
			* Staff involved in NTP do not object to the implementation of the Project.

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2. 合同評価報告書

**JOINT EVALUATION REPORT
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE NATIONAL TUBERCULOSIS CONTROL PROJECT**

**JAPAN INTERNATIONAL COOPERATION AGENCY
JAPAN**

AND

**MINISTRY OF HEALTH
KINGDOM OF CAMBODIA**

NOVEMBER 14, 2002



Joint Evaluation Report

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1 Introduction

1.1 Summary of Study Team

JICA dispatched the Mid-term Evaluation Team (hereinafter referred to as “the Team”) to Cambodia from November 3 to November 15, 2002 for the National Tuberculosis Control Project (hereinafter referred to as “the Project”). The Team evaluated achievements so far made in the Project, which started in August 1999. The Team is headed by Dr. Nobukatsu ISHIKAWA.

In collaboration with Cambodia counterparts, the Team prepared this Joint Evaluation Report to summarize the achievements of the Project, and to give some recommendations for the remaining period of implementation.

The members of the Team are shown as follows:

	Name	Mission	Job Title	Duration of stay
1	Dr. Nobukatsu ISHIKAWA	Team Leader	Deputy Director, Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association	2002.11.10-15
2	Dr. Kosuke OKADA	Tuberculosis Control	Director, Kochi Prefectural Motoyama Health Center	2002.11.10-15
3	Ms. Naoko SUGITANI	Cooperation Evaluation	Staff, First Medical Cooperation Division, Medical Cooperation Department, JICA	2002.11.10-15
4	Ms. Shinobu MAMIYA	PCM Evaluation	Researcher, Social Development Department, Global Link Management	2002.11.3-15

1.2 Background of the Project

1) Fact Finding Team

The fact finding team headed by Toru MORI visited Cambodia from March 2 to March 7, 1998. The Team surveyed the basic situation of health sector, and had series of discussion with people concerned. As a result, it was concluded the tuberculosis control had high priority, and there were urgent needs for Japanese technical cooperation. The expecting areas of cooperation had been defined as strengthening NTP function, implementing surveillance and logistics management.

2) Preparatory Study Team

The preparatory study team headed by Dr. Nobukatsu ISHIKAWA visited Cambodia from May 25 to May 30, 1998, in order to decide scope of cooperation and to collect basic information for grant aid program of rehabilitation of CENAT building. Through the mission, the outline of the project, including project purpose, plan of operation, and components of Japanese inputs, were agreed by both Japanese and Cambodian sides.

3) Project Design Team

The project design team headed by Dr. Toru MORI visited Cambodia from June 6 to June 16, 1999. The team had a series of discussion with Cambodia authorities and the both side signed on the Record of Discussion of the Project on June 16, 1999.

During its stay, two days workshop of the Project Cycle Management (PCM) was also held to clarify the Cambodian needs and to make activity plan for the Project. As a result, the Project Design Matrix (PDM) and the Tentative Schedule of Implementation were formulated with mutual agreement.

4) Project Consultation Team

The Project Consultation Team headed by Dr. Toru MORI visited Cambodia from March 18 to March 24, 2001 to discuss the current problems in the Project and to confirm the progress of the activities. The team made following recommendation;

- * The Project should continue the efforts to expand DOTS in MPA –HCs.
- * The effective system of supervision for the new DOTS strategy should be developed.
- * The job description of the CENAT staff should be elaborated more clearly.
- * The NTP managers should hold regular meeting for coordinating the partners for their efficient activities.
- * The Cambodian government should consider enhancing the capability of the CENAT staff.
- * The CENAT should be aware that the earlier expansion of new DOTS strategy is the top priority in its mission.



2. EVALUATION PROCESS

2.1 Methodology of Evaluation

The Evaluation Team conducted surveys in the project site and interviews with the counterpart personnel, collaborating donor agencies, NGOs, residents and patients in the model areas as well as the Japanese experts engaged in the Project. The Team analyzed and evaluated the Project by means of Accomplishment Grid and Evaluation Grid from the viewpoints of evaluation criteria according to the method of Project Cycle Management (PCM). Finally, the Team made a set of recommendations.

Accomplishment of the Project in terms of Inputs, Activities and Outputs were assessed in comparison with the R/D, the Project Design Matrix (PDM0) as shown in ANNEX I.

2.2 Criteria for Evaluation

1) Relevance:

Relevance of the Project is reviewed by the validity of the Project Purpose and Overall Goal in connection with the government development policy and needs of tuberculosis patients in the Kingdom of Cambodia.

2) Effectiveness

Effectiveness is assessed to what extent the Project has achieved its purpose, clarifying the relationship between the Project purpose and outputs.

3) Efficiency

Efficiency of the Project implementation is analyzed with emphasis on the relationship between outputs and inputs in terms of timing, quality and quantity.

4) Impact

Impact of the Project is assessed in terms of positive /negative, and intended/unintended influence caused by the Project.

5) Sustainability

Sustainability of the Project is assessed in terms of organizational, financial and technical aspects by examining the extent to what the achievements of the Project will be sustained or expanded after the Project is completed.

2.3 Preparation of PDM for evaluation

As a result of discussions between the Team and the Cambodian authorities concerned, the PDM for evaluation (hereinafter called "PDMe) was created, considering the

changed circumstances of the Project and the actual activities being implemented.

- 2.3.1 One of the main revised points is to add the two other outputs (Output 3 and 4) to reflect the newly added activities as the project has been being progressed. Those added outputs and its activities are shown below.

Output 3. Application of DOTS suitable for different settings and target groups are developed, and are expanded.

- 3-1 Conduct the operational research at HC under DOTS
- 3-2 Introduce DOTS to the Model area and expand to the HC level
- 3-3 Support TB control development in urban area
- 3-4 Support local TB programs assisted by other donor agencies such as local NGO.

Output 4. HIV project is developed.

- 4-1 Organize workshop and training with special attention to patients/clients rights on TB/HIV control
- 4-2 Develop the cooperation strategy to cope with TB/HIV.
- 4-3 Conduct the pilot project for TB/HIV control.
- 4-4 Conduct the local program for TB/HIV control.

- 2.3.2 Some Activities are restated.

“1-3 Enhance basic medical knowledge of the staff” is restated as “1-3 Enhance basic medical / public health knowledge.”

“2-1 Organize regular meetings to evaluate the activities, to prepare annual plan and to give feedback for supervision” is divided into three activities shown as, “2-1 Prepare annual plan.”, “2-2 Organize regular meetings to evaluate the activities”, and “2-3 Give feedback for supervision..”

“2-8 Pay special attention to HIV/TB co-infection with close collaboration with HIV/AIDS program” is revised and included in Output 4 as “Organize workshop and training with special attention to patients/clients rights on TB/HIV control”



2.3.3 Some Objectively Verifiable Indicators (hereinafter "Indicators") set up in PDM0 had not been clearly defined to measure the achievement of outputs. Therefore, they were restated or revised as shown below.

- Indicators for the Overall Goal

"Declining trend of TB morbidity is confirmed by the year 2010" was revised as "TB morbidity and mortality is reduced by half within 10 years by 2010"

- Indicators for the Project Purpose

"The case detection rate of 70% is achieved by the year 2004" was revised as "The DOTS case detection rate of 70% is achieved by the year 2004."

"90% of the population is covered by DOTS by 2004" has been eliminated from the Indicator of the Project Purpose. And it was shifted to the Indicator for the Output 3 (3-2) as being restated as "All HCs established by 2002 are covered by DOTS by 2004."

- Indicators for the Output 1

"80% of CENAT staff acquire enough capacity to fulfill his/her role by 2004" is replaced by, "1-1 Self evaluation by CENAT staff on their basic capability including medical/public health knowledge", and "1-2 Evaluation of CENAT capability under NTP by other related organizations."

- Indicators for the Output 2

"2-1 90% of annually planned targets are achieved." is replaced by, "2-1 Result of joint evaluation with donors on NTP achievement"

- Indicators for the Output 3

An indicator for this output is newly added as "3-1 Result of external evaluation" and "3-2 All MPA-HCs established by 2002 are covered by DOTS by 2004."



- Indicators for the Output 4

An indicator for this output is newly added as “4-1 Result of external evaluation for the pilot project on TB/HIV.”

- Indicators for the Output 5

“3-1 Good reporting is made from 95% microscopy centers by 2004” is replaced by, “5-1 Evaluation indicators for quality control system” and “5-2 Number of bacteriological examinations for TB and their results (smear microscopy, culture), and “5-3 Inventory management of laboratory materials / reagents in each TB laboratory”.

- Indicators for the Output 6

“6-2 Planned surveys are conducted by 2004” is newly added.

2.3.4 Important Assumptions were reviewed, considering the changing circumstances to proceed the project activities, and two Important Assumptions were eliminated as shown below.

“Multi-drug resistant TB bacteria do not prevail” and “Involvement of MOH does not weaken.”

2.4 Revision of PDM:

The Mid-term Evaluation was conducted based on the PDMe. It is agreed that PDMe will be used to monitor the project activities for the remaining period of the Project as PDM1 which is shown in ANNEX 2.



3. Achievements and Implementation Process

3.1 Inputs

3.1.1 Japanese Side

a) Experts

- i. Long-term experts: A total of four (4) long-term experts have been dispatched. They are the Chief Advisor, Project Coordinator, and the expert on Laboratory Technology.

- ii. Short-term experts: A total of twenty-nine (29) short-term experts have been dispatched. The fields of experts are as follows:
TB Control, Epidemiology, Laboratory Technology, Drug Management, X-ray Diagnosis, Radiology, HIV Testing, TB/HIV Control, Health Administration

The list of experts is shown in ANNEX 3.

b) Provision of machinery and equipment

The machinery and equipment worth approximately 122,675,000 Japanese yen (US\$1,068,000) in total have been provided.

The list of equipment is shown in ANNEX 4.

c) Trainings for Counterparts

The total of twelve (12) persons have been trained under the C/P training scheme in Japan in the fields of Tuberculosis Control at the Research Institute of Tuberculosis (RIT) in Japan.

The following trainings have also been arranged by the Project with other schemes.

- Clinical Laboratory training in Thailand
- TB Control and Management TB Intermediate-Level at RIT
- Community Based Approach HIV/AIDS Management in Thailand
- Training for Future Health Leaders at the Tokai University in Japan

The list of these trainings is shown in ANNEX 5 and 6.

d) **Human Resources Development**

Human resources development has been made through following trainings and workshops to the related health staffs fully or partially supported by the Project.

- National level trainings and workshops for TB control, laboratory, prevalence survey, community DOTS, etc.
- In-country training for CENAT and provincial health staff for DOTS expansion, Serology and HIV testing
- DOTS training for Health Center staff
- International level trainings and workshops for National TB program, TB/HIV Control, etc.

The list of these training is shown in ANNEX 7.

e) **Others (Local cost support)**

For the effective and smooth implementation of the Project, a total amount of US\$708,673.21 has been provided since the project was started. The breakdown by item of expense of each year is shown in ANNEX. 8.

3.1.2 Cambodian Side

a) **Appointment of counterpart personnel**

Fifteen (15) persons have been appointed as the counterpart personnel by the Cambodian side.

The list of counterpart personnel is shown in ANNEX 9.

b) **Office space for experts**

The office space for Japanese experts has been provided on the 3rd floor of CENAT building.

c) **Allocation of budget**

The project has been supported by the budget under NTP, Cambodia.



3.1.3 Other sources

Other sources of funds and assistances from other donors such as World Bank, WHO, WFP, USAID, IUATLD, MSF-F, and Japanese Foundation for AIDS Prevention, have been mobilized to facilitate Project's activities. The details are shown in ANNEX 7.

3.2 Achievement of Activities

Activities consist of the following thirty (30) fields as shown in the PDM. The activities completed and ongoing at the time of evaluation are summarized as follows:

Activities	Results
<p>1.1 Improve basic capacity, including communicating and computer technique.</p>	<p>A series of English trainings have been conducted since Oct. 1999 for Cambodian counterparts and local staff of the Project. According to the self-evaluation conducted during the evaluation mission, it is confirmed that their English reading and speaking capabilities of CENAT staff has been much improved and thus to facilitate the communication in the process of project activities. It is recommended that further efforts should be made to improve their English writing skills. In 2001, some of laboratory staff received the training to improve their presentation skills as well.</p> <p>Training of computer skills has been conducted since Jan. 2001 for Cambodian counterparts and local staff of the Project. According to the self-evaluation, it is confirmed that the computer skills for Word, Excel have been much improved and those acquired skills have been fully utilized at work. It is also confirmed that the computer skills for MS ACCESS, ADVANCE, the internet/E-mail, which needs further training, is useful for future activities.</p>
<p>1.2 Increase management skills, especially in planning, monitoring and evaluation.</p>	<p>Thirteen (13) counterparts have participated in the TB control management course at RIT, Japan. Six (6) counterparts have participated in the technical exchange program of clinical laboratory at Khon Kaen University, Thailand. According to the self-evaluation, it is confirmed that those courses have proven to be very useful to improve their managerial skills and clinical laboratory for TB control, and thus to help them to supervise the HC staff for DOTS expansion.</p> <p>In addition, several counterparts and local staff have received other trainings, such as HIV/AIDS management, Future health leaders, etc., through other JICA schemes in 2001 and 2002. According to the individual interviews, it is observed that the knowledge and skills acquired at the training have effectively been utilized at work. It is required to improve their skills in planning and in IEC.</p>
<p>1.3 Enhance basic medical (and public health) knowledge of the staff.</p>	<p>According to the self-evaluation, it is confirmed that the medical knowledge of the CENAT staff for TB and DOTS has been much improved. The knowledge for HIV/AIDS and laboratory has been somewhat improved. Those acquired skills have been fully utilized at work.</p>

1.4 Coordinate related organizations on the central level.	Interagency Coordinating Committee (ICC) has been established to facilitate the coordination among organizations on the central level and it has been functioning as a useful mechanism to promote the coordination among organizations. It has also served to facilitate the DOTS expansion by sharing the views and technical expertise among organizations. A closer communication with many NGOs related to TB or TB/HIV work at community level has been made with the Project/CENAT.
2.1 Prepare annual plan	Annual action plan for CENAT was made and submitted to MOH as scheduled every year. The NTP action plan for 2003 is now under process and will be finalized soon. The preparation process of these plans has been conducted with the team effort of the Project.
2.2 Organize regular meetings to evaluate the activities	<p>Annual Conferences were conducted as planned each year. The number of participants from different stakeholders has increased every year. Quarterly workshops were conducted as planned. Since many project members have engaged in the prevalence survey, other types of gathering have replaced two of quarterly workshops this year. Monthly meetings within CENAT staff were conducted as planned. Central Supervisor meetings were held as planned except this year due to the survey. It is agreed that the frequency of the meetings should be reviewed to meet the real needs.</p> <p>It is also agreed that the number of participants from NGOs should be increased in the future in order to share the strategy and ideas to strengthen the community involvement for DOTS expansion.</p>
2.3 Give feedback for supervision	Supervision and the feedback among central and provincial supervisors have not always functioned well. It is agreed that the current system of supervision and reporting should be reviewed to make it more efficient and practical.
2.4 Organize trainings for provincial and operational district levels, especially for trainers and supervisors.	Almost all trainings have been conducted as scheduled. It is observed that the capability of trainers and supervisors of provincial and operational district levels has been improved.
2.5 Improve recording and reporting system.	The recording / reporting activities has been greatly improved. It is recognized that there exists false positive (unintentional or intentional) or over-diagnosed /misclassified patients in the registration record. However, it has been improving and making the current data more realistic. The publication of annual statistics has been resumed by the group effort of project members.
2.6 Develop IEC materials on TB for people.	Almost all activities have been carried out as planned. Calendars, books for health education have been published and signboards were provided to each HC. These IEC materials have been effectively utilized to expand DOTS in communities.
2.7 Develop modules and training materials for health staff.	Sufficient number of modules and training materials for health staff has been developed as planned. It is agreed that the contents should be reviewed every year and be revised if necessary.

2.8 Coordinate donors and related agencies in local level, including GOs, INGOs, and domestic NGOs.	Coordination among donors and related agencies in local level has been facilitated through various kinds of activities. All kinds of stakeholders from central to rural levels participated in DOTS expansion workshops. More than 30 NGOs participated in dissemination workshops. Weekly report by the Project Chief Advisor has greatly contributed to improve the communication and the network among related organizations.
2.9 Monitor logistic schemes, especially on TB drugs and laboratory materials.	The current system is not functioning well enough to cope with the seasonal fluctuation of the number of TB patients. Distribution delays of laboratory materials (procured through other agencies) have affected the activities. To avoid the leaking, shortage/surplus of drugs, reagent, and laboratory materials, the request system needs to be improved.
3-1 Conduct the operational research at Health Center under DOTS	Operational researches have been successfully conducted. For example, a feasibility study has brought the conclusion that the microscopy should not be used at HC level. This research result was presented at the international conference, and has also been utilized in the policy making of DOTS expansion in health center level.
3-2 Introduce DOTS to the Model area and expand to the HC level	DOTS has been being expanded to the HCs based on the experience of Model area as shown below. . In 1999, 9HCs in 3 provinces started as pilot HCs. In 2000, 60HCs in 8 ODs in 4 provinces covered as pilot OD In 2001, 204 HCs were newly covered. In 2002, 117 HCs were newly covered. Totally, 456 MPA-HCs including FDHs are providing DOTS (as of Nov.2002.)
3-3 Support TB control development in urban area	DOTS in Phnom Penh has been promoted as planned in collaboration with the Municipality and other agencies. In 2001, 10HCs in 4 OD were covered and in 2002, 7 HCs were covered by DOTS. Home delivery DOTS, which was developed by other project supported by MSF/F has been taken over and further developed by the Project.
3-4 Support local TB programs assisted by other donor agencies such as local NGO.	The Project has been supporting NGOs' TB activities, such as SHARE in Srey San Tor OD, CARE in Sre Am Bit OD, and CHC in Svay rieng Province.
4-1 Organize workshop and training with special attention to patients/clients rights on TB/HIV control	In 2001 and 2002, workshops were conducted as planned. Attention to patients/clients right aspects will be continuously considered.
4-2 Develop the cooperation strategy to cope with TB/HIV	The country framework of TB/HIV was completed and disseminated as planned. Project proposal for pilot program are drafted.
4-3 Conduct the pilot project for TB/HIV control.	"Afternoon Clinic" at CENAT has been set up, and been appreciated by the patients / NGOs. This pilot has been contributing to develop country policy and frame for TB/HIV services.

4-4 Conduct the local program for TB/HIV Control	4 spots were selected the pilot program and preparation for implementation are ongoing. The TB/HIV pilot project proposal at provincial level in 4 TB/HIV spot is being developed. The project will be started in 2003.
5-1 Develop manuals and modules for TB laboratory staff.	Manuals and modules have been developed as planned. However, the printings have not yet been completed.
5-2 Organize trainings for laboratory personnel.	Various types of trainings for TB laboratory staff, such as those for new staff, for quality control, have been conducted as planned.
5-3 Improve QC (Quality Control) system for TB laboratory.	The external quality control system has been introduced in the TB laboratory network. Staff needs to be trained to manage the system. The internal quality control for culture and DST, have not yet been established.
5-4 Establish referral system of TB laboratory.	The transportation of slides from HC to TB units is being carried out smoothly. This has made it easier to implement External Quality Assurance (EQA) in the TB laboratory network. However, the proper system such as filling up the feedback sheets for EQA and returning it in timely manner has not been established yet.
6-1 Conduct prevalence survey of tuberculosis and /or TB infection.	The survey has been in the process as scheduled with the good teamwork of the Project.
6-2 Conduct drug resistance survey among TB patients.	The survey has been successfully completed as planned. The result is being utilized in DOTS expansion plan. And it was presented in the international conference.
6-3 Conduct HIV seroprevalence survey among TB patients.	The draft protocol of HIV seroprevalence survey has been developed as planned.
6-4 Conduct operational research for any specific issue.	Besides the feasibility study of microscopy examination at HC level, other studies will be processed after the prevalence survey is completed.
6-5 Conduct other studies/ surveys, e.g., KAP study, delay analysis.	Delay analysis has been completed as planned. Other studies will be processed after the prevalence survey is completed.

3.3 Results of Outputs

Results of outputs are summarized as follows:

Output 1: Capability of CENAT is improved.

It is confirmed by the C/P self-evaluation and interviews with partner agencies that the capability of CENAT has been greatly improved.

Various activities conducted under the Project have promoted improvement of the capacity of CENAT staff in the process of activity implementation. For example, CENAT staff has improved management capacity through planning, organizing, implementing and evaluating workshops and trainings with Japanese experts. Besides, a series of trainings for English, computer skills and presentation skills have also contributed to improving the basic capability of CENAT staff. Counterpart trainings for TB control at RIT in Japan, several overseas training courses for clinical laboratory and technical exchange programs have proven to be useful to increase their medical and public health knowledge as well as to improve their managerial skills to proceed the project activities.

Moreover, the coordination and collaboration among donors and NGOs have been facilitated by the establishment of ICC (Interagency Coordination Committee). CENAT has been playing a leading role to combine the contribution of donors and NGOs to initiate the collective action for TB control.

Output 2: NTP functions (planning, training, supervising, monitoring and evaluation) are strengthened.

Not only planned activities but also some more additional activities have been successfully carried out according to the necessity. The Project has strengthened overall NTP functions partly with the collaboration of related donor agencies and NGOs. The result of this output will be assessed by the joint evaluation of NTP achievements with donor agencies, which is scheduled in 2003.

In addition, capacity of health staff at provincial, Operational District, and HC levels has been strengthened through trainings /workshops and works for tuberculosis control.

Output 3: Applications of DOTS suitable for different setting and target groups are developed and are expanded.

Model approach has been developed through operational research in pilot area, and expanded to other health centers throughout the country. By October 2002, 456 MPA (Minimum Package Activities) HCs including FDHs are covered by DOTS out of 814 HCs (coverage rate of 56%) within three years after the initiation of the Project. DOTS expansion to HC is contributing to maintaining high treatment success rate over 90% in

the country. The case detection both in quantity and quality has been significantly improving.

The external evaluation by NGOs (SHARE, CARE, and CHC) showed that applications on decentralized DOTS in HC have been working well. Health workers are executing well the HC-DOTS program, increasing the total number of people using HC services.

Output 4: TB/HIV pilot project is developed.

According to the increased needs and available strategies, TB/HIV pilot project has been developed. "Afternoon Clinic" at CENAT has been started and proved to be one of the effective means of TB/HIV services. It is appreciated by the patients / NGOs. Moreover, this pilot project has been contributing to development of country framework for TB/HIV.

Output 5: National network of TB laboratories is strengthened.

Various types of trainings for TB laboratory staff have been conducted as planned. In order to improve the performance in TB laboratory, the external quality control system has been introduced in the TB laboratory network. The evaluation indicators have revealed that the quality control of TB laboratory units has been improving. And the increase of TB examinations and their results have shown that the capacity of TB laboratory network has been expanding.

However, there still needs a further improvement in quality services in the management of laboratory network as well as in the function of the central laboratory.

Output 6: Surveillance and research activities are strengthened.

Drug Resistance Survey and National TB Prevalence Survey have been conducted as planned. The result of the Drug Resistance Survey has been presented in the international conferences, and is being utilized in DOTS expansions plan. National TB Prevalence Survey has been in the process and preliminary results will be available by Feb. 2003.



3.4 Implementation Process

The Project has been progressed mostly as planned. The Project has also expanded its scope of activities as the DOTS expansion is being progressed. The communication among the project members has been facilitated by meetings, workshops and the surveys. Japanese experts and Cambodian counterparts have been closely working together. These shared experiences have also contributed to improve the teamwork of the Project.

It is observed during the evaluation mission that the progress has not been periodically monitored by PDM. Some of the activities newly added after the Project started has not been reflected on the PDM. And the Annual Plan of Operation (APO) has not been prepared each year. It is recommended that the project should use the PDM as a tool of monitoring the progress and the Plan Operation (PO) or APO to plan the annual activities overall.



4. Evaluation by Five Criteria

4.1 Relevance

The Project's overall goal and project purpose have consistency with the policy of Cambodian government. The Ministry of Health of the Kingdom of Cambodia, in its overall national health policies and strategies, has given the highest priority to the control of communicable diseases in the country. And the tuberculosis (TB) is ranked as one of the most important diseases to be tackled.

The Project is relevant to the need of TB patients and community people. Cambodia is among the 22 countries in the world with a high burden of tuberculosis. In order to respond to the need for controlling the disease, the government adopted DOTS (Directly Observed Treatment, Short-Course) strategy since 1994. The DOTS expansion for the past few years has demonstrated that the strategy is the effective intervention to combat the disease.

Overall Goal and Project Purpose are also consistent with the policy of JICA's assistance to Cambodia, which defines the health sector development as one of the key issues to be tackled. Especially, a focus is on the control of communicable diseases, which includes TB, HIV/AIDS and TB/HIV co-infection.

4.2 Effectiveness

Six outputs have been contributing to the Project Purpose directly, and the Project has expanded its scope of activities as the DOTS expansion is being progressed. According to the surveys and interviews to related agencies, it is indicated that the contribution of this project toward the national goal has been highly appreciated.

The following points are recognized as the promoting factors for project advancement. First, good coordination and collaboration among related donor agencies and NGOs have provided an opportunity to exchange the mutually effective resources. It has often helped to avoid the duplication of development assistance. This collaboration mechanism has been further improved through the weekly report on Internet by the Project Chief Advisor. Second, the flexibilities of JICA project scheme, especially the



local cost support, have been constructively assisting the project advancement. Furthermore, the effective use of other JICA scheme in a timely manner, such as the grant aid, technology local adaptation and training in the third country has maximized the benefit of each scheme.

Currently hampering factors for project activities are not recognized. However, some of the indicators set up in the original PDM are not clearly defined to measure the achievement of the outputs. It is recommended that the Project should use the PDM1 as a tool to monitor the progress of project activities for the remaining period.

4.3 Efficiency

Overall efficiency of the Project is high and inputs have promoted the smooth implementation.

4.3.1 Japanese Side

1) Dispatch of experts

Long-term experts in the field of Chief Advisor, Laboratory Technology, and Coordinator have been dispatched on schedule. Totally twenty-nine (29) short-term experts were dispatched as almost scheduled. There were a few problems in regard to the assignment period¹, but these have not influenced the project progress much. It is assessed that the amount and the expertise of Japanese experts are appropriate. It may be reconsidered to assign one expert, or another human resources for TB control position since the Chief Advisor holds this additional position.

2) Provision of equipment and machinery

The quality and the quantity of the equipment were appropriate in general. Most of equipment is properly utilized for the project implementation. However, it is noted that the delay of equipment procurement has influenced the project progress. It is recommended that the timing of procurement for equipment should be streamlined by cooperation and coordination among the project team, JICA Cambodian Office, and the JICA headquarter. In accordance with the DOTS expansion to the peripheral level, more laboratory equipment is to be used at TB unit in peripheral level. It is also recommended

¹ According to the interviews, some of counterparts requested to extend the period of assignment for the short-term experts.

that the Project should establish the system to monitor the maintenance of equipment on a regular basis.

3) Trainings for Counterparts

It is evaluated that the contents of training in Japan is very effective for counterpart personnel and increase their motivation and confidence. Those who attend training in Japan have applied knowledge and skills acquired through training to their works. In order to improve the basic capability of counterpart personnel, the Project has also provided the overseas trainings under other JICA scheme. Furthermore, most of the counterparts as well as other CENAT staffs have received the trainings for English and computer skills. This has greatly contributed to improve the communication and facilitate the project activities.

4.3.2 Cambodian Side

1) Office space for experts

Provision of the office space on the 3rd floor of CENET that locates on the same floor of those of counterparts has been facilitating the close communication between Japanese experts and Cambodian counterparts.

2) Counterparts

The Cambodian side has first assigned fifteen (15) counterparts to work under the National Tuberculoses Program in collaboration with Japanese experts. As the scale of project activities has been expanding, it is expected that the number of counterparts will increase.

4.4 Impact

Although the impact of the Project Purpose to the Overall Goal will be assessed at the final evaluation, following positive impacts by the Project activities have been observed.

First, the intervention of TB control by the Project through existing health care system has been contributing to strengthening the facility and the staff capacity of health services at peripheral level. According to the external evaluation of the pilot program, it is indicated that health workers have been motivated to work and the number of patients have increased at the health centers with DOTS. Second, the remarkable achievements



of the Project have shown the potential capacity of the Cambodia as a model of national tuberculosis program development in Asia. At this moment, any negative impact by the Project has not been observed.

4.5 Sustainability

4.5.1 Organizational aspect

CENAT assumes overall responsibility for NTP to be implemented countrywide. It is predicted that the CENAT is continuously supported by the government strong commitment until Project Purpose is fulfilled.

4.5.2 Financial aspect

Currently, it is not possible to predict whether the financial resources are secured for the future activities after the cooperation finishes.

4.5.3 Technical aspect

Technical sustainability is, at this moment, likely to remain in CENAT after the cooperation finishes. The counterparts have acquired the skills, knowledge and experience and been much motivated to achieve the national goal. Moreover, the Project is accumulating the TB control information and expertise through the researches, surveys, program implementations, etc. It is highly expected that the counterparts at the central level will share the knowledge and expertise to the health staff at lower levels such as province or OD.

5 Recommendations

Based on the results of the evaluation, the Team has made following recommendations for the further successful implementation of the Project.

1. NTP with the Project should maintain the high quality services for tuberculosis through further capacity building of the staff concerned, especially at the central, provincial and OD levels.
2. NTP should improve basic understanding of quality program expansion among the health staff at all levels such as avoiding a target oriented approach, not merely to increase the number of patients.
3. NTP should keep making efforts to reduce false positive or over-diagnosed patients, which will be an essential basis for scientific planning and evaluation of the national health program.
4. NTP should give more focus on sustainable development of the national tuberculosis program in maintaining the services under the existing health system and limited resources, especially within the framework of new health service system (MPA & CPA).
5. NTP with the Project should strengthen the logistics and inventory management capacity both for drugs and laboratory materials and reagents.
6. NTP should define the future role of the central TB laboratory in CENAT so that reasonable plan for future capacity development can be made.
7. NTP should strengthen the collaborative activities with national AIDS program to meet the increasing needs for TB/HIV services in the community.
8. NTP with the Project should conduct further operational researches to meet the changing situations such as 6 months short course regimen or childhood tuberculosis.



Project Design Matrix for "The National Tuberculosis Control Project In the Kingdom of Cambodia (PDM-0)

Duration: 1999, August .1 ~ 2004, July .31

Project Name: The National Tuberculosis Control Project In the Kingdom of Cambodia

Target Group : Tuberculosis Patients

Project Area: Whole Country

Date Issued : June 16, 1999

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal</p> <p>TB mortality and morbidity are reduced so that TB is no longer a threat to the people in Cambodia.</p>	<p>Declining trend of TB morbidity is confirmed by the year 2010.</p>	<p>Result of periodic prevalence surveys</p>	<p>1 The health system reform is smoothly implemented. 2 Big epidemic of HIV does not occur.</p>
<p>Project Purpose</p> <p>Quality TB control service with DOTS is expanded nationwide under the new health service structure.</p>	<p>1 The cure rate of 85% is maintained until 2004. 2 The case detection rate of 70% is achieved by the year 2004. 3 90% of the population is covered by DOTS by 2004.</p>	<p>Statistics of MOH</p>	<p>1 The political situation stabilizes. 2 Multi-drug resistant TB bacteria do not prevail.</p>
<p>OUTPUTS</p> <p>1 Capability of CENAT is improved.</p> <p>2 NTP functions (planning, training, supervising, monitoring and evaluation) are strengthened.</p> <p>3 National network of TB laboratories is strengthened.</p> <p>4 Surveillance and research activities are strengthened.</p>	<p>1-1 80% of the CENAT staff acquire enough capacity to fulfill his/her role by 2004. 2-1 90% of annually planned targets are achieved. 3-1 Good reporting is made from 95% microscopy centers by 2004. 4-1 Achievements are reported on international occasions by 2004.</p>	<p>1-1 Annual Report of CENAT 2-1 Annual Report of CENAT 3-1 Annual Report of CENAT 4-1 Publications</p>	<p>1 Involvement of MOH does not weaken. 2 Big changes in nature environment do not occur. 3 Changes in social circumstances do not occur that will influence much on household economy.</p>
<p>Activities</p> <p>1-1 Improve basic capacity, including communicating and computer technique. 1-2 Increase management skills, especially in planning, monitoring and evaluation. 1-3 Enhance basic medical knowledge of the staff. 1-4 Coordinate related organizations on the central level. 2-1 Organize regular meetings to evaluate the activities, to prepare annual plan and to give feedback for supervision. 2-2 Organize trainings for provincial and operational district levels, especially for trainers and supervisors. 2-3 Improve recording and reporting system. 2-4 Develop IEC materials on TB for people. 2-5 Develop modules and training materials for health staff. 2-6 Coordinate donors and related agencies in local level, including Gos, INGOs, and domestic NGOs. 2-7 Monitor logistic schemes, especially on TB drugs and laboratory materials in each level. 2-8 Pay special attention to HIV/TB coinfection with close collaboration with HIV/AIDS program. 3-1 Develop manuals and modules for TB laboratory staff. 3-2 Organize training for laboratory personnel of various levels. 3-3 Improve QC(Quality Control) system for TB laboratory. 3-4 Establish referral system of TB laboratory. 4-1 Conduct prevalence survey of tuberculosis and/or TB infection. 4-2 Conduct the drug resistance survey among TB patients. 4-3 Conduct HIV seroprevalence survey among TB patients. 4-4 Conduct operational research for any specific issue. 4-5 Conduct other studies / surveys, e.g., KAP study, delay analysis.</p>	<p>INPUTS</p> <p>Cambodian Side</p> <p>1 Counterpart 2 Trainee 3 Facility, Land</p>	<p>Japanese Side</p> <p>1 Long-term Experts Chief-Advisor Coordinators Laboratory Technology 2 Short-term Experts TB Control Epidemiology HIV testing Information Management Drug Management Health Administration 3 Equipment 4 Training in Japan</p>	<p>1 Newly trained personnel do not leave his/her job. 2 NTP staff accept the implementation of the guideline.</p> <p>Pre-Conditions</p> <p>* Staff involved in NTP do not object to the implementation of the Project.</p>

Notes: This matrix is formulated tentatively on the assumption that the necessary budget will be acquired by both sides and is subject to change within the framework of the Record of Discussion when the necessary

Project Design Matrix for Evaluation (PDMe/PDM1) - "The National Tuberculosis Control Project in the Kingdom of Cambodia"

ANNEX 2

Duration: 1999. 8.1 ~2004. 7.31

Project Name: The National Tuberculosis Control Project in the Kingdom of Cambodia

Target Group : Tuberculosis Patients

Project Area: Whole Country

Date Issued : Nov.14, 2002

Narrative Summary	Objectively Verifiable Indicators	Means of Verification	Important Assumption
<p>Overall Goal</p> <p>TB mortality and morbidity are reduced so that TB is no longer a threat to the people in Cambodia.</p>	<p>TB morbidity (i.e. prevalence) and mortality is reduced by half within 10 years by 2010.</p>	<p>Result of periodic prevalence surveys</p>	<p>1 The health system reform is smoothly implemented.</p> <p>2 Big epidemic of HIV does not occur.</p>
<p>Project Purpose</p> <p>Quality TB control service with DOTS is expanded nationwide under the new health service structure.</p>	<p>1 The cure rate of 85% is maintained until 2004.</p> <p>2 The DOTS case detection rate of 70% is achieved by the year 2004.</p>	<p>Statistic data of MOH</p>	<p>1 The political situation stabilizes.</p>
<p>OUTPUTS</p> <p>1 Capability of CENAT is improved.</p> <p>2 NTP functions (planning, training, supervising, monitoring and evaluation) are strengthened.</p> <p>3 Applications of DOTS suitable for different settings and target groups are developed, and are expanded.</p> <p>4 TB/HIV pilot project is strengthened.</p> <p>5 National network of TB laboratories is strengthened.</p> <p>6 Surveillance and research activities are strengthened.</p>	<p>1-1 Self evaluation by CENAT staff on their basic capability including medical / public health knowledge</p> <p>1-2 Evaluation of CENAT capability under NTP by other related organizations</p> <p>2-1 Result of joint evaluation with donors on NTP achievement</p> <p>3-1 Result of external evaluation</p> <p>3-2 All MPA-HCs established by 2002 are covered by DOTS by 2004.</p> <p>4-1 Result of external evaluation for the pilot project on TB/HIV.</p> <p>5-1 Evaluation indicators for quality control system</p> <p>5-2 Number of bacteriological examinations for TB and their results (smear microscopy, culture)</p> <p>5-3 Inventory management of laboratory materials / reagents in TB each laboratory</p> <p>6-1 Achievements are reported on international occasions by 2004.</p> <p>6-2 Planned surveys are conducted by 2004</p>	<p>1-1 CENAT documents (Survey Result)</p> <p>1-2 CENAT documents (Interview result)</p> <p>2-1 Evaluation Report with donors</p> <p>3-1 External evaluation report</p> <p>3-2 Statistic Data of MOH</p> <p>4-1 Evaluation report</p> <p>5-1 CENAT documents</p> <p>5-2 CENAT documents</p> <p>5-3 CENAT documents</p> <p>6-1 Publications and survey reports</p> <p>6-2 CENAT documents</p>	<p>1 Big changes in nature environment do not occur.</p> <p>2 Changes in social circumstances do not occur that will influence much on household economy.</p>

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Activities	INPUTS		
	Cambodian Side	Japanese Side	
<p>1 Capability of CENAT is improved.</p> <p>1-1 Improve basic capacity, including communicating and computer technique.</p> <p>1-2 Increase management skills, especially in planning, monitoring and evaluation.</p> <p>1-3 Enhance basic medical /public health knowledge.</p> <p>1-4 Coordinate related organizations on the central level.</p> <p>2 NTP functions (planning, training, supervising, monitoring and evaluation) are strengthened.</p> <p>2-1 Prepare annual plan.</p> <p>2-2 Organize regular meetings to evaluate the activities.</p> <p>2-3 Give feedback for supervision.</p> <p>2-4 Organize trainings for provincial and operational district levels, especially for trainers and supervisors.</p> <p>2-5 Improve recording and reporting system.</p> <p>2-6 Develop IEC materials on TB for people.</p> <p>2-7 Develop modules and training materials for health staff.</p> <p>2-8 Coordinate donors and related agencies in local level, including GOs, INGOs, and domestic NGOs.</p> <p>2-9 Monitor logistic schemes, especially on TB drugs and laboratory materials.</p> <p>3 Applications of DOTS suitable for different settings and target groups are developed and are expanded.</p> <p>3-1 Conduct the operational research at Health Center under DOTS</p> <p>3-2 Introduce DOTS to the Model area and expand to the HC level</p> <p>3-3 Support TB Control development in urban area.</p> <p>3-4 Support local TB programs assisted by other donor agencies such as local NGO.</p> <p>4 TB/HIV pilot project is strengthened.</p> <p>4-1 Organize workshop and training with special attention to patients/clients rights on TB/HIV control</p> <p>4-2 Develop the cooperation strategy to cope with TB/HIV.</p> <p>4-3 Conduct the pilot project for TB/HIV Control</p> <p>4-4 Conduct the local program for TB/HIV Control</p> <p>5 National network of TB laboratories is strengthened.</p> <p>5-1 Develop manuals and modules for TB laboratory staff.</p> <p>5-2 Organize trainings for laboratory personnel.</p> <p>5-3 Improve QC(Quality Control) system for TB laboratory.</p> <p>5-4 Establish referral system of TB laboratory.</p> <p>6 Surveillance and research activities are strengthened.</p> <p>6-1 Conduct prevalence survey of tuberculosis and/or TB infection.</p> <p>6-2 Conduct drug resistance survey among TB patients.</p> <p>6-3 Conduct HIV seroprevalence survey among TB patients.</p> <p>6-4 Conduct operational research for any specific issue.</p> <p>6-5 Conduct other studies / surveys, e.g., KAP study, delay analysis.</p>	<p>1 Counterpart</p> <p>2 Trainee</p> <p>3 Facility, Land</p>	<p>1 Long-term Experts</p> <p>Chief-Advisor</p> <p>Coordinators</p> <p>Laboratory Technology</p> <p>2 Short-term Experts</p> <p>TB Control</p> <p>Epidemiology</p> <p>HIV testing</p> <p>Information Management</p> <p>Drug Management</p> <p>Health Administration</p> <p>3 Equipment</p> <p>4 Training in Japan</p>	<p>1 Newly trained personnel do not leave his/her job.</p> <p>2 NTP staff accept the implementation of the guideline.</p> <p>Pre-Conditions</p> <p>* Staff involved in NTP do not object to the implementation of the Project.</p>

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Dispatch of Experts

Long-term Experts

No.	Field	Name	Term
1	Chief Advisor	Dr. Ikushi Onozaki	20th Aug. 1999 to 28th Feb. 2003
2	Coordinator	Mr. Masaru IIZUKA	20th Aug. 1999 to 19th Aug. 2003
3	Laboratory Technologist	Ms. Kiyoko YAMAKAMI	20th Aug. 1999 to 31st Mar. 2002
4	Laboratory Technologist	Mr. Takashi MIURA	14th May 2002 to 31st Jul. 2003

Short-term Experts

No.	Field	Name	Term
1	Epidemiology	Dr. Norio YAMADA	4th Dec. 1999 to 26th Dec. 1999
2	HIV Testing	Dr. Namiko YOSHIHARA	2nd Mar. 2000 to 18th Mar. 2000
3	TB Control	Dr. Toru MORI	12th Mar. 2000 to 18th Mar. 2000
4	Laboratory Technology	Ms. Akiko FUJIKI	16th Mar. 2000 to 31st Mar. 2000
5	Drug Management	Mr. Yuta UCHIYAMA	17th Apr. 2000 to 30th Jun. 2000
6	Epidemiology	Dr. Norio YAMADA	28th May 2000 to 17th Jun. 2000
7	TB Control	Dr. Nobukatsu ISHIKAWA	16th Jun. 2000 to 24th Jun. 2000
8	Epidemiology/Statistics	Dr. Hitoshi TAGAWA	16th Sep. 2000 to 21st Sep. 2000
9	Medical Information	Dr. hitoshi KIKUCHI	5th Nov. 2000 to 26th Nov. 2000
10	X-ray Diagnosis	Dr. Keiichi NAGAO	15th Nov. 2000 to 25th Nov. 2000
11	Medical Administration	Dr. Shoko NAGAYA	4th Jan. 2001 to 18th Jan. 2001
12	HIV Testing	Dr. Namiko YOSHIHARA	8th Jan. 2001 to 25th Jan. 2001
13	Epidemiology	Dr. Takashi YOSHIYAMA	25th Jun. 2001 to 17th Aug. 2001
14	HIV Testing	Dr. Namiko YOSHIHARA	25th Jul. 2001 to 11th Aug. 2001
15	Laboratory Technology	Ms. Kimiko HAYAKAWA	25th Aug. 2001 to 14th Sep. 2001
16	X-ray Diagnosis	Dr. Keiichi NAGAO	27th Aug. 2001 to 8th Sep. 2001
17	Radiology	Mr. Shizuo NAKANO	31st Aug. 2001 to 28th Sep. 2001
18	DOTS	Ms. Miyuki TAMURA	21st Sep. 2001 to 31st Mar. 2002
19	Epidemiology (Prevalence)	Dr. Norio YAMADA	10th Nov. 2001 to 28th Nov. 2001
20	TB Control	Dr. Nobukatsu ISHIKAWA	7th Jan. 2002 to 15th Jan. 2002
21	HIV Testing	Dr. Namiko YOSHIHARA	8th Jan. 2002 to 24th Jan. 2002
22	Epidemiology (Prevalence)	Dr. Norio YAMADA	23rd Feb. 2002 to 23rd Feb. 2002
23	Medical Administration	Dr. Shoko NAGAYA	28th Mar. 2002 to 12th Apr. 2002
24	TB Control (Radiological Diagnosis)	Dr. Shozo TATEISHI	8th May 2002 to 10th Aug. 2002
25	TB Control (Radiological Diagnosis)	Dr. Akito NAKAGAWA	4th Jun. 2002 to 1st Dec. 2002
26	TB Control (AIDS)	Ms. Miyuki TAMURA	1st Jul. 2002 to 1st Feb. 2003
27	Epidemiology (Prevalence Survey)	Dr. Norio YAMADA	17th Jul. 2002 to 13th Aug. 2002
28	Drug Management	Mr. Yuta UCHIYAMA	22nd Sep. 2002 to 21st Dec. 2002
29	TB Control (Radiological Diagnosis)	Dr. Shozo TATEISHI	13th Oct. 2002 to 15th Dec. 2002

ANNEX 4

Provided Equipments

Equipment for JFY 1999

No.	Item	QTY	Arrival Time	Place of Installation
1	4WD Wagon Vehicle	2	31 Mar. 00	CENAT
2	Motorcycle	25	30 Mar. 00	Provinces
3	Microscope	30	24 Mar. 00	Provinces
4	Microscope with Video Camera	1	24 Mar. 00	Lab., CENAT
5	Blood Cell Counter	1	23 Mar. 00	Lab., CENAT
6	Spectrophotometer	1	31 Mar. 00	Lab., CENAT
7	Water Bath	1	24 Mar. 00	Lab., CENAT
8	Ultrasound Cleaner	1	24 Mar. 00	Lab., CENAT
9	Mixer	2	24 Mar. 00	Lab., CENAT
10	pH Meter	1	24 Mar. 00	CENAT
11	Desktop Computer Set	4	30 Mar. 00	CENAT
12	Laptop Computer with BJ Printer	3	30 Mar. 00	CENAT
13	Color A4 size Laser Printer	1	30 Mar. 00	CENAT
14	B&W A3 Laser Printer	1	30 Mar. 00	CENAT
15	B&W A4 Laser Printer	2	30 Mar. 00	CENAT
16	Scanner	1	30 Mar. 00	JICA Project Office
17	Refrigerator	1	30 Mar. 00	CENAT
18	Copier	2	30 Mar. 00	JICA Project Office/CENAT
19	LCD Projector	1	30 Mar. 00	JICA Project Office
Total				\$295,068.00 (¥30,983,000)

Equipment for JFY 2000

No.	Item	QTY	Arrival Time	Place of Installation
1	4WD Wagon Vehicle	2	31 Jan. 01	CENAT
2	Motorcycle	25	20 Dec. 00	Provinces
3	Microscope	30	26 Mar. 01	Provinces
4	Autoclave	2	26 Mar. 01	CENAT
5	Refrigerator	2	20 Dec. 00	CENAT
6	Lab. Training Kit	400	20 Dec. 00	Provinces
7	Lab. Supervision Bag	40	20 Dec. 00	Provinces/CENAT
8	TV & Video Player set	2	20 Dec. 00	CENAT
9	Mixer	2	26 Mar. 01	Lab., CENAT
10	Wash Basin with Stand	150	20 Dec. 00	Provinces
11	Counter	150	20 Dec. 00	Provinces
12	Medical Textbook	200	20 Dec. 00	Library, CENAT
13	Desktop Computer with A4 size Laserprinter	10	20 Dec. 00	CENAT
14	Laptop Computer set	5	20 Dec. 00	CENAT
Total				\$323,483.00 (¥35,584,000)

Provided Equipments

Equipment for JFY 2001

No.	Item	QTY	Arrival Time	Place of Installation
1	Potable X-ray Equipment with support stand	1	6 Sep. 01	CENAT
2	X-ray Film Processor (Desk top type)	1	6 Sep. 01	CENAT
3	Generator with dolly	1	6 Sep. 01	CENAT
4	Darkroom for x-ray film development	1	6 Sep. 01	CENAT
5	X-ray protection screen	1	6 Sep. 01	CENAT
6	Radiographic stand	1	6 Sep. 01	CENAT
7	X-ray film Viewer (Single type)	1	6 Sep. 01	CENAT
8	X-ray film Cassette with Intensifying screen	10	6 Sep. 01	CENAT
9	Grid	2	6 Sep. 01	CENAT
10	X-ray protection suit	2	6 Sep. 01	CENAT
11	X-ray film marker (alphabets and numeral)	5	6 Sep. 01	CENAT
12	X-ray film storage cabinet	1	6 Sep. 01	CENAT
13	Roll film viewer	1	6 Sep. 01	CENAT
14	X-ray film Viewer	1	6 Dec. 01	CENAT
15	Intensifying Screen with Cassette	20	6 Dec. 01	CENAT
16	X-ray Green Type Film	50	6 Dec. 01	CENAT
17	Ultrasound Diagnostic System	1	6 Dec. 01	CENAT
18	Motorcycle	25	13 Dec.01	Provinces
19	Microscope	10	17 Jan. 02	CENAT
20	Lump unit for Microscope	10	17 Jan. 02	CENAT
21	Autoclave	1	17 Jan. 02	CENAT
22	Table Top Centrifuge	1	17 Jan. 02	CENAT
23	Hot Oven Dryer	3	17 Jan. 02	CENAT,Kg.Cham,Battambang
24	Distiller	3	17 Jan. 02	CENAT,Kg.Cham,Battambang
25	White Cell Counter	2	17 Jan. 02	CENAT
26	Pipet Tip Washer	2	17 Jan. 02	CENAT
27	Smear Making Kit	400	15 Jan.02	DOTS introduced Health Centers
28	Medical Textbook	50	25 Mar.02	Library, CENAT
29	X-ray Film Viewer	1	25 Mar.02	CENAT
30	Desk Top Computer Set	10	25 Mar.02	CENAT
31	Lap Top Computer	1	13 Mar.02	Project Office
32	File Cabinet	160	25 Mar.02	TB Units
33	Water Purifier	160	25 Mar.02	TB Units
34	Over Head Projector	1	25 Mar.02	CENAT
35	35mm Slide Film Projector	1	25 Mar.02	CENAT
36	Digital Camera	1	13 Mar.02	CENAT
37	Potable Multimedia Liquid Cryatal Display	1	13 Mar.02	Project Office
38	Transmitter set for Interpretation	1	13 Mar.02	Project Office
39	Receiver set for Interpretation	20	13 Mar.02	Project Office
Total			\$333,743.13 (¥41,494,000)	

Equipment for JFY 2002

No.	Item	QTY	Arrival Time	Place of Installation
1	4WD Wagon Vehicle	2	not yet	CENAT
2	Motorcycle	25	not yet	CENAT/Provinces
3	Sub-stage illuminator for microscope	45	not yet	Provinces
4	Ultra pure water system	1	not yet	CENAT/Provinces
5	Hand lap	200	not yet	Provinces
6	Multichannel Pipetter Large	1	not yet	CENAT
7	Multichannel Pipetter Small	1	not yet	CENAT
8	Smear Making Kits	300		Health Centers
Total			\$115,985.86 (¥14,614,218) expected figures	

Grand Total			\$1,068,280.92 (¥122,675,218) expected figures	
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Counterpart Training in Japan

Counterpart Training in Japan through the Project

No.	Subject	Training Institution	Term	Name	Position (present if changed)
1	TB Control Course II	The Reserarch Institute of Tuberculosis (RIT), Japan	4th May 1999 to 15th Aug. 1999	Dr. Khun Saorith	Technical Bureau, CENAT
2	Tuberculosis Control Laboratory Services	ditto	23rd Aug. 1999 to 12th Dec. 1999	Mr. Vichetmony Chey	Provincial TB Lab. Supervisor, Kg. Cham
3	National Tuberculosis Programme Management	ditto	10th Jan. 2000 to 27th Feb. 2000	Dr. Team Bak Khim	Chief of Technical Bureau, CENAT (Vice Director, CENAT)
4	TB Control Course II & AIDS course	ditto	1st May 2000 to 22nd Oct. 2000	Dr. Khum Kim Eam	Technical Bureau, CENAT
5	Tuberculosis Control Laboratory Services	ditto	23rd Aug. 2000 to 12th Dec. 2000	Mr. Kim Sorth Heng	Provincial TB Lab. Supervisor, Banteay Meanchey
6	National Tuberculosis Programme Management	ditto	8th Jan. 2001 to 25th Feb. 2001	Dr. Keo Sokonth	Technical Bureau, CENAT
7	Management TB Intermediate-Level	ditto	1st Apr. 2001 to 12th Aug. 2001	Dr. Natith Ratha	Provincial TB Supervisor, Pursat
8	TB Control Lab. Management	ditto	17th Sep. 2001 to 30th Nov. 2001	Dr. Koeu Sineth	Acting Chief of Laboratory, CENAT (left for World Vision, Aug. '02)
9	Leadership Training in TB Management	ditto	20th Jan. 2002 to 2nd Feb. 2002	Dr. Mao Tan Eang	Director, CENAT
10	Management TB Intermediate-Level	ditto	14th May 2002 to 11th Aug. 2002	Dr In Sokhanya	Acting Chief of Home Care DOTS, CENAT
11	Management TB Level-Level	ditto	14th May 2002 to 11th Aug. 2002	Dr. Tan Vutha	Provincial TB Supervisor, Battambang
12	TB Control Lab. Management	ditto	10th Sep. 2002 to 10th Dec. 2002	Dr. Pin Prakad	Provincial TB Lab. Supervisor, Siem Reap

Technical Exchange Program in Third Country through the Project

No.	Subject	Training Institution	Term	Name	Position
1	Technical Exchange of Clinical Laboratory Technology for Cambodian in 2001 (Technical Exchange)	Faculty of Medicine Khon Kaen University, Thailand	20th Sep. 2001 to 19th Mar. 2002	1)Mr.Pang Lieng Hout 2) Mr.Yim Chan Than 3) Mr.Yang Sam Oi 4) Mr. Khieng Khmarin 5) Mr.Sovith Ly 6) Ms. Somary Nhem	Municipal Hospital Phnom Penh Takeo Provincial Hospital CENAT, Phnom Penh Sihanouk Ville Hospital Provincial Hospital Kg. Cham Provincial Hospital Kg. Cham

Counterpart Training in Japan through other JICA program

No.	Subject	Training Institution	Term	Name	Position
1	TB Control Course II	The Reserarch Institute of Tuberculosis (RIT), Japan	4th May 1999 to 15th Aug. 1999	Dr. Teng Kunthy	Chief of DOTS Home Care, CENAT (Postgraduate Student in U.S.A.)
2	Management TB Intermediate-Level	ditto	1st Apr. 2001 to 12th Aug. 2001	Dr. Tieng Sivanna	Chief of Statistics, Planning and IEC, CENAT
3	Leadership Training in TB Management	ditto	20th Jan. 2002 to 2nd Feb. 2002	Dr. Lo Veasna Kiry	Acting Director, Dept. of Planning & Health Information, Ministry of Health
4	Community Based Approach HIV/AIDS Management	Venue: Chiang Mai, Thailand Foundation for Advanced Studies on International Development (FASID) Japan	21st Jul. 2002 to 17th Aug. 2002	Mr. Seak Kunrath	Program Officer, JICA National TB Control Project
5	Future Health Leaders	Research Center for International Health Department, Tokai Univ. Graduate School of Medicine, Japan	Aug. 2002 to Sep. 2002	Dr. Huot Chan Yuda	Deputy chief of Supervisor Training and Research

Counterpart Training in Third Country through other JICA program

No.	Subject	Training Institution	Term	Name	Position
1	Training Program in Clinical Laboratory for Cambodian Trainees	Faculty of Medicine Khon Kaen University, Thailand	4th Sep. 2000 to 2nd Mar. 2001	Mr. Seam Sok Aun	Laboratory, CENAT

National

Category	Date	Title	target	no	place	T/A	Funding	Remarks
WS	1999 8/23-8/24	Quarterly National WS	Central & Provincial	60	CENAT	JICA,WHO	WB	
ICC	1999 9/28	1st Meeting for Collaboration for TB control	partners	20	MOH	JICA,WHO	N/A	
WS	1999 11/29-11/30	Quarterly National WS	Central & Provincial	60		JICA	WB	
WS	2000 1/6	Food Provision to TB patients	NTP, WFP central and provincial staff	60	JICA Project Office	JICA	WB, WFP, JICA	
Lec	2000 1/14	Presenation: TB situation in Cambodia	provincial health advis.	15	UNICEF		N/A	
Conf	2000 3/14-3/15	5th Annual National TB Conference	National	200	MCH Center	JICA	WB	Mori
Sympo	2000 3/16	TB/HIV in Cambodia	National	70	Sunway Hotel	JICA, UNAIDS	JICA Research Fund	Shimizu Yanai
WS	2000 5/27-5/28	Quarterly National WS	Central & Provincial	60	Kg Som	JICA	WB	
WS	2000 6/8-6/9	National WS for OD supervisors I	OD supervisors		Kg Chhunang PHD	JICA	WB	
Training	2000 6/26-6/30	Lab training for Drug Resistance Survey I	TB units Lab		CENAT & JICA Project office	JICA	JICA	
Training	2000 7/3-7/7	Lab training for Drug Resistance Survey II	TB units Lab		CENAT & JICA Project office	JICA	JICA	
Training	2000 8/21-8/23	Coordinators Training for DRS	DRS Coordinators	25	JICA Project Office	JICA	JICA	Yamada
Training	2000 8/28-9/1	Lab training for Drug Resistance Survey III	TB units Lab		CENAT & JICA Project office	JICA	JICA	
Training	2000 9/19-9/23	Final Training and Guidance on DRS	TB units staff	84	Malaria Center	JICA	WB	
Seminar	2000 11/16-11/18	TB diagnosis & Role of X-ray in NTP	Key Hospitals	20	JICA Project Office	JICA	JICA	Nagao
WS	2000 12/12-12/13	Quarterly National WS	Central & Provincial	60	Siem Reap	JICA	WB	
WS	2000 12/14-12/15	Lab WS	Central & Provincial Lab s.v.	30	Siem Reap	JICA		
WS	2001 1/11-1/13	HIV Examiantion in TB unit & Review of Clinical Guideline Khmer Version	Key Provincial Hospitals	15	JICA Project Office	JICA	JICA	Yoshihara Nagaya
WS	2001 1/18-1/19	Quarterly National WS	Central & Provincial	60	JICA Project Office	JICA	WB	
Conf	2001 3/21-3/22	6th National TB Conferecne	National	230	CENAT(New)	WHO	WB	Mori
ICC	2001 4/25	1st official Meeting of Interagency Coordination Committee			CENAT	JICA	JICA	Shimura

Meeting	2001	5/3-5/4	Thai-Cambodia Border Health Meeting		80	Siem Reap		JICA (TB section) WB?	
WS	2001	5/28-5/29	Review WS: Process of National DRS		98	CENAT	JICA		
WS	2001	6/20-6/21	Quarterly National WS	Central & Provincial	60	Kg Som	JICA	WB	
Symposium	2001	6/26-6/28	2nd TB/HIV in Cambodia	National Stakeholders	81	CENAT	JICA	Research Fund	Yanai
Seminar	2001	8/29-9/5	TB diagnosis & Role of X-ray in NTP	Key Hospitals	20	CENAT	JICA	JICA	Nagao
WS	2001	11/21-11/23	Result of National TB Drug Resistance Surveillance 1st Round, 2000-2001	National	157	CENAT	JICA	JICA	Yamada
WS	2001	12/11-12/12	Dissemination WS on Policy and Plan for TB control	National	250	MCH Center	WHO JICA	JICA, WHO	Pieter
WS	2002	1/11	Role of NGOs in DOTS in HC and Community	NGOs, Central s.v.	50	CENAT	JICA	JICA	Ishikawa
Training	2002	2/18-2/24	OD supervisors training for DOTS expansion	52 OD supervisors	52	CENAT	JICA	JICA	
WS	2002	2/22-2/23	Speical WS: Paramedical Technology	National	82	CENAT	WHO JICA	JICA	SJKim
Training	2002	2/23-3/7	International Training WS: Tuberculin Testing for Survey	Prev. Survey Team (CAM, VIET)	15	CENAT Schools in PNP	WHO JICA KITA, ITSC	WHO, WB JICA	SJKim, Corry, Khan, Yamada Yamada
Training	2002	3/11-3/16	Pilot Test and On the job training of Prevalence Survey	Survey Teams	50	Samrong Kg Spue	JICA	JICA	
Conf	2002	3/21-3/22	7th National TB Conferecne	National	276	MCH Center		WB JICA JICA	Jintana, Yamada
WS	2002	3/25-3/27	Seminar WS for Referral hopitals Role of Referral hospitals in NTP	Rep of 67 Referral Hospitals	67	CENAT	JICA JICA	JICA	
WS	2002	6/21	Community DOT/DOTS Guideline Development	Donors, NGOs, Central s.v.	33	CENAT	JICA	JICA	
WS	2002	7/11	Community DOT/DOTS Guideline Development II	Donors, NGOs, Central s.v.	45	CENAT	USAID JICA	JICA	
WS	2002	8/5-8/7	Mid Term Review: National TB Prevalence Survey	Survey Teams	75	Sihanoukville	WHO JICA	WHO JICA	Tho Yamada
WS	2002	8/20-8/22	TB/HIV Country Framework Presentation & Action Plan development	National & 4 Hot spots	185	Sunway Hotel CENAT	CDG/USAI D WHO JICA	USAID	Charles, Pieter, Fujita
WS	2002	10/24-10/25	Quality Assessment of Smear Microscopy & Preparation for HIV survey among TB patients	Provincial lab supervisors	24	CENAT	JICA JICA	JICA	

Local	CENAT/Local									
Category	Date	Title	Target	No.	place	T/A	Funding	Remarks		
Training	2000 03/02-03/17	Serology & HIV testing	Lab staff of CENAT and selected provinces	20	CENAT & JICA Project office	JICA	JICA	Yoshihara		
WS	2000 04/18-04/22	Training Module Development	Central & Prov s.v.	8	JICA Project Office	JICA	WHO			
WS	2000 05/02-05/06	District Training Module Development	Central & Prov s.v.	8	JICA Project Office	JICA	WHO			
WS	2000 5/20	DOTS in Different Setting	Central s.v.	15	JICA Project Office	JICA	N/A	Ishikawa		
WS	2000 5/22	NGOs activities in TB - NTP perspective	Central s.v.	15	JICA Project Office	JICA	N/A	Ishikawa		
WS	2000 9/16	Preparatory WS for National TB Prev. Survey	Central staff	10	JICA Project Office	JICA	N/A	Hoshino		
WS	2001 2/9	STOP TB in Phnom Penh	Anyone in PHN	70	Rec Cross Center	JICA	JICA			
WG	2001 4/3-	WG on NTP Policy and Strategy	MOH, CENAT, Key Partners	15	CENAT	WHO, USAID	JICA			
WS	2001 5/3-5/10	DOTS Expansion: Planning & Budgeting	DOTS Expansion WG		CENAT	JICA	JICA			
WS	2001 6/14-6/15	Finalization of Protocol for TB National Prevalence Survey			CENAT	JICA	N/A			
Training	2001 7/ -8/10	Serology & HIV testing		10	CENAT	JICA	N/A	Yoshihara		
WS	2001 6/18-6/21	Microscope Maintenance WS 1st course (total 18 X 6 courses till 7/7)		23	CENAT and provinces	JICA Olympus	JICA			
Training	2001 8/8-9/7	TB Culture	CENAT and Key Provincial Hospitals	10	CENAT	JICA	JICA	Hayakawa		
Training	2001 8/29	Clinical X-ray training	CENAT and	26	CENAT	JICA	JICA	Nagao		
Training	2001 9/1-9/26	X-ray Car and Mobile X-ray Unit Installation & On the job training	CENAT X-ray Unit	5	CENAT and field	JICA	JICA	Nakano		
WS	2001 11/7	TB Screening clinic among PWA in PNP	All Stakeholders	44	CENAT	JICA	JICA	Tamura		
WS	2001 11/23-11/25	NTP Planning Camp	CENAT/NTP staff	63	Sihanoukville	JICA	JICA			
WS	2001 12/13	DOTS Technical WS	Central s.v.	140	CENAT	JICA	N/A			
Seminar	2001 12/20	TB Seminar for Non-TB doctors	Phnom Penh	50	CENAT	JICA	JICA			
Seminar	2001 12/26-12/28	TB education for Non-TB health workers (1day x 3 courses)	Phnom Penh	200	CENAT	JICA	JICA	KKSan		
WS	2002 1/4-1/5	NTP DOTS Expansion WG: Planning	Central s.v.	15	Siem Reap	WHO JICA	JICA	Kasai		

Training	2002	1/14- 1/20	TOT for Central supervisor for DOTS Expansion	Central s.v.	20	CENAT	JICA	JICA	
Training	2002	1/14- 1/18	Serology & HIV testing	CENAT lab	12	CENAT	JICA	JICA	Yosihara
Training	2002	1/28- 2/1	Presenation Skill	CENATand Pro. S.v	8	CENAT	JICA	JICA	
WS	2002	2/4	DOTS Sensitizing WS	Kandal	46	Kandal Province	CENAT	JICA	
Training	2002	2/4- 2/9	DOTS: Health Center Staff training	Kg Cham	65	Kg Cham	CENAT	JICA	
Training	2002	2/11- 2/26	DOTS: Health Center Staff training	Kg Spue	76	Kg Spue	CENAT	JICA	
Training	2002	2/25- 2/27	DOTS: Health Center Staff training	Kratie	35	Kratie	CENAT	JICA	
Training	2002	3/5	DOTS: HC staff training	Svay Rieng HC	53	Svay Rieng	CENAT	JICA	
Training	2002	5/6- 5/10	HIV/AIDS Basic and Counseling	CENAT staff	35	CENAT	NCHADS	JICA	
WS	2002	9/11	DOTS Sensitizing WS	Srey Senthor OD Kg Cham	43	Srey Senthor	SHARE JICA	JICA	KKSan
Training	2002	10/9- 10/11	DOTS: Health Center Staff training	Srey Senthor OD Kg Cham	40	Srey Senthor	SHARE JICA	JICA	KKSan
WS	2002	10/26- 10/28	NTP Planning Camp	CENAT/NTP staff	75	Sihanoukville	JICA	JICA	

DOTS Pilot Program

Category	Date	Title	target	participants	place	T/A	Funding	Remarks
WS	1999 9/29	Role of HCs and OD in DOTS	Province, ODs	30	Kg Chhunang PHD	JICA	JICA	
WS	1999 10/4	Role of HCs in New Health System	Central s.v.	15	CENAT	JICA,WHO	JICA	
Training	1999 9/26	Smear Microscopy for HC staff	Pilot HCs		CENAT	JICA	JICA	
WS	1999 12/1	DOTS in HCs "Feasibility Issues"	Central s.v.	15	CENAT	JICA	JICA	
WS	2000 5/26	Provincial TB WS	Kg Som Province	30	CHC Hotel, Kg Son	JICA	JICA	
WS	2000 6/2	Provincial TB WS	Battambang Prov.	40	Battambang PHD	JICA	WB, JICA	
WS	2000 6/20	Provincial TB WS	Siem Reap Prov.	40	Sieam Reap PHD	JICA	WB, JICA	
WS	2000 7/3	DOTS in Health Centers	Kg Chhunang Prov.	50	Kg Chhunang PHD	JICA	JICA	
WS	2000 7/6	DOTS in Health Centers	Battambang Prov.	50	Battambang PHD	JICA	JICA	
WS	2000 8/18	DOTS in Health Centers	Sothnikum OD	40	Sothnikum OD	JICA	JICA	
Training	2000 8/28-9/2	DOTS Trainig for Health center staff	16 HCs in Thmakol OD	40	Thmakol OD, BTB	JICA	JICA	
Training	2000 9/19-9/24	DOTS Trainig for Health center staff	9 HCs in Kg Som	30	Sihanoukville Hosp	JICA	JICA	
Training	2000 10/2-10/7	DOTS Trainig for Health center staff	11HCs in Kg Tralach	35	Kg Tralac OD	JICA	JICA	
Training	2000 10/9-10/14	DOTS Trainig for Health center staff	10 HCs in PNP	30	PhnomPenh PHD	JICA	JICA	
Training	2000 11/20-11/25	DOTS Trainig for Health center staff	17 HCs in Sothnikum	40	Sothnikum OD	JICA	JICA	
WS	2000 11/27	DOTS in Phnom Penh	Phnom Penh		JICA Project office	JICA	JICA	
WS	2001 1/5-1/7	DOTS in Health Centers: OD and HC's Perspective	Pilot HCs	40	Sihanoukville	JICA	JICA	
WS	2001 4/24	DOTS in HCs: Supervisors' WS	Pilot OD/Provinces	8	CENAT	JICA	JICA	
WS	2001 8/8-8/9	DOTS in HCs: Supervisors and TB unit managers' WS	Pilot OD/Provinces		CENAT	JICA	JICA	
Training	2001 8/20-8/22	DOTS Trainig for Health center staff	Battanbang Province		Battambang PHD	JICA	JICA	
Training	2001 9/3-9/8	DOTS Trainig for Health center staff	Kg Chhunang OD.		Kg Chhunang Hospital	JICA	JICA	
Training	2001 9/25-9/26	Refresher Training for HC staff	Tomakol OD		Tomakol OD	JICA	JICA	
Training	2001 10/1-10/4	Refresher Training for HC staff	Kg Tralach OD		Kg Tralac OD	JICA	JICA	
Training	2001 10/8-10/12	Refresher Training for HC staff	Sothnikum OD	19	Sothnikum OD	JICA	JICA	

Training	2001	11/14-11/16	Refresher Training for HC staff	Kg Som Province	32	CENAT	JICA	JICA	
Training	2001	11/15-11-16	Smear making TOT I	TB units lab staff in pilot areas	17	CENAT	JICA	JICA	
Training	2001	11/28-11/30	Refresher Training for HC staff	Phnom Penh	31	CENAT	JICA	JICA	
Training	2001	11/29-11/30	Smear making TOT II	TB units lab staff in pilot areas	14	CENAT	JICA	JICA	
WS	2002	1/3	Review: DOTS in HC: 1y experience	Sothnikum OD, Central s.v.	40	Sothnikum OD	WHO JICA	JICA	Kasai
Training	2002	1/24-1/26	Basic of TB and TB control for Non-TB health workers (1day x 3 courses)	Thmakol OD, Battambang	88	Thmakol OD, BTB	JICA	JICA	KKSan
WS	2002	1/30	Review: DOTS in HC: 1y experience	Pnom Penh	28	Phnom Penh	JICA	JICA	
WS	2002	2/1	DOTS in HC: 1st review	Kg Chhunang OD.	44	Kg Chhunang OD	JICA	JICA	
Training	2002	2/8	TB training for non-TB staff	MD, MA and Nurse	79	Sihanoukville	JICA	JICA	
Training	2002	2/11-2/13	Basic of TB and TB control for Non-TB health workers (1day x 3 courses)	Kg Chhunang OD.	129	Kg Chhnang OD	JICA	JICA	KKSan
WS	2003	2/12	TB training for non-TB staff	Health center staff	22	Kg Tralach	JICA	JICA	
Training	2002	2/13	TB training for non-TB staff	Health center staff	39	Kg Tralach	JICA	JICA	
Training	2002	4/23-4/25	HC training for new health centers	Phnom Penh	34	CENAT	JICA	JICA	
WS	2002	10/5	Review: DOTS in HC	Tomakol OD		Tomakol OD	JICA	JICA	
WS	2002	10/6	Provincial TB WS: Review of DOTS in HCs &TB/HIV	Battambang	60	Battambang	JICA	JICA	
WS	2002	10/7	Review: DOTS in HC	Kg Tralach OD	29	Kg Tralac OD	JICA	JICA	

International Activities

Category	Date	Title	target	participants	place	Organizer	Travel Cost	Presentation
2000 Meeting	01/18-01/20	Preparatory WS for Ministerial Conference "TB and Sustainable Development"	High class official	Onozaki, Chor Meng Chou, Youk Sambath	Bangkok	WHO WB	WHO	Yes
2000 Meeting	02/22-02/24	1st Technical Advisory Meeting in Western Pacific Region	High Burden Countries	Sareth, Sokonth, Onozaki	WHO Manila	WHO	WHO JICA	Yes
2000 Meeting	3/22-3/24	Ministerial Conference "TB and Sustainable Development"	Ministers in high burden countries	Minister, Chou, Sambath	Amsterdam	WHO/WB	Netherland	Yes(prepared by JICA)
2000 Study Tour	10/15-10/20	TB/HIV in Thailand	CENAT Doctors	Sokonth, Satha Saorith, Vanna Onozaki	Bangkok Chiang Rai Bangkok	Project	JFAP	
2000 Conference	10/16-10/18	Global Meeting on International Clinical Epidemiology Network				INCLINE	JFAP	Yes#1
2000 WS	10/30-10/31 (King's Birthday Holidays)	NTP Evaluation WS in Myanmar	NTP Myanmar	Onozaki	Yangon	NTP/ Myanmar	JATA	Yes#2
2000 Conf	11/9-11/11	Sustainable Development by Science and Technology in Greater Mekong Sub-region		San, Saly	Chiang Mai	Royal Thai Project	Research Fund	Yes#3
2000 Symposium	11/11-11/12	Japanese Aid Programs in Health in Cambodia	ODA, NGOs	Onozaki	Tokyo	Japanese Society of Tropical Disease	JICA	Yes#4
2000 Meeting	11/20-11/22	1st Global WG Meeting of STOP TB DOTS Expansion	22 High Burden Countries	Sareth, Khim, Vanna	Cairo	WHO, WB	WHO, WB	Yes
2000 Study Tour	12/24-12/30	Prevalence Survey Preparation & Ambulatory DOTS	NTP Staff	10 NTP staff led by Dr Sareth + Onozaki	Hanoi HCMC	NTP JICA	WB JICA	
2001 WS	2/8-2/15	Prevalence Survey Protocol Development	NTP WG	Vanna, Satha	RIT/Tokyo	RIT, JICA	Research Fund	
2001 Conference	3/6-3/9	Eastern Regional Conference of IUATLD		10 NTP staff led by Dr Sareth + Onozaki & Yamakami	Manila	IUATLD	WB IUATLD JICA	Yes#5
2001 Conference	3/29-3/30	TB Drug Resistant Research	Resercher	Sareth, Vanna, Saorith, Dara Eang, Onozaki			WB	
2001 Meeting	4/9-4/11	1st Global WG Meeting on TB/HIV in STOP TB			WHO HQ, Geneva	WHO	WHO, JICA	Yes
2001 Meeting	6/3-6/6	2nd Technical Advisory Meeting in Western Pacific Region	High Burden Countries	Eang, Khim, Onozaki	Beiging	WHO	WHO JICA	Yes

2001 Study Tour	9/18-9/22	WHO NTP&NAP Joint Study Tour on TB/HIV	NTP and AIDS Program	Eang, Eam, Leng, Onozaki	Northern Thai	WHO	WHO	
2001 Meeting	10/2-10/4	National TB and AIDS Program managers on TB/HIV in Asia	NTP & NAP managers and advisors	Eang, Leng, Onozaki	Melbourne	WHO	WHO	Yes Lecture#6 (Onozaki)
2001 Meeting	10/22-10/23	STOP TB Partners' Forum	High burden Countries & Donors	Eang and HE Dr Heng	Washington DC	WB/WHO	WB	Yes
2001 Conference	10/31-11/4	2nd DOTS Expansion WG IUATLD World Conference on Lung Health		Eang, Phally Onozaki, Yamakami Sokonth Sokanya Sareth + 3	Paris	WHO IUATLD	JICA JICA WHO MSF-F WB	Yes Yes#7
2001 Conference	12/17-12/20	AIDS Home Care	TB/HIV stakeholders	Sareth, Heng, Rath Onozaki (1day)	Chiang Mai	TB/HIV symposium by RIT	WHO, Research Fund	Yes
2002 Conference	4/16-4/17	Japan TB Society	Symposium TB in Asia	Eang, Onozaki	Tokyo	Japan TB Society	Japan TB society, JICA	Yes#8
2002 Training	5/20-6/14	TB/HIV Control & Clinical Skill	Physicians in CENAT and Battambang	Heng, Sayorn Sothara, Suthep	Chiang Rai Bangkok	JICA, RIT-Thai CCH	Research Fund	
2002 Meeting	6/14-6/16	2nd Global WG Meeting on TB/HIV in STOP TB		Eam, Wantha Onozaki	Durban	WHO	WHO JICA	
2002 Meeting	7/31-8/2	Preparation for GF-ATM Proposal	Country managers & Advisors	Khim Onozaki	Manila	WHO	WHO	
2002 Conference	10/5-10/11	3rd DOTS Expansion WG IUATLD World Conference on Lung Health		Eang, Onozaki, Tamura Vanna Sareth +3	Montreal	WHO IUATLD	JICA WHO WB	Yes#9

Operational Expenses on Local Activities

Item / Year	1999	2000	2001	2002(6 months)	Total
General	\$29,362.96	\$68,121.63	\$186,276.81	\$141,385.85	\$425,147.25
Technology Local Adaptation	\$34,285.84	\$82,611.75	\$87,665.83	\$7,623.59	\$212,187.01
Technology Exchange	\$0.00	\$0.00	\$71,338.95	\$0.00	\$71,338.95
Total	\$63,648.80	\$150,733.38	\$345,281.59	\$149,009.44	\$708,673.21

Cambodian Couterparts in CENAT

No.	NAME	POSITION
1	Dr. Mao Tan Eang	Director
2	Dr. Touch Sareth	Vice director
3	Dr. Team Bak Khim	Vice director, Chief of Technical Bureau
4	Dr. Keo Sokonth	Deputy chief of Technical Bureau
5	Dr. Khun Saorith	Chief of Supervisor Training and Research
6	Dr. Huot Chanyuda	Deputy Chief of Supervisor Training and Research
7	Dr. TANN KUNDARA	Technical Bureau officer
8	Dr. Khloeung Phally	Technical Bureau officer
9	Dr. Tieng Sivanna	Chief of Statistics, Planning and IEC Unit
10	Dr. Khun Kim Eam	Deputy Chief of Statistics, Planning and IEC Unit
11	Dr. Kruey Chheang Tay	Deputy Chief of Statistics, Planning and IEC Unit
12	Ms. Ton Chhavivann	Acting Chief of Laboratory
13	Dr. Peou Satha	Chief of X-Ray section
14	Dr. Yous Bun Heng	Chief of Dispensary section
15	Dr. In Sokhanya	Chief of Home Care DOTS