3. Annual Report
(January 1994 - December 1994)

DOH-JICA The Public Health Development Project
Annual Report
(January 1994 - December 1994)

1. Summary of the Activities/Progress during the Year:

The DOH-JICA Project focusing on Tuberculosis Control in Cebu Province has undertaken the following activities in its second year of the implementation.

The assignment of two long-term experts were extended for another year. Five short-term experts in the fields of Supervision/monitoring, Logistics, Bacteriology, Epidemiology and Radiology were received in 1994. They provided technical support to the ongoing activities as follows: 1) seminars/trainings 2) revised NTP guidelines 3) logistics system 4) quality control of laboratory works 5) establishment of reference laboratory and 6) improvement of X-ray examinations.

In this year, laboratory and X-ray equipment were received and installed to Cebu Chest Center. The Reference Laboratory of Cebu Chest Center was inaugurated on August 15. The laboratory serves sputum direct smear examination as routine services and has conducted several training on sputum microscopy.

The field tests of the proposed new NTP Guidelines were started in the two areas of the ISAs namely Mandaue City and Dalaguete RHU I. Revision of NTP guidelines aims to enhance the case-holding activities, improvement of treatment strategies and simplification of recording/reporting system.

Two counterparts were sent for training in Japan. These were in the fields of TB Control and Laboratory Works. Local seminars and training were conducted in the Project site. These were the seminar on supervision/monitoring with the introduction of the new guidelines to be field tested and NTP Refresher training on sputum microscopy.

The Japanese Consultation Survey Team visited the Project last November to observe and discuss the Project details. The Team participated in the Joint Coordinating Committee Meeting. In the JCC Meeting, technical and administrative problems were discussed and implementation of Project activities were planned.

2. Events during the Period

2.1 List of events (1994)

Date	Activities
Jan. 14	Meeting with TBCS, Manila
Jan. 30-Feb. 9	JICA Team Leaders Meeting in Japan
Feb. 21-23	Seminar on Supervision/Monitoring
Feb. 26	High Level Mission on Economic and Technical Cooperation
April 12	Turn-over of JICA donated tricycles to 2 cities
April 14	Workshop for the finalization of protocol for field testing
May 2-7	Orientation workshop for field testing
June 1-3	Received equipment for ref. lab. & vehicles
June 9	Inspection of JICA donated motorcycles
June 9-10	Distribution of field testing supplies/materials

June 18	Distribution of motorcycle to DSPHNs
June 23-Oct 23	Sending of Counterpart for Training on TB Control in Japan
Aug 15	Inauguration of Reference Laboratory
Aug. 29-Oct. 14	Four batches of Refresher Training Courses on Lab. Works
Oct. 11-20	Monitoring visits to RHU to check utilization of allocated equipment
Oct. 27	Project Task Force Meeting
Nov. 8	Joint Task Force Meeting
Nov 9	Third JCC Meeting
Dec 6	TB Coordinator's Meeting
Dec. 14	Contact Mission to Danao City
Dec 20	Contact Mission to Cebu City

2.2 Visitors (1994)

Date of Visits	Name
Jan 19	Mr. Tetsuya Togawa Engineer for X-ray machine installation survey
Feb. 16-26	Dr. Shoichi Endo Short-term expert on Supervision/ Monitoring
March 2-5	Dr. Iwao Takakura with Academicians from Tokai University, School of Medicine, Japan
April 10	Mr. Satoshi Machida Deputy Resident Representative, JICA Philippine Office
	Mr. Eiji Iwasaki Asst. Resident Representative JICA Philippine Office
April 24-May 7	Dr. Akihiro Seita Short-term Expert on Laboratory Network & Logistics
April 24-May 21	Ms. Akiko Fujiki Short-term Expert on Bacteriology
June 17	Mr. Eiji Iwasaki Asst. Resident Representative JICA Philippine Office
June 21-29	Dr. Toru Mori Short-term Expert on Epidemiology

July 10-17	Mr. Tetsuya Togawa Engineer for X-ray machine installation
July 13-27	Mr. Seiko Nakaoji Short-term expert on Radiology
Aug 9-11	Ms. Ikuko Moriguchi Short-term expert of JICA MCH/FP Project, Tarlac
Aug. 14-Sept. 3	Ms. Akiko Fujiki Short-term Expert on Bacteriology
Sept. 1	Mr. Akira Okuda & Mission Team JICWELS' Expert on International Medical Cooperation
Sept. 12-14	Mr. Kazuto Kitano JICA Headquarters
Nov. 2-10	Dr. Shoichi Endo Leader, JICA Consultation Mission
	Dr. Toru Mori Member
	Ms. Junko Nemoto Member
Nov. 9	Dr. Norihiko Yoda First Secretary, Embassy of Japan
	Mr. Akihiko Hashimoto Resident Representative JICA Philippine Office
	Mr. Eiji Iwasaki Asst. Resident Representative JICA Philippine Office
Nov 22-24	Technical Exchange Training Program Team from Khonkaen, Thailand headed by Mr. Tsutomu Kitajima JICA Expert, JICA Community Health Project, Thailand
	Dr. Manit Teeratantikanon Chief medical Officer, Khonkaen Provincial Health Office
	Dr. Piya Fongsaran Medical Officer, Department of Environmental Health
	Mr. Udon Hintaku Chief, Nampun District Health Office
	Ms. Nopporn Karntak Technical Officer, Planning & Evaluation Section

3. Achievements

3.1 Dispatch of Long-term Experts

Dr. Masashi Suchi — Sept. 1, 1992-Aug. 31, 1995
Chief Advisor, TB Control

Mr. Yoshinori Terasaki — Dec. 10, 1992-Dec 9, 1995
Project Coordinator

3.2 Project Inputs

3.2.1 Field Tests Activities

The proposed NTP guidelines prepared by TB Control Service, Manila was field tested in the 2 areas of the ISAs representing the rural and urban setting. The main components being field tested are the guidelines on case finding and diagnosis, treatment and recording/reporting system (See Annex A for Summary Report).

In the preparatory phase, a series of meetings, workshops and orientation were conducted in preparation for field testing of the New NTP Guidelines, viz:

1) TB Consultative Meeting (April 14, 1994)

Finalization of the protocol of the revised NTP guidelines was done and action plan for the field testing implementation was made. This was attended by TBCS staff, Regional/Provincial TB coordinators, Provincial Coordinator/Medical Technologist, MHO and PHNs of Dalaguete RHU I and Mandaue City and Argao DSPHN.

2) Orientation workshop (May 2 - 7, 1994)

An orientation workshop was given to all health personnel in Dalaguete RHU I and Mandaue City. Learning objectives were each items of the NTP guidelines, practical application through case exercises and workshop output presentation.

3) Distribution of supplies/materials (June 9 -10, 1994)

Forms and supplies are allocated by JICA while TB drugs are provided by DOH Logistics such as reagents, slides and FHSIS target client list were utilized as before.

Implementation phase:

1) Start of Field Testing

Implementation of field tests of the revised NTP guidelines started at Mandaue City and Dalaguete RHU I on June 13, 1994.

2) Supervision/monitoring visits

Supervision and monitoring visits to the RHUs, BHSs and microscopy center in the 2 areas were conducted. Visits were done twice per month in the first 2 months, and at least once per month in the succeeding months from the Regional & Provincial level From Central Office, they have visited the pilot areas twice last year.

3.2.2 Strengthening the function of Cebu Chest Center

The X-ray room of Cebu Chest Center was renovated for the installation of a new X-ray machine. Expansion of its laboratory services was made through establishment of a Reference Laboratory which presently performs routine laboratory examination (Direct Smear Examination) and serves as training center on sputum microscopy.

3.2.3 Provision of Equipment

The sets of equipment received were allocated and installed at Cebu Chest Center, Reference Laboratory of Cebu Chest Center and others. Equipment requested for Japanese fiscal year 1994-1995 are for the field units.

1) Equipment list for Japanese fiscal year 1992-1993

Name of Equipment	Quantity	Allocation
X-ray machine	1 unit	Cebu Chest Center
Computers and Printers	2 sets	Reference Laboratory, DOH-IRFO 7 RHTC
Audio-visual set	1 unit	Reference Laboratory
Copier	1 unit	TBCS, Manila
Books		DOH-IRFO 7 RHTC
Vehicles	2 units	DOH-IRFO 7, Cebu IPHO
Motorcycles	6 units	6 Districts

2) Equipment list for Japanese fiscal year 1993-1994

Name of Equipment	Quantity	Allocation
Incenerator	1	Reference Laboratory
Clean bench	1	- ditto-
Distiller	2	
Refrigerator	1	
Deep freezer	1	
Refrigerator with chemicals	1	
Pipette washer	1	
Dryer for glassware	1	
Autoclave	2	
Hot Air Oven	2	
Incubator	2	
Coagulator	2	
Centrifuge	1	
Safety Cabinet for chemicals	1	
Cabinet for glassware	2	
Electronic chemical balance	1	

Cover for balance	1
Chemical balance	2
Water bath	1
Glass wares	
Instruments	
Experimentation tables and chairs	

3) Equipment requested for Japanese fiscal year 1994-1995

Name	Quantity	Allocation plan
Microscopes	15	Field units
Copier with sorter	1	Cebu IPHO
OHP (desk top)	1	Cebu IPHO
Screen	1	Cebu IPHO
Sound system	1	Cebu IPHO
Slide projector	1	Cebu IPHO
Printing machines	5	TBCS, DOH-IRFO 7, Cebu IPHO, Cities of Mandaue & Lapu-lapu
Portable sound system	50	RHUs
Motorcycles	6	New ISAs

3.2.4 Counterpart Training Courses

Dates of Participation	Name of Trainees	Training Course
June 23, 1994 to Oct. 23, 1994	Dr. Lucia S. Florendo MS IV, Provincial Coordinator	TB Control
Oct 3, 1994 to Feb. 18, 1995	Ms. Yolanda Garces Medical Technologist, Cebu IPHO	Laboratory Works for TB Control

3.2.5 TB Program Seminar/Training

1) Seminar on Supervision/Monitoring Skills and New NTP Guidelines

A 3-day workshop seminar on supervision/monitoring activities of NTP and presentation of the revised NTP guidelines was conducted. A lecture discussion on supervision/monitoring was given by a short-term expert. Selection of pilot areas, detailed planning and scheduling for field testing was one of the main agenda. This was attended by TBCS staff, Regional/Provincial/City TB Coordinators, DSPHNs, DSMHO (Cebu). Provincial Coordinator and Chief of Cebu Chest Center & staff (See Annex B for the syllabus).

2) Refresher Training Courses on Laboratory Works

This training was conducted in four (4) batches, participated by 32 Medical technologists in the RHUs or District hospitals of the ISAs. The inputs was focused on the concept of TB Control and direct smear examination. Lecture discussion and laboratory practice was given (See Annex C for the syllabus).

3 2 6 Receiving of Short-term Experts

Date of Visit	Name of Expert	Field of Expertise/ Activities
Feb. 16-26	Dr. Shoichi Endo	Supervision/Monitoring Resource speaker on the Seminar on supervision/ monitoring skills & New NTP guidelines; visited the field; discuss with TBCS staff and local counterparts on the new NTP guidelines (See Annex D for his comments).
Apr. 24-May 7	Dr. Akihiro Seita	Laboratory Network and Logistics Observe and gave recommendations on the logistics supply & distribution from RHU, Provincial, Regional and Central level; visited selected Project areas & Cebu Chest Center, attended the orientation workshop & provide comments on the new NTP guidelines (See Annex A and E for his comments).
Apr 24-May 21	Ms. Akiko Fujiki	Bacteriology Visited Cebu Chest Center, plans for the establishment of the reference lab.; Observe laboratory techniques in the field; performs slide checking for quality control evaluation; discuss with TBCS & local counterparts on observation findings; gave advise on Project activities pertaining to laboratory works and training programme (See Annex F for her summary report).
June 21-29	Dr. Toru Mori	Epidemiology Provide technical advise on epidemiology and project implementation activities; Ocular inspection to ref.lab.;visited the field tested areas; discussed with Project staff members & counterparts on the modifications of the proposed NTP guidelines (See Annex A for his comments).

July 13-27	Mr. Seiko Nakaoji	Radiology Observe and gave recommendations on the quality of X-ray examination done at Cebu Chest Center.
Aug. 14-Sept. 3	Ms. Akiko Fujiki	Bacteriology Attended the Inauguration rites of ref. lab.; initiate ref. lab. activities like in the conduct of refiesher courses to Med. Techs.

3 3 Project Task Force Meeting

The annual plan of the Project for fiscal year 1995-1996 was presented to the group for comments and recommendations. Feedback of NTP implementation from field personnel was given. Planning for equipment to be requested was made.

3.4 Joint Task Force Meeting

A Joint task force meeting with representative from TBCS, Manila, NTP Coordinators, field personnel and Mission team convened to discuss the progress and annual work plan of the project which includes the nomination of New ISAs.

3 5 Third Joint Coordinating Committee

The meeting was attended by JICA's Consultation Survey Team, representatives of DOH and other members. Approval of the minutes of the second JCC meeting, presentation of the projects progress report, annual work plan, and discussions of issues were in the agenda of said meeting. Discussions were made concerning the requirements to maximize the function of the reference laboratory such as provision of manpower. Nomination and number of counterparts to be trained in Japan, field testing of the new NTP guidelines, expansion of ISAs and utilization of equipment were also discussed (See Annex G for Minutes of the Meeting)

3.6 The Japanese Consultation Survey Team

From November 2-10, a 3-member Japanese Consultation Survey Team visited the Project The members of the team were as follows, viz:

Dr. Shoichi Endo - Leader, Tochigi Prefecture
Dr Toru Mori - Member, RIT, JATA
Ms Junko Nemoto - Member, JICA

The purpose of the Team was to observe and discuss the Project details. The Team participated in a series of meetings related with the Joint Coordinating Committee Meeting. In the JCC Meeting, technical and administrative problems were discussed and implementation of Project activities were planned (See Annex H for Minutes of Discussions)

4. Problems

In general, the project has been confronted with both technical and administrative matters. In technical aspect, only a slight improvement in the implementation of the TB Control Program were achieved. Before the training of microscopist conducted at the third

quarter of the year, quality of microscopy examinations remains unchanged. Differences in laboratory techniques and readings per microscopist were noted. Thus, standardization of procedures in direct smear examination were one of the objectives of the refresher training.

As to the introduction of the new NTP guidelines, several constraints were met. These are related to the policies in the guidelines itself, planning and implementation. To mention, quality of orientation workshop is not so satisfactory due to the big number and mixed category of participants. But this was compensated with regular supervision/monitoring that was provided especially in the first two months. Adequate training of Medical Officers on TB case management and frequent conduct of field conferences have to be considered. In the reporting system, negotiation with FHSIS has to be cleared to avoid duplication and additional workload to the health personnel. To resolved these constraints, discussions with TB Control Service, Manila and field personnel were made for the finalization of the guidelines.

On the other hand, administrative problems occur which contributes to the delay in the implementation of project activities. One is the delay in the installation of the equipment to the reference laboratory, renovation of the X-ray room of Cebu Chest Center, release of equipment, distribution and etc. After the establishment of the reference laboratory, other needed requirements to fully maximize its function such as adequate manpower has to be provided As to the other allocated equipment for technical purposes, proper maintenance should be carried out.

It is hoped that as the project progresses in its third year of operation, intensification of TB Control activities and implementation of the new NTP guidelines will improved the TB situation in Cebu province.

5 Annex

Annex IV.

SUMMARY REPORT OF THE FIELD TESTS

I INTRODUCTION:

The DOH-JICA Project is testing the proposed NTP guidelines in selected Project area for the revision of the NTP guidelines by DOH-TB Control Service, Manila. The new guideline aims to strengthen case holding activities rather than case finding; improving TB treatment strategies and simplification of records/reports to implement an effective TB Control Program. One of the vital point for its implementation is a stepwise introduction with regular and appropriate follow-up visits.

II. MATERIALS/METHODS:

The proposed guidelines prepared by TBCS follows the WHO modules with modifications to adjust the Philippine set-up. The proposed guidelines were tested in Mandaue City and Dalaguete RHU I.

The 1993 Health Service background of these 2 areas are as follows.

	Mandaue City	Dalaguete RHU I
Population	183, 99	29, 496
No. of brgys	27 (3 Dist.)	19
No of BHS	27	8
Manpower		
MHO	5	1
PHN	30	2
MT	6	1
RHM	27	9
RSI	1	1
BHW (Active)	72	34
Dentist	1	1
Hospital		
Gov't.	1 (10 beds), 1 sanitaria	2 (25 beds)
Private	2 (100 and 50 beds)	

* Source: Presentation by the representative of each area, April 14-15, 1994.

The different activities undertaken for the field testing were seminar workshops, orientation which are enumerated herein:

1 February -Seminar workshop on Supervision/monitoring skills and New NTP guidelines

In this seminar workshop, the following discussions was done.

1 Discussions on each item of the newly drafted NTP guidelines;
2. Detailed planning and scheduling of the field testing;
3. Selection of field testing areas and making of an action plan.

2. March - Preparation of New guideline based on above-mentioned seminar workshop.

3. April - TB Consultative Meeting

Finalization of protocol for field testing and making of action plan. The guidelines on Case finding, Treatment, Recording/Reporting including the frequency of supervisory visits was discussed.

4. May

A 2 day/batch orientation of the new NTP guidelines to doctors, PHNs, Med. Tech., RHMs, Dentist and RSI was done. The draft of the guideline was distributed to all health personnel.

The number of participants were for Dalaguete RHU I (15 participants) and Mandaue City (94 participants in 2 batches).

The syllabus of the Orientation was as follows:

Day 1

- Briefing on Workshop Activities
- Lecture on Case finding, NTP Chemotherapy, NTP Recording/reporting system

Day 2

- Group Workshop on case exercises
- Presentation of workshop output
- Evaluation through a questionnaire about their impression of the NTP guidelines

Observations by Dr. Seita. He analyzed each item of the proposed NTP guidelines and has submitted a memo to the Project (See Annex 1 for his comments)

5. June 13 - Started the implementation of the New guidelines

The delivery of sputum cups was delayed so initiation of field testing started on June 13 instead of June 1, 1994 as planned. But in Mandaue City, entry on the laboratory logbook started from June 1, 1994.

Distribution of materials:

DOH

1. Additional drugs for Regimen II and for modified treatment.

There is a delay in the allocation of additional drugs. The RHU utilizes the existing drugs for SR.

JICA

2	Sputum cups with screw cap	
2	Treatment card	- by printing press
3	Identification card	- by printing press
3	NTP Laboratory logbook	- by the Project Office
4	TB registry	-ditto-
5	NTP lab. request form	-ditto-
6	TTP transfer form	-ditto-

ORDINARY SUPPLY

1. TB drugs (Type I & II)
2. Microscope
3. Reagents & slides
4. Target Client list
5. one tricycle solely for NTP use - Mandaue City
6. Motorcycle for DSPHN - Dalaguete RHU I

6 June - Dr. Mori's visit. He proposed modifications to the NTP guidelines. (See Annex 2 for his comments)

2

7. Conduct of supervision/monitoring visits by the DOH-JICA team & TBCS

Dates (1994)	Mandaue City	Dalaguete RHU I
	June 9	June 10
	June 17	June 16 (by telephone)
	June 24	June 23
	July 7	July 8
	July 28	July 29
	August 9	August 10
	October 6	October 5
	November 4	November 7
	December 9	December 8

With the implementation of the field testing, field personnel can refer several questions to the Project Office by telephone e.g. type of patient, selection of regimen and etc.

III RESULTS:

Through the observations of the above-mentioned activities, the following results were observed:

Case-finding & Treatment Activities in the Pilot Areas (*June - Oct., June - Nov.)

	Mandaue City				Dalaguete RHU I			
	'93*		'94*		'93		'94	
Case-finding								
No. of Symptomatics Examined	3,190	(100.0%)	658	(100.0%)	328	(100.0%)	339	(100.0%)
with 3 Specimens	-		559	(85.0%)	-		287	(84.7%)
Sm (+) ('94 w/ 2+)	114	(3.6%)	64	(9.7%)	16	(4.9%)	23	(6.8%)
Doubtful ('94 w/ 1+)	-		12	(1.8%)	-		1	(0.3%)
Treatment								
No. of Treatment Started	201	(100.0%)	222	(100.0%)	49	(100.0%)	49	(100.0%)
Sm (+)	113	(56.2%)	63	(28.4%)	14	(28.6%)	24	(49.0%)
Sm (-)	88	(43.8%)	159	(71.6%)	35	(71.4%)	25	(51.0%)
Regimen I (SCC)	126	(100.0%)	120	(100.0%)	21	(100.0%)	29	(100.0%)
Sm (+)	113	(89.7%)	58	(48.3%)	14	(66.7%)	23	(79.3%)
Sm (-)	13	(10.3%)	62	(51.7%)	7	(33.3%)	6	(20.7%)
Regimen II	-		5		-		1	
Regimen III (SR)	75		97		28		19	

2 Summary of discussion with Field Personnel

Dalaguete RHU I
Impressions from:
1 PHN's
- Reminding of follow-up examination is sometimes difficult and motivation of RHM is not easy.
- For adjustment of dosage for the TB drugs, additional pills are packed in a small plastic bag by PHN - this gives additional workload.

2. MHO
- One of the key of the field tests is strong logistic support.
- Through their routine job and Tibay baga, their NTP activity is already well known in the community
- Corrective action to workers is important especially motivation to RHMs. For this motivation, a strong pressure is needed from time to time.
- The orientation seminar is alright but a refresher course is necessary.
- For supervision/monitoring, utilization of staff meeting is effective.
- He raised up the lacking of supervision and monitoring from upper level.
- The Clinical aspect of the new guideline should be strengthened.

Mandaue City
Impressions from:
1. Medical Technologists
- Smearing increased their workload but overall workload in the laboratory is acceptable
- They thought that 3 sputum collection is difficult but actually not because symptomatics followed their motivation
- Recording improved and is informative.
- There is no column for the number of follow-up examination but further discussion is needed to determine if this information is necessary in the lab. request & lab. registry or not
- Sometimes RHM forget to fill up TB Case No. in the request form.
- They said that the work is systematic.
- To record the date of examination in the TB registry is alright.

2. PHN's
- Several points were mentioned on the differences between old and new guidelines but it seems that those differences does not come from the system itself but on the introduction like the conduct of training and provision of materials.
- New guideline is specific. The expression of symptoms in the new guideline is more understandable. However, before no proper instruction was done.
- They can concentrate more on case follow-up and no target is imposed.
- They can make case holding activities with case holders.
- In the new guideline, cough is mentioned as the main symptom and clear for them for symptomatic identification.
- The work instructed in the new guideline is quality oriented not quantity oriented.
- For them more specimen, but no smearing is better.
- Forms related to their work is easy to fill-up and clear.
- They mentioned that the new guideline is more systematic, informative and specific.

Systematic means that each step from case finding and treatment is clear.

3. RHM's
- Before they are working for target accomplishment than for patient.
- Now smearing/fixing is under the Med. Tech. so workload is not so much compared with another program.

4. City Health Officer II & NTP Coordinator
- The difference of the new guideline and old manual is not so big.
- New guideline is more technical.
- Discussion with field worker is more important especially in the 1st & 2nd months after introduction. Refresher meeting is necessary as observed from the findings in the supervision/monitoring activities.
- In the new guideline, treatment can be provided to all type of TB patient.
- Supervision/monitoring is important and necessary.
- Workload of field personnel in NTP decreased.
- The hired CFPackage by LGU is an advantage and is helpful as case holders.
- More consideration is needed in the guideline for chidren, tranferred-in and referred cases.
- Automatic registration of smear positive identified was discussed. However, registration may have more confusion regarding the information of patient.
- As suggested by the Medical Officers, children below 10 yrs. should be examined as long as patient can produce phlegm.
- Passive case finding is employed.
- X-ray result read by radiologists is the basis of the Medical Officer for treatment eventhough patient is physically examined.
- Some of the definition like lost transferred-in and referred cases should be discussed further

Annex 1

Comments on the NTP Policy Manual

May 4, 1994

Akihiro SEITA
Short Term Expert of JICA

I would like to leave my personnel comments on the NTP Manual developed by the TBCS hereafter. However, I would like to express my sincere admire for this excellent achievement.

NTP Guidelines on Case Finding and Diagnosis

Page 3 — It may be better to add the sentence as "the very first sputum excreted in the morning"

Page 5 — It may be better to explain how to collect three specimens within two days

Page 6 — 5. Require and collect for a second (repeat) sputum... It may be better to specify the number of examinations needed like "another three consecutive sputum smear examinations are needed"

Page 7 — F. On Diagnosis of referred or Transferred in Patients.
It may be better to specify the number of smear examinations needed like "once" or "tree times.

Page 8 — First paragraph.
It is probable rare that smear positive cases shows the negative conversion within two weeks of treatment, but it may happen. I am afraid that if we follow the present protocol, we may treat real smear positive cases which show by chance smear negative with 2HRZ+2HR. This regimen is too short.
We are planning these new guidelins on the premise that every microscopic centers are reliable.

NTP Guidelines on Chemotherapy

Page 3 — Defaulter and Lost
TB cases are categorized into New, Relapse, Transfer in, Treatment after Loss; and Treatment failure. Also, treatment outcome is categorized into cured, completed, died, lost failure and transfer out. So, it is not needed to specify the "defaulter".

Page 4 — 5. The national and local governments shall ensure the provision of drugs.....
Did I understand that this sentence includes the procurement of drugs? If not, it may be better to specify as "distribution" or...

6. Treatment resources, logistics and ....
First priority is given to both new and re-treatment smear positive cases. I guess new smear positive cases should be given the first priority. Re-treatment will be the next. It may be better to divide them into two.

Page 5 — Contraindication of EB. There is "extreme of age". What does this exactly mean?

Page 6 — Extra-pulmonary TB is to be treated with Category 1. Are you going to treat lymphadenitis for six months?
It may be better to specify that serious forms of EP such as meningitis, miliary or bone TB will be treated with category 1.

Page 7 — Sputum smear examination for the follow up cases. It is said that one time of smear examination is enough. I agree that if the result is negative, one is enough. But if it is positive, I think another one specimen is needed to be examined to confirm the results. Of course, clinical course and other symptoms and signs should be taken into consideration. Practically what is needed for RHMs or PHNs to refer the case to the medical officer not deciding the treatment policy by themselves.

Page 9 — 11. Modify Regimen 1.
What do you exactly mean "multi-drug resistance"? In the USA, multi-drug resistance means the bacilli resistant to both INH and RFP. Is it same for you? How do you survey this resistance rate?

Table 1 — It may be better to add the explanation that "if smear becomes positive again during the treatment, RHMs and PHNs should refer the cases to the medical officers."

Table 5 — It may be better to specify the quantity of each anti-TB drugs included in the blister package. E.g. For type 1, RFP 450 mg capsules x 7, INH 300mg tablets x 7 and PZA 500mg tablets x 14.

Guidelines on NTP Recording and Reporting

Annex B The title is "Sputum Smear Examination".

It may be better to explain more practically how to fill the columns of Specimen Code No. Do you want them to click the blanks?

Annex C It may be better to add one line for the telephone number in the column of Address.

Annex F It seems to me that this NTP Quarterly Report, Activity Report, is still very complicated. I will summarize my idea in my report on the logistics in TB control in the Philippines.

Annex H It may be better specify what is needed is "No. of sputum positive cases" is a number of cases or a number of examined slides.

Memo on NTP Quarterly Report (Annex F)

May 5, 1994

Akihiro SEITA M.D.
Research Institute of Tuberculosis

I would like to express my personal comments on the NTP Quarterly Report (Annex F) hereafter.

I understood that the objectives of this report are to collect the data on the incidence of tuberculosis in RHU and on the drug supply (logistics). I fully agree that this report is indispensable to establish an effective TB control activities. However, it seems to me that several points still need further discussions.

Case Finding

This part consists of 1. Pulmonary TB and 2. Extra-pulmonary TB. Pulmonary TB part is divided into three such as;

a. No. of new S(+) cases,
b. No. of S(+) cases with previous treatment, and
c. No. of S(-) cases.

I fully agree on a. No. of new S(+) cases. This figure is one of the most important one in TB epidemiology. However, I would like to make sure the meaning of b. and c.

Regarding to b. No. of S(+) cases with previous treatment, did I understand that this category include the number of both relapses and treatment failures? I have no objection to report the number of relapsed cases in this form but if the number of treatment failure cases is included, please take below comments into your consideration.

Treatment failure cases are, as you defined in your manual, the ones who failed to show the negative conversion of sputum smears during or at the end of treatment. In other words, they are found that their sputum smears are still positive during or at the end of the treatment. These cases should be considered as treatment failure and immediately put under the re-treatment regimen (category - 2) as you mentioned in your manual. However, from the view point of incidence reporting, these cases are once registered and reported as new cases. So, if you include these cases in this report, what you are going to do is to report this case again. It means you are going to count the same case twice. I think it may be better to replace b. with b. No. of S(+) relapsed cases.

Regarding to c. No. of S(-) cases, did I understand that this means only the new S(-) cases? If that so, it may be better to say c. No. of New S(-) Cases to avoid unnecessary confusion.

Regarding to the extra-pulmonary TB part, I would like to ask the same question. Did I understand that it means only the new extra-pulmonary cases? If that so, again, it may be better to say a. No. of new Extra PTB cases.

It may be needless to mention here, but I would just like to confirm the following issue. In terms of incidence of TB, what we need to know is the number of below cases such as;

* Number of new smear positive pulmonary TB cases
* Number of new smear negative pulmonary TB cases
* Number of new extra-pulmonary TB cases
* Number of smear positive relapsed cases.

When we evaluate the incidence of any area, we only need above figures. Please be reminded that cases of transferred in, treatment after loss and treatment failure are once recorded and reported as new cases previously. So, if you count these cases for case-finding report, eventually you will count these cases twice. In other words, you will double the number of TB cases.
It may be better to use following table for this explanation.

Category	S(+) PTB	S(-) PTB	EP	Total
New	(A)	(B)	(C)	(D)
Relapse	(E)	---------	-------	(F)
T/I	(G)	(H)	(I)	(J)
Tx Loss	(K)	(L)	(M)	(N)
Tx failure	(O)	(P)	(Q)	(R)
Total	(S)	(T)	(U)	(V)

What is needed for incidence evaluation, only (A), (B), (C) and (E) are needed. Others from (G) to (Q) are already registered as New cases so it is not needed to report these figures for incidence report. Anyhow, these figures should not be mixed with (A) to (E).

Treatment and Drug Inventory and Requirement Report

As the treatment part and drug inventory and requirement part of the NTP Quarterly Report (Annex F) are relevant each other, let me discuss these part together hereafter.

At first, let me summarize these part as follows;

Category of Cases	Tx table	Drug Inventory and Requirement
New S(+) Cases	(c)	Category 1
S(+) with previous treatment	(f)	Category 2
S(-) age 0-9	(i)	6HR
age 10+	(l)	category 3
EP age 0-9	(o)	category 1
age 10+	(r)	category 1

I fully agree that all of new S(+) cases will be under category 1 treatment. It is same for S(+) with previous treatment if this category includes relapsed and treatment failure cases.

For S(-) aged 0-9 years (i), did I understand that this report mentioned report that these cases are treated with 6 months of INH and RFP? This regimen is not category 1, 2 nor 3. I am afraid that I may misunderstand the meaning. Please let me know the detail.

For S(-) aged 10 and over (l), basically they are to be treated with category 3. However, how about the smear negative but radiologically moderately or far advanced cases? In your manual, they are to be treated with category 1. I think there are some.

For extra-pulmonary cases (o) and (r), if all the EP cases including cervical lymphadenitis are to be treated with category 1, it is OK. Please be noticed that lymphadenitis is usually the most common form of extra-pulmonary TB in almost all age groups. I do not think they are progressive primary PTB cases.

The Drug Inventory and Requirement Report is definitely in need. However, I guess it may be better to modify this form as follows;

i) To simplify the baseline data for drug requirement calculation as the number of cases who started the category 1, 2 and 3. Probably the table of "Treatment Started this Quarter of Cases identified" is not necessarily.
The column of "No. of Cases" in the Drug Inventory and Requirement Report is enough.

ii) To avoid the HR regimen for S(-) aged 0-9 years. This case can be treated with category 3.

Memorandum for the discussions with DOH-JICA Health Development Project and other concerned authorities and staff.

May 6, 1994

Akihiro SEITA
Research Institute of Tuberculosis, Japan

This is just a memorandum prepared for the final discussion with the team member of DOH-JICA Health Development Project. The contents mentioned hereafter is only the preliminary report of the two weeks observation. I would like to discuss two issues briefly here, one is the logistics in TB control, next is the laboratory network and the last was the new NTP policy (manual) and its field tests.

1. Logistics

I would like to apologize that I could not finalize my report on the logistics in TB control in the Philippines. This report will be submitted within a week. I will briefly summarize the logistics situation and problems in this country.

Drug policy	National Drug Formulary exists and the types of anti-TB drugs are mentioned in it. Treatment regimen is standardized but it will be modified according to the WHO recommendations soon.
Drug selection	TBCS is selecting the drugs to be procured.
Procurement	PLS is in charge of procurement of SCC dugs. The quantity is calculated by TBCS as expected number of cases, not morbidity. Reserve stock is not basically taken into consideration. The price of anti-TB drugs are quite reasonably cheap (average price paid ; 888) The lead time between the order and arrival of drugs are 120 days. Quality assurance is done by BFAD. The SR drugs are supposed to be procured by municipality. However it is not clear to me that how much SR drugs municipality is exactly procuring.
Distribution	SCC drugs are distributed to central, region, province and then RHU. TBCS, RTC, PTC are supervising the distribution in each level. From central to region, drugs are distributed based on the expected number of TB cases. It is basically same from region to province. From province to RHU, it is request base.

Distribution is done through general channel. In all calculation, stock level is not considered. It seems that there is no shortage of drugs and there have been no stock-outs last year.

Use of drugs — As blister pack is implemented for SCC, patients for SCC is treated accurately. However for SR, there is confusion. Some of them are treated with 12HE and some of them are treated with 2HRZ+2HR. I could interview only a few patients but it seems that patients have the correct knowledge on drugs.

Private sector — There is no regulation in terms of anti-TB drugs in private sector. Almost all type of anti-TB drugs are available at private sector. Even the combined tablets, blister packed preparation are available. However the price is around 4708 higher compare to the international average price.

Discussions and recommendations

1. As a whole, TB drug management system is developed in this country. TBCS is in charge of SCC drugs selection, ordering the quantity and distribution to regions. QA system is existing and above all blister pack preparation for SCC is implemented with quite cheap unit price. There is no shortage of anti-TB drugs in this country.

2. The issues to be discussed are inventory control, drug request form and drug expiration date.

   As anti-TB drugs will expire two years after the manufacture, there are practical difficulties to establish the buffer stock. This short period is not logical to me. There should be at least three years before the expiration of drugs.

   Each level should clearly have the stock-level of its warehouse. Ledger system is introduced but the general inventory record or report system should be implemented in all level.

   In terms of drug distribution, the stock-level is not considered. It may cause the over-stock at any level. To avoid this unnecessary stock at any place, the unified request form with the report of stock level should be implemented. The current proposed request form for drug distribution is basically fine.

2. Laboratory Network

According to the current proposal from NTP, the rural health midwives are supposed to do only the transportation of

sputum to laboratory. They are free from making smears. I would like to agree this new policy.
However, the quality control seems to need improvement. The selection of slides should be done by validators and they should not know the reading results of lab tech in advance. Probable the intensive training for the lab tech is in need. It should be recognized that validation can not be 100%.

3. New NTP Policy and its field test

Please refer to my memos on new NTP policy.
For the field test, the most important issue is probably the supervision from central, region and province. There should be at least once a month supervision from these level.

Annex 2.

PROPOSED MODIFICATIONS OF THE NEW NTP GUIDELINES

Date : June 24, 1994
Presided by : Dr. Toru Mori
Present : Dr. Masashi Suchi
Dr. Elaine R. Teleron
Ms. Colita C. Auza
Ms. Maria Carolyn Daclan

The following modifications were suggested by Dr. Toru Mori and discussed with the DOH-JICA team.

NTP GUIDELINES ON CASE FINDING & DIAGNOSIS

Page 6 No. 2 To avoid delay in transporting sputum specimen it is better to specify as soon as possible, at latest 4 days from sputum collection than just stating within 4 days from collection.

No. 3 last sentence "This is to enable clinic personnel to initiate treatment as early as possible especially to sputum positive cases". Does this clinic personnel includes not only doctors but nurses and midwives as well to initiate TB treatment?

It is suggested to put, this is to enable clinic personnel to schedule initiation of treatment as early as possible especially to sputum positive cases.

NTP GUIDELINES ON CHEMOTHERAPY

Page 2 Definition of terms:
It is much easier to refer to this definitions if arrangement of terms is in sequence like,

1. Classification of TB cases
2. Pulmonary TB
3. Extra-pulmonary TB
4. Smear negative case
5. Smear positive case
6. Type of TB cases
7. New case
8. Relapse case
9. Treatment failure case and so on.

As observed in the implementation of the new guideline, most difficulties met in TB registration lies in TB case classification. The definition of treatment failure is specific which places some cases unclassified. It is recommended that having OTHERS (comprises mostly of failures) is opted. Sample cases are as follows:

a) Sm (+) on entry, was cured and came back Smear negative.
b) Sm (-) on entry came back again Sm(-), X-ray positive.

c) Sm (+) on entry, outcome of treatment is completed and came back again Sm (+).

Page 3 No. 8. Transferred-in
How to deal with patient with no referral slip?

No. 9 Defaulter
This can be simply define as a patient who has interrupted treatment for less than 2 months.

No. 10 Lost
A patient who interrupted treatment and remains unretrieved for two months or more.

Page 4 POLICIES ON NTP CHEMOTHERAPY
No. 5 The national and local governments shall ensure the procurement and provision of drugs to all sputum positive cases.

It should be clearly identified, which office will provide which type of drugs especially to smear negative cases.

No. 6 Prioritization of cases can be omitted, because all cases are important for treatment.

Page 5 No. 7 Prophylactic treatment is not recommended.
Omit the statement and "is strongly discouraged".

PROCEDURAL GUIDELINES
No 1. Absolute contraindications to specific anti-TB drugs recommended in NTP regimens should be elaborated.

Isoniazid : Liver disease (What type of liver disease?, epilepsy?)
Ethambutol: Extremes of age (specify age limit).

Page 6 No. 2 Regimen I
Cases to be included for Regimen I should be limited to new smear positive cases; seriously ill extra-pulmonary or smear negative cavitary cases. As to the extent of lung involvement, it is better to treat X-ray cavitaries than moderately or far advanced cases.

No. 3 Minor adverse reactions to specific drugs are:
Streptomycin : giddiness
The word dizziness is well understood and commonly used among health workers.

Proposed Modifications of New NTP Guidelines /page 3

Page 7 Major adverse reactions :
Suggestions:
PZA : joint pains, jaundice (instead of acute gout)
Streptomycin: tinnitus, deafness

No. 12 Second sentence
Meanwhile, treat with INH alone (at 15 mg/kg. body weight per day). There should be a maximum dosage like in INH, it should not exceed 750 mg/day.

Table 1. SCHEDULE OF SMEAR FOLLOW-UP EXAMINATIONS
Patients under Regimen I

After 2 months of treatment	- Yes
After 3 months	- No
After 4 months	- Yes to both Sm(-) and Sm(+).
After 5 months	- Yes
After 7 months	- Instead of NO place Not applicable

It was suggested that Intensive phase will be extended for 1 week awaiting the result of sputum follow-up. If result is Sm(-) start maintenance phase, but if Sm (+) continue Intensive phase for 3 weeks.

Schedule of Smear Follow-up for those whose intensive treatment is extended should be clearly presented.

Table 2. TREATMENT MODIFICATIONS BASED ON RESULT OF SMEAR FOLLOW-UP EXAMINATIONS
Patients Under Regimen II
After 4 months of treatment- if result is Negative, Continue maintenance phase instead of Start.

Table 3. TREATMENT FOR NEW SMEAR POSITIVE CASES WHO DEFAULTED TREATMENT FOR REGIMEN I
How to manage the patient if length of interruption is more than 8 weeks? If possible include this, because several cases were met with this situation.

There should be a Table for REGIMEN III who interrupted treatment.

Table 5. GUIDE TO ANTI-TUBERCULOSIS DRUG DOSAGE FOR PATIENTS WEIGHING LESS THAN 30 KGS. OR MORE THAN 50 KGS.

Daily dosages should have a maximum limit. For PZA, this expression is not clearly understood (2- - 35 mg/kg daily, not to exceed 3 gms. daily).
The 3 gms. as maximum dosage is quite high.

Proposed Modifications of New NTP Guidelines /page 4

GUIDELINES ON NTP RECORDING & REPORTING

Page 2 DESCRIPTION OF RECORD AND REPORT FORMS

A. Records

1. Masterlist of TB Symptomatics

Delete the last sentence "This record is optional". This is important because this will enable the Midwife to follow-up the request of sputum examination sent to the laboratory and therefore should be retained in the BHS.

Page 4 B. Reports

No. 3 NTP QUARTERLY RETROSPECTIVE COHORT REPORT, second paragraph, can be restated as follows:

It provides NTP area managers with information needed to estimate overall programme effectiveness in terms of cure rate as well as the percent of patients who defaulted, the percent of patients who failed and the percent of patients who died while on treatment. (Conversion rate was omitted).

Third paragraph

The cohort report is completed quarterly either by the DSPHN or PHN in the RHU, based on information found in the TB registry. This will be submitted and consolidated by the Provincial TB coordinator. The compiled provincial cohort report is then transmitted to the regional NTP coordinator who compiles the data of the region and submits the same including a consolidated regional cohort to the central office of the Department of Health.

The DSPHN has a vital role because they have a lesser number of catchment area as compared to provincial coordinators and is nearer to the field. They can be utilized not only in report analysis but also feedback to their respective RHUs in due time.

Cohort analysis must be done by RHU base rather than by province. This way, it can be easily accomplished due to lesser number of cases.

Page 5 C. Other Forms

Third paragraph NTP LAB. REQUEST FORM FOR SPUTUM EXAM

It was proposed to have a duplicate form as stated in the guideline. To retain a copy in the laboratory is useful if misrecording or disagreement of results happen. But in the field, they were instructed to have only one copy which will be kept in the BHS because TB Symptomatics Masterlist contain the same information as this request form. To have one or a duplicate of this form should be agreed.

Page 6 GUIDELINES TO SPECIFIC RECORDS, REPORTS AND FORMS:

A. Masterlist of TB Symptomatics:

Omit (Reminder. This record is optional).

Proposed Modifications of New NTP Guidelines /page 5

When to use : As soon as TB symptomatics/suspects are discovered until results of sputum examination and/or x-ray are received.

TB suspects is included to refer to those patients whose sputum are examined even without complaint of symptoms but with X-ray result indicative of a TB case.

Sources of Information : TB symptomatic/suspect etc...

1. Refer to Annex A for the suggested format of the Masterlist of TB Symptomatic.

2. Date of registration, name, address, age and sex

3. Family serial no.

4. **Date sputum submitted/examination results** - Enter the date sputum specimens are submitted to the microscopy center above the dotted line and record the examination results from the lab. request form below it. The 1st column (7), 2nd column (8), and 3rd column (9) refers to the sputum specimen submitted. When a second (repeat) sputum examination is required to TB symptomatics, pertinent patient data shall be entered in the succeeding spaces.

5. **Date sputum results received** - Enter the date when lab. request form containing the sputum examination results from the microscopy center is received by the Midwife.

6. TB Case Number

Page 8 B. NTP LABORATORY REQUEST FORM FOR SPUTUM MICROSCOPY

1. Refer to Annex B for the suggested format of the NTP Laboratory Request Form for Sputum Examination

2. **Name of collection unit, date of submission** - Enter the name of the collection unit (RHU/BHS) and the date of submission as soon as collected specimen/s are ready to be transported to the microscopy unit.

3. Name of patient, address, age, sex

4. Disease Classification

5. **Reason for examination** - the same as in the written procedure
Check the box on Others for reasons other than the stated ones and specify.

Proposed Modifications of New NTP Guidelines /page 6

6. TB Case No.

7. Specimen code number

8. **Date of Sputum collection** - Write the date of sputum collection beside the specimen code number in the box.

9. Signature of sputum collector

10. **Date received** - Write the date the sputum specimen/s along with this form is received by the personnel at the microscopy unit.

Page 11 C. NTP TREATMENT CARD

Suggested User/s: M.D/PHN opens treatment card which should be place at the treatment unit.

When to Open : As soon as treatment is started in the unit.

When to Open should be placed instead of When to Use. This shall be opened only with the patient's presence and not when a TB case is identified from the laboratory based from his results only.

1. Refer to Annex C for the suggested format of the NTP Treatment Card.

2. **Sputum Examination Follow-up** - Write in the due date the target date when follow-up sputum examination will be collected to TB patients based from the date treatment was started. Enter in the submission date, the actual date specimen is collected and enter the result on the space provided for.

Page 12 No. 3 Date the card is opened - **This denotes the date when treatment is started in the unit**

No. 6 Second paragraph Classification of TB, type of patient and regimen
All the previously enumerated information required in the treatment card (no. 2 to 7 of this section) may be gathered as soon as the TB case is identified or confirmed. **(This paragraph should be placed between No. 7 and 8).**

Page 13 No. 8 Treatment started
Omit the last sentence "If he is started on treatment as soon as discovered, the date the card is opened and the date when treatment is started should be the same".

No. 9 **Omit the last sentence** "In case no sputum follow-up examination was made for a follow-up schedule, write none".
Sputum follow-up should be taken even if the date is delayed.

Proposed Modifications of New NTP Guidelines /page 7

Page 11 No. 10 Treatment stopped
(c) **Lost - omit the statement** "such that when he reports back for treatment he is registered anew".

(d) **Transferred out** - a patient who continue treatment in another facility having a different TB registry. This patient must bring with him proper referral papers. For TB patients who move to another treatment unit having the same registry, arrangement for the transfer of treatment card will be made by the PHN.

This is the suggested definition. An acknowledgement slip from the referred unit need not be received by the referring unit to consider this patient a transferred out from the registry.

Page 14 D. TB Registry
When to Use : As soon as TB cases is started on treatment in the unit.

Interchange column on sex and age to make it uniform with the treatment card.

Page 15 Guide to Codification of TB Cases

It was proposed to utilize the year (2 digits), RHU/City Code (2 digits), and Serial No. (3 digits) without dash. Example: Mandaue 9404001

No. 4 b) Codes for barangays is omitted to make it more simpler and since no report is submitted from the BHS level. The treatment unit where patient received his treatment can be seen in the Name of Health Facility (RHU/BHS) in the registry.

Page 16 E. NTP Laboratory Register

No. 2 Laboratory serial number - the suggested code that shall be assigned to it is simply the YEAR and SERIAL NUMBER for example 94001.

Page 17 No. 3 Include this statement **Enter the TB Case No. for follow-up examination.**
Column 6 Name of Treatment Unit change to Name of Collection/Treatment Unit.

F. NTP Quarterly Report
When to Use : End of every quarter of the year
(Specify further the deadline of submission and to which level, RHU to IPHO, IPHO to Region)

Proposed Modifications of New NTP Guidelines /page 8

Page 18 NTP QUARTERLY REPORT
The Case Finding part and Drug Inventory and Requirement Report should be separated.

The age group of 0-14 for New Smear positive should be included. It is not necessary to breakdown No. of Sm(+) cases with previous treatment, Sm(-) cases, and Extra-pulmonary by age but a breakdown by sex will suffice.

Combine the No. of S(-) cases seriously ill and No. of S(-) not seriously ill.

Delete the part on Treatment.

For the Drug inventory and requirement report a simple form is appreciated because number of stock varies for example when TB treatment is extended or when no patients are admitted.

Page 20 G. NTP Quarterly Retrospective Cohort Report
Responsible Officer : PHN

Page 21 No. 7 Omit last statement "whether they are included in the cohort of patients to be evaluated or not".

Second paragraph
Omit " To do this, a provincial coordinator may have to resort to ticking off each specific item as he goes through a row in the TB registry for each TB case".

Instead of No. 7 its No. 8 Treatment outcomes are those indicated by numbered column (1) to (6) each of which corresponds to TB registry.

Page 22 No. 10 Omit this item.

Page 23 I. NTP REFERRAL/TRANSFER FORM
This can titled as NTP TRANSFER FORM

This should include bacteriology results (sputum examinations performed by the referring unit)

For referral purposes like for X-ray or hospitalization, a different form should be used.

Page 24 NTP IDENTIFICATION CARD
- A folded design of this card was suggested
- No word of TB should be placed infront of the card
- In the drug collection part, this should patterned after the treatment card with Due Date and Actual Date.

Schedule of Smear Follow-up Examinations

Patient Groups / Schedule	Patients under Regimen I		Patients under Regimen II		Patients under Regimen III
	Regular treatment	With treatment Extension on the intensive phase	Regular treatment	With treatment Extension on the intensive phase	
After 2 months of treatment	Yes	Yes	Not Applicable	Not Applicable	Yes
After 3 months of treatment	No	Yes	Yes	Yes	No
After 4 months of treatment	Yes	No	No	Yes	Yes
After 5 months of treatment	Yes	Yes	Yes	No	Not Applicable
After 6 months of treatment	No	Yes if Sm(-) on the 5th month	No	Yes	Not Applicable
After 7 months of treatment	Not Applicable	Not applicable	Yes	No	Not Applicable
After 8 months of treatment	Not Applicable	Not Applicable	No	Yes	Not Applicable
After 9 months of treatment	Not Applicable	Not Applicable	Not Applicable	Yes	Not Applicable

Treatment Modifications Based on Result of Smear Follow-Up Examinations

Patient Group	Schedule of Smear Follow-up Examination for Patients with Treatment Extension	Smear Follow-up Examination Result	
		Negative	Positive
Patients under Regimen I	After 2 months of treatment	Start maintenance phase	Extend intensive phase one more month
	After the 3 months of treatment	Continue maintenance phase	Continue maintenance phase
	After 5th month of treatment	Continue maintenance phase	Consider as Failure Shift to Regimen II
	After 6 months of treatment	Continue maintenance phase	Consider as Failure Shift to Regimen II
Patients under Regimen II	After 3rd month of treatment	Start maintenance phase	Extend intensive phase of IIRZE
	After 4th month of treatment	Continue maintenance phase	Start maintenance phase; better. do culture and sensitivity if reference laboratory is available and adjust treatment accodingly
	After 6th month of treatment	Continue maintenance phase	Continue maintenance phase or treat based on C/S results
	After 8th month of treatment	Continue maintenance phase	Continue maintenance phase Repeat sputum examination at at the end of treatment
Patients under Regimen III	After 2 months of treatment	Start maintenance phase	Shift Regimen II
	After 4 months of treatment	Complete Regimen III	Shift Regimen II

Annex B

SEMINAR WORKSHOP ON SUPERVISION/MONITORING SKILLS AND NEW NTP GUIDELINES

I. INTRODUCTION :

Good supervision and monitoring activities comprise one of the core pre-requisites of an effective National Tuberculosis Control Program. Thus, reinforcement of this aspect should be directed towards the improvement of health workers' performance in the conduct of correct and efficient public health services. With the implementation of the Local Government Code, the TB program managers/supervisors at the provincial, city and district levels need to meet and assess which modes of supervision/monitoring to adopt that are relevant to the present times. This Seminar Workshop is envisioned to provide additional knowledge and skills in the satisfactory conduct of supervisory visits to the peripheral levels and opportunity for exchange of information and experiences in the implementation of the newly drafted NTP Guidelines.

II. OBJECTIVES :

A. General Objectives :

1. To update knowledge and skills in the conduct of Supervision and Monitoring activities that befits the present devolved set-up of health services; and

2. To plan for the phasing in of the new NTP Guidelines in the Intensive Service Areas (ISA).

B. Specific Objectives :

After the 3-day Seminar Workshop, the participants will be able to:

1. Share their knowledge and ideas on the present supervision/monitoring activities in their areas;
2. Gain insights in the proper conduct of supervisory visits to lower levels;
3. Discuss each item of the newly drafted NTP Guidelines;

4. Perform detailed planning and scheduling for field testing of the new NTP Guidelines; and
5. Select the areas for field testing.

III. METHODOLOGY :

Lecture
Workshop
Open Forum

IV. OPERATING DETAILS :

Venue	:	Regional Health Training Center, DOH-IRFO 7, Cebu City
Duration	:	3 days
Time	:	8:00 -12:00 - 1:00 - 5:00
Participants	:	DSPHNs, DSMHO (Cebu), Regional/Provincial/City NTP Coordiantors, IPHO Coordinators/Medical Technologists, Cebu Chest Center Chief and staff, and TBCS staff
Funding	:	DOH - JICA Project

V. REQUIREMENTS :

Complete attendance
Active Participation
Workshop output/group analysis

ERT/ebd02109409

Seminar Workshop on Supervision/Monitoring Skills
and New NTP Guidelines

SCHEDULE OF ACTIVITIES

	Day 1 February 21, 1994	Day 2 February 22, 1994	Day 3 February 23, 1994
8:00-9:00	Registration		
9:00-10:00	Opening Ceremony	Lecture on Monitoring and Supervision (Dr. S. Endo)	Planning and scheduling for field testing
10:00-10:15	M O R N I N G B R E A K		
10:00-11:00	Background of WHO TB Control Policy Package (Dr. M. Suchi)	Continuation of discussion	- do -
11:00-12:00	Summary findings of External Eval. & WHO synthesis on recording/ reporting eval. (Dr. V. Lofranco)	Open forum	
12:00-1:00	L U N C H B R E A K		
1:00-2:00	Introduction of new guidelines (Dr. V. Lofranco Dr. N. Cruz)	Workshop on the implementation of new guidelines Detailed discussion of each items	Lecture on Monitoring and Supervision for New NTP Guideline (Dr. S. Endo)
2:00-3:00	- do -		Final discussion on new NTP guidelines and operational research
3:00-3:15	A F T E R N O O N B R E A K		
3:00-5:00	- do -	- do -	Closing Ceremony

Annex C

National Tuberculosis Control Program
REFRESHER TRAINING ON LABORATORY WORKS

I. PURPOSE:

This training is carried out to address the needs of Medical Technologists for a refresher training on Laboratory works. The National Tuberculosis Control Program of the Department of Health adheres to provide good services to the populace through early detection of tuberculosis cases in the community. As a means to achieve this goal, it uses a simple, affordable and accurate diagnostic tool, which is the Direct Smear Examination. With this, it is imperative that Medical Technologists that manned the microscopy centers and the key personnel in TB diagnosis should be adept with knowledge and skills in TB Control and laboratory techniques with emphasis on sputum microscopy.

This refresher program accomplished in a series of batches enables participants from the DOH-JICA Intensive Service Areas (ISA) and Cebu, IPHO validators to implement a unified and strengthened NTP in Cebu Province.

II. OBJECTIVES:

A. General Objectives:

1) To provide inputs on TB Control and laboratory techniques on Direct Smear Examination.

2) Upgrade their knowledge and skills in sputum microscopy through practice examination.

B. Specific Objectives:

By the end of the training period, the participants are expected to be able to:

1) Know the importance of direct smear examination in the TB control programme;
2) Gain insights on the techniques of sputum collection, smearing, fixation, staining and microscopy reading;
3) Manage and evaluate smear microscopy laboratory;
4.) Adopt a system of recording/reporting, logistics and referral between laboratories/radiographic facilities

III. METHODOLOGY:

Laboratory Practice
Lecture Discussion
Prosentation
Pre and post test
Demonstration/Return Demonstration

IV. OPERATING DETAILS:

Duration : August 29 - September 2, 1994 (1st Batch)
September 12 - September 16, 1994 (2nd Batch)
September 26 - September 26, 1994 (3rd Batch)
October 3 - October 7, 1994 (4th Bacth)
Venue : Reference Laboratory of Cebu Chest Center
Time : 8:00 a.m. - 5:00 p.m.
Participants : See attached list of Medical Technologists

Facilitators :

August 29 - September 2, 1994
Dept.of Health & Integrated Regional Field Office No. 7

Dr. Nora Cruz	-	Training Officer, TB Control Service, Manila
Ms. Paz Rostrata	-	Medical Technologist, TBCS, Manila
Dr. Elaine Teleron	-	Regional TB Medical Coordinator
Ms. Colita Auza	-	Regional TB Nurse Coordinator
Mr. Benny Loberiza	-	Medical Technician, Cebu Chest Center
Dr. Enrique Sancho	-	Chief, Cebu Chest Center
Ms. Leonides Manatad	-	Medical Technologist, IPHO Cebu

Japan International Cooperation Agency

Dr. Masashi Suchi	-	DOH-JICA Chief Adviser
Ms. Akiko Fujiki	-	Short-term Expert on Laboratory Works

Funding : DOH-JICA Project

V. REQUIREMENTS:

Complete Attendance
Active participation

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SCHEDULE OF ACTIVITIES

Day	AM 8:00 - 12:00 (15' Tea Break)	PM 1:30 - 5:00 (15'Tea Break)
1	8:00 - 8:30 Registration 8:30 - 8:45 Opening Ceremony/course orientation 8:45 - 9:30 Quiz (Pre-test) 9:45 - 12:00 (Pr) What are the difficulties encountered in your laboratory?	1:30 - 5:00 (P) Laboratory Preparation - Laboratory set up - Reagents preparation - Microscope handling
2	8:00 - 8:55 (L) General Concept on TB and TB Control 9:00 - 9:55 (L) Aim of TB Lab. services 10:10 - 12:00 (L) Specimen Collection (L) Safety precautions & disposal	1:30 - 5:00 (P) Sputum Collection Technique (L) Ziehl-Neelsen Method (P) Ziehl-Neelsen Staining
3	8:00 - 12:00 (L) NTP in the Philippines (L) Recording/reporting system (L) Logistics	1:30 - 5:00 (P) Smear slide reading (P) Direct Smear Examination
4	8:00 - 12:00 (P) Direct smear examination	1:30 - 5:00 (P) Direct smear examination
5	8:00 - 9:00 Quiz (Post-test) 9:30 - 12:00 Course evaluation and summary	1:30 - 2:00 Closing Ceremony

(L) Lecture, (P) Practice, (Pr) Presentation

****PLEASE ALWAYS BE ON TIME****

Annex D

Observations and Suggestions

I. Case-finding

Too many active casefinding. BHWs go out to the village and collect sputum specimens.

1.1 The yield is very low. In some Rural Health Units out of 135 sputa examined, only one is positive. In the many developed countries, active case-finding is being discouraged. The reason is that the active case-finding (using MMR) discovered only less than 20% of all the new bacillary cases and the rest were discovered through passive-case-finding.

1.2 This activities take too much time of the health workers. The effort should be focused to passive-case-finding and treatment.

Collect better quality sputum
Collect three specimens. Spot and morning and spot (next day)

Good services such as correct diagnosis and good treatment (high cure rate) attract more patients to our health units and increase smear positive cases through passive case-finding.

II. Recording for supervision

The present recording system is not well organized. Therefore supervision, in terms of making sure that the activities are being performed according to what should be done, is not easy.

2.1 Major weakness is record linkage.

2.1.1 Registration (Master list of SCC), treatment card and laboratory record have their own numbers. Therefore to search in the registration book the patient who is recorded as smear positive in the laboratory record, one has to go through the registration book by the name of patients not the number, which is time consuming.

2.1.2 The numbers in the registration and laboratory record are not serial. This also prevent easy search of the patient in the record.

1

2.2 Type and Classification of tuberculosis should be introduced.

Cure rate differ according to these categories. Therefore evaluation should be done by category.

III. Treatment

WHO new policy said that the target for treatment service should be 85% cure rate for new smear positive cases.

According to WHO mission which visited Region VII in February-March 1993, the cure rate is 67%. According to my observation it is around 70%. The cure rate should be improved.

Suggestions:

1. Fully supervised treatment for initial one month or two months whenever feasible.

2. Improve patient education

   Improve health workers education

3. Two specimens for each follow-up examination

IV. Management

The duties and role of health workers at the Rural Health Unit and district supervisory nurse should be clearly defined, however these two level workers should be mutually cooperative in order to achieve the same objective that is, to deliver to the patient the best possible services (more than 85% of cure rate). The good recording helps mutual understanding

Monitoring and Supervision

Tools for Management

Tuberculosis Control Programme is composed of activities which are carried out by a number of individuals. The activities must be carried out in harmony in order to achieve a certain objective. There is a need to control the individual activities.

The **CONTROL** may be called **MANAGEMENT.**
If the activities are carried out by a team, the management will be easy and the team leader will be the manager.

Another aspect of the NTP is The **INTEGRATED** programme which is different from clinical work which is mainly done as a clinician and a patient relationship.

Carried out by GENERAL HEALTH WORKERS
- Health Workers at Rural Health Unit
- Barangay Health Workers
- Health Workers at dispensaries
- Health Workers at health centers
- Health Workers at hospitals
- Microscopists

These workers are not specialized in tuberculosis, therefore their knowledge may be limited and have other several duties. Therefore somebody (manager) must lead their activities of tuberculosis programme in coordination with other programmes.

Requirement of successful integrated programme.
- Technology must be simple
- Simple arranged activities--written in manual
- Good training
- Good management -- supervision, monitoring and evaluation -- corrective action

Review of integrated tuberculosis programme from my experience.
- WHO policy developed in early 1960s. The eight and ninth reports
- Many countries accepted the policy.
  - Some countries are successful.
    good infrastructure of health services and good management
  - Some others not

1

Reasons for unsuccessful programme:
Inadequate priority setting, resources allocation other pressing needs in health or other than health -- shortage of health workers, poor training, inadequate management

Development of general health service is more emphasized than that of special diseases programme.

Insufficient evaluation -- confusion in priority between case-finding and treatment.
Although some researchers said that regular and complete treatment is essential for successful tuberculosis programme, many policy makers set the target for case-finding because that is more presentable.

Difficulty in defining cure rate -- long treatment (one year) time for evaluation

There is an opinion that regular and complete treatment is more important than choice of regimen. (Dr. Nagpaul)

Efficacy of regimen ranges	100% to 70%
Completeness	100 to 30%

Another opinion -- Delivering good service is the best health education so as to attract more patients to the health services.
Quality of service is important.
Technique and system (detailed procedure) of supervision has not been developed.
Insufficient dialogue between tuberculosis workers and policy makers on the results of evaluations.

Consequence:
To meet target, number of sputum examination increased (sort of active case-finding), yield (positive rate) decreased and made false positives and negatives.

Lower priority (less attention) on tuberculosis programme resulted to lower performance and poor quality of services.
Less tuberculosis cases detected, less cases cured, resistant cases.
The decrease of tuberculosis become slower, even it is increasing.

Recent WHO policy change

MORE EMPHASIS ON TREATMENT

The primary aim of a country's National Tuberculosis Programme is to improve the cure rate of new smear-positive patients to at least 85% and to achieve at least a 70% detection rate. However, the detection of smear-positive cases should not be aimed at before a high cure rate (such as 70%) has been achieved.

If health facilities are curing 85% of the new smear-positive cases, this will attract more patients to attend health facilities, if they develop tuberculosis.

The reasons for the policy change are:

As the above mentioned, many treatment failures with resistant bacilli, slower decrease or increase of tuberculosis

Appearance of HIV infection

Availability of Rifampicin, SCC

Regimen with INH and Rifampicin is so effective, the duration of treatment become much shorter and the management of treatment service become easier.

The actions taken are:

Develop good efficient and effective system of management

- Supervision of performance
  logistic of drugs and other supplies
- Training of workers at all levels including field workers and supervisors at district, provincial, regional and national levels.
- Strategies on the dialogue with policy makers
- Intensify and coordinate with the international cooperations on tuberculosis programme

SUPERVISION

Supervision is to ensure that activities related to case-finding and treatment of tuberculosis are adequately performed by health workers. In the integrated programme, actual activities regarding case-finding and treatment are carried out by general health workers. They receive training most probably in group first. When they are assigned to actual work, they may face many problems in application of the knowledges and skills they learned during their training. They need help. Therefore it is not enough, even harmful to them to just point out what is wrong and inadequate in their performances and give pressure to do more work.

Supervision is to identify and solve problems the field workers encounter.

WHO training module said "Regular supervisory visit in which you place the emphasis on helping health workers identify and solve problems will create a good relationship between you and the health workers in the district. Health workers will be less worried about your finding things 'wrong', and may be more willing to discuss problems and work with you to identify solutions."

To identify problems, needs effective system to check performance WHO develop systematic recording which consist a treatment card, district tuberculosis register and laboratory register, this makes problem identification much easier.

Treatment Card
- classification pulmonary--extrapulmonary--infectivity, regimen, assessment (cure rate)
- sputum examination for diagnosis--infectivity, regimen, assessment
- type--new, relapse, failure--regimen, assessment
- regularity of treatment
- district TB register number and laboratory register number--record linkage

Laboratory Register
- reason for examination, diagnosis or follow-up (district TB register number)
- results for each specimen--number of specimens
- laboratory number

District tuberculosis register

Classification, type, sputum examination for diagnosis and follow-up, outcome of treatment. These records make all necessary evaluation and reporting possible. Number of cases detected during certain period of time by classification, type, sputum. Cure rate by classification, type, sputum in the disrict.

Record linkage prevents the drop from treatment, sputum examination, and make monitoring, supervision and evaluation of treatment outcome possible.

COMMENTS ON THE WORKSHOP BY DR. SHOICHI ENDO

The Workshop was a hectic and hardworking exercise. I appreciate your active participation. The aim of the workshop which is to develop a test plan for the introduction of the new WHO policy package in the Philippines was, I believe, well achieved. Because of your enthusiasm, your opinion based on your experiences at your daily work was well reflected in the plan. With the well prepared draft plan and efficient guidance of the two doctors from DOH Manila, the discussion was thorough. I believe DOH should be most happy.

Now I am going a little in detail. I am happy that you agree to the three (3) sputum specimen collection for initial diagnosis. Even if active case-finding remains in the plan, you want to be more flexible for choosing the area or occassion for active case-finding. We did not discussed the target for sputum collection, but it seems to be abolished.

The draft plan made by DOH includes detection rate/expected detection rate, which looks like another target. However, this is not the target for sputum collection but for detection of bacillary cases. This is also included in the WHO policy package. I understand that this rate should be used for programme evaluation. I think these changes show the big progress toward the adoption of WHO new policy in terms of emphasis shift to improvement treatment service.

I am also happy that your plan of treatment service is to implement supervised chemotherapy whenever feasible, and intensify patients' education including family involvement for better treatment.

Regarding recording and supervision, you brought up the problem derived from the devolution to the local governments. I hope there will be more dialogue between DOH and the local executives not only at the national level but also local level, so that the latter will understand the National Tuberculosis Program (NTP) to achieve our common goal to reduce tuberculosis in our community.

I would like to emphasize here again, the most important thing is that good monitoring and supervision system is to be established so that during the course of the test and the implementation of the new NTP, programme evaluation will be made timely and more scientifically in order to take necessary corrective action.

Annex E

Logistics in Tuberculosis Control in the Philippines

June 11, 1994

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1. Preface

The logistics system of anti-tuberculosis drugs in the Philippines was reviewed by the author from April 25 to May 6, 1994, based on the request from the Public Health Development Project of Japan International Cooperation Agency (JICA). The author would like to appreciate team members of this Project and also the concerned staff of Tuberculosis Control Services of Department of Health and other related staff in provinces and municipalities.

"Rapid Assessment Manual on Tuberculosis Drug Management in National Tuberculosis Control Programme (NTP)" (the Manual) was used for this review. This Manual was developed by the author and other related researchers. This Manual has indicators which describe the anti-TB drug management activities. Although this is still on the stage of draft, the author found that this Manual is useful to evaluate the logistics in tuberculosis (TB) control.

This Manual reviews the drug management activities according to the following logistics cycle.

1. General Economics
   Public Health sector and NTP Sector budget and finance
2. Drug Policy Issue
3. Selection of anti-Tuberculosis Drugs
4. Procurement of anti-Tuberculosis Drugs
5. Distribution of anti-Tuberculosis Drugs
6. Use of anti-Tuberculosis Drugs
7. Private Sector

This report will firstly describe the executive summary and recommendations and then the review of Philippine's anti-TB drug management. Discussions and recommendations will follow. This review represents the analysis done by the author and does not represents those of the Project nor JICA.

At first, the administrative structure in the public sector in this country will be briefly mentioned.

Administratively, nation is divided into Regions, then Provinces and then Municipalities in this country. Some large cities are considered as Provinces.

Department of Health (DOH) is covering the whole nation. Region has its DOH office called Integrated Regional Field Office (IRFO). Province has its own health office called Integrated Provincial Health Office (IPHO) and Municipality has Rural Health Units (RHUs). The peripheral unit in the community is called Barangay and it has a Barangay Health Station (BHS).

Tuberculosis Control Services (TBCS) in DOH is in charge of TB control in this country.

This office has more than 30 staff. Each region has usually two regional TB coordinators. One is a medical officer and the other is a nurse. IPHO also has two TB coordinators. At RHU and BHS, TB control services are integrated into general health services.

Regarding to this administrative structure, two issues should be added. One is the devolution (decentralization). It started in October 1992. Before devolution, all the health offices and staff in public sector belonged to DOH. After the devolution, IRFO is belonging to DOH, but IPHO belongs to Province and RHU and BHS belonging to Municipality. This devolution changed several aspects in health activities including the logistics system. It seems to the author that there is still slight confusion in the field.

The other issue is the on-going revision of NTP by TBCS. This revision was based on the TB control policy package developed by World Health Organization (WHO). The field tests of this revised NTP are about to start. Some of the issues discussed in this report are already taken into TBCS's consideration and modified in this on-going revision.

2. Executive Summary and Recommendations

2.1 Executive Summary

In the Philippines, there are two standardized chemotherapeutic regimens. One is 6 months regimen called Short Course Chemotherapy (SCC) and the other is 12 months regimen called Standard Regimen (SR). Tuberculosis Control Service (TBCS) of Department of Health is in charge of the management of anti-TB drug for SCC. Drugs for SR is under the responsibility of Municipalities. However, this 12 months SR will probably replaced with 4 months SCC because the NTP policy is under the revision now and they will be supplied by Tuberculosis Control Service. So, this report will focus on the management of anti-TB drugs for SCC.

There is a written National Tuberculosis Control Programme drug policy document titled NTP DRUGS LOGISTICS AND IEC (modification specifications). This document describes the specifications of drugs for SCC. NTP manual also describes the Drug Distribution Scheme. DOH also has the National Drug Formulary which describes all drugs in the Philippines. Anti-TB drugs are listed in this Formulary.

Anti-TB drugs are selected by TBCS from National Drug Formulary. In this Formulary there are six entities of anti-TB drugs such as Rifampicin (RFP), Isoniazid (INH), Pyrazinamide (PZA), Ethambutol (EB), Streptomycin (SM) and Kanamycin in the National Drug Formulary. In the NTP DRUGS AND IEC, three drugs for SCC such as RFP, INH and PZA. It is a TBCS's policy to use the blister packed anti-TB drugs for SCC. There are two types of blisters. One is for initial phase of SCC which contains RFP, INH and PZA. The other is for continuation phase which contains RFP and INH. Both blisters are prepared for one week drug intake. One day quantity is one tablet of RFP 450mg, one tablet of INH 300mg and two tablets of PZA 500mg.

Procurement of anti-TB drugs are done by Procurement and Logistics Service of DOH. TBCS computes the quantity of each drugs to be procured. This procurement is done through a domestic public bid. In 1993, totally 166 million Philippine Peso (6.3 million US Dollars) were spent for drug procurement. This means 0.1 US dollars were spent for anti-TB drugs per capita in the Philippines. All of these budget is from DOH. The average price paid in this procurement

was 88% of international average price, which was computed by Management Sciences for Health. One SCC costs 19 US dollars. Average lead time between the order of drugs and arrival of these drugs to Central Warehouse is 120 days. One issue should be mentioned here is the term of validity for all anti-TB drugs. All of them are expired 2 years after the manufacture in this country.

Distribution of anti-TB drugs is divided into three steps. One is from central to Region. Next is from Region to Province. The last one is from Province to Municipality (Rural Health Unit, RHU). TBCS is in charge of the first step. Second step is done by Regional TB Coordinator and the third step is by Provincial TB Coordinator. Each level has its Warehouse. These supply channels and warehouses are integrated into general services, not TB specific. However some Provincial TB coordinator have storage for anti-TB drugs. The inventory control is done by tally, ledger and stock-cards at Central Warehouse, by ledger and stock cards at Regional warehouse and by stock cards at provincial warehouse. However, at Central Warehouse and one Regional Warehouse which author visited there are no stock-records of reports which describe the stock-level of anti-TB drugs. Drugs are not well-arranged in that Regional Warehouse.

The quantity of drugs to be distributed is computed by the TBCS, Regional TB Coordinator and Provincial TB Coordinator primarily based on the expected number of TB cases. From Province to Municipality (RHU), the quantity is calculated based on the number of TB cases started the treatment during the last certain period, usually three months. In this calculation, the stock-level of the warehouse for the distribution is not taken into consideration. There is no standardized anti-TB drug request form at this moment.

At this moment anti-TB drugs for SCC are available for all over the country. Moreover, there have been no stock-outs of these drugs in 1993 and 1994, so far.

The use of anti-TB drugs are surveyed in a limited number of health facilities. As drugs for SCC are prepared in blister packages, all the patients for SCC are treated according to the NTP policy. However, some patients for SR are treated with 4 months of SCC which NTP is now planning to implement. Only two points were interviewed for drug use. They all have the correct knowledge of dispensed anti-TB drugs.

Regarding to the private pharmacies, there is no governmental regulations to control anti-TB drugs. Almost all kinds anti-TB drugs are available. It seems that anti-TB drugs can be bought at private pharmacy without any difficulties. The average price of several important anti-TB drugs compared to the international average price is 528%. It means the price of anti-TB drugs are six times more expensive than those paid by the DOH.

2.2 Recommendations

The current TBCS's policy on the use of blister packed anti-TB drugs for SCC is a strong support to the management of anti-TB drugs in this country. It should be mentioned that DOH is providing all the budget for the anti-TB drugs procurement and the price paid by DOH in the last procurement is almost 10% cheaper than the international average price. It is amazing that even after the preparation for blister packages, the price of anti-TB drugs are 10% cheaper than the average. The commitment and effort done by TBCS and DOH to maintain these activities should be highly appreciated. Blister packs are available at each level. To secure the drug supply is one of the key component for effective TB control.

The author would like to mention several issues concerning the current logistics system. One is the strengthening the NTP commitment particularly at region level. Logistics system for SCC and SR should be unified and TBCS should take the responsibility for both. It may be better to visit warehouse more often to have an idea on the storage system and stock-out level of each drugs. Second is the standardization and establishment of recording and reporting forms which are necessary for the logistics management. Standardized drug request form is needed. TBCS is now implementing this forms. NTP side also needed to set a standardized stock record which describe the stock-level and in and out of each anti-TB drugs. Third is the control of anti-TB drugs at private sectors. This issue seems to be quite difficult, however if the current situation continues, it is anticipated that the drug resistant TB cases may increase in number.

The followings are the discussions and recommendations concerning these issues such as procurement of SR drugs, terms of validity of drugs, inventory control measures, calculation of the drug quantity to be distributed and the regulation of anti-TB drugs in private sectors.

Drugs for SR are supposed to be procured by Municipality Government. However, as the number of TB cases at Municipality level is relatively small, it is not economic to continue to procure anti-TB drugs at this level. It may lead the shortage of drugs. It is needed to change its policy to put all the logistics management under the responsibility of TBCS. As NTP policy is being revised currently, it is a good opportunity to modify this policy now.

All anti-TB drugs expire two years after the manufacture according to the regulation by Bureau of Food and Drugs. It is too short. Anti-TB are valid at least in three years after the manufacture. TBCS is now proposing to extend this term to three years. This proposal is quite reasonable because this short term makes the distribution management particularly buffer stock setting difficult. This short term of validity need to be changed.

Inventory control of anti-TB drugs is done by general warehouse. It seems that this general warehouse need more improvement in inventory control. Drugs in warehouse need more arrangement. Anti-TB drugs should be kept in one place to count the stock level more easily. Warehouse needs to make a stock record or a report to have information on stock level. To assure this activity, NTP offices of each level need to visit the warehouse more often and regularly. It is needed to check the stock level. NTP officer should have the up-to-date stock-level of its warehouse.

At this moment, quantity of drugs to be distributed are computed based on the expected number of TB cases. It is not based on the number of TB cases detected (morbidity) nor the consumption of anti-TB drugs. Stock-level of anti-TB drugs at the warehouse is not considered in this calculation. TBCS is now planning to introduce the morbidity based calculation method and request form. This kind of logical way of calculation need to be implemented. However, it is anticipated that unless the term of validity extends to three years, it may be difficult to set buffer stock at each level.

It seems that there is no regulation on anti-TB drug use in private sector. Almost all kind of anti-TB drugs are available in the private pharmacies including at least five types of blister packages prepared for daily intakes. To control this situation seems to be very difficult at this moment, however the awareness among policy makers and DOH officers needs to be increased. More frequent and tight communication between private and public sectors are also needed.

3. Review of anti-TB Drug management in the Philippines

As described previously, anti-TB drug management in this country are reviewed by utilizing the indicators in the Manual. The full data concerning these indicators are attached in the Annex.

3.1 General Economics, Public Sector and NTP Sector budget and finance

The total population of the Philippines was 60,703,206 in 1990 (1992 Philippine Year Book). Per capita Gross National Product (GNP) was 730 US dollars in 1991.

The budget utilized for the NTP was around 229 million Philippine peso. Of them, 4.3 million Philippine peso was for the distribution of NTP diagnostic supplies for TB suspects, 12.7 million peso was for the procurement of NTP diagnostic supplies and IEC materials and 189 million peso was for the procurement of anti-TB drugs.

According to the NTP Annual Report of 1992 by TBCS, in 1992, 110,576 smear positive cases were detected. This figure gives the incidence rate as 173 per 100,000. The number of TB cases who initiated to the Short Course Chemotherapy (see below) during 1992 was 146,047. And, 88,475 cases initiated to the Standard Regimen (see below) in 1992.
The latest cure rate of TB cases was % in 19 . Based on the limited scaled tuberculin survey in the region V, VIII and X in 1992, the annual risk of infection was computed as 1.5%.

3.2 Drug Policy Issue

Existence of a written NTP drug policy is the key indicator in the Manual. Standardized chemotherapeutic regimen for TB cases is also the important indicator. In terms of essential drugs, existence of a national drug policy and its list are also the indicators.

In the Philippines, DOH has a National Drug Formulary. The latest revision of this formulary was done in 1993. Anti-TB drugs are included in this formulary (Annex).

TBCS has a written document on anti-TB drugs titled NTP DRUGS LOGISTICS AND IEC (modification specifications). This document was developed in 1993 and it describes the details of each anti-TB drugs. For example, the size, length, thickness, diameter and color of each drug are mentioned.

TBCS has its NTP manual which was developed in 1988. This manual describes standardized three treatment regimens such as so-called Short Course Chemotherapy (SCC), Standard Regimen (SR) and re-treatment regimen. Followings are the details of these regimens described in this manual. To simplify the explanation, in this report the following abbreviation of anti-TB drugs are used.

INH;	Isoniazid	RFP;	Rifampicin
PZA;	Pyrazinamide	EB;	Ethambutol
SM;	Streptomycin		

For new smear positive cases or smear negative cavitary cases;

6 months Short Course Chemotherapy (SCC)

2 months of daily INH, RFP, PZA and 4 months of daily INH and RFP

For new smear negative cases;

12 months Standard Regimen (SR)

daily INH supplemented by SM daily for one month and twice weekly for another eleven months.

For re-treatment cases;

There is no one standardized re-treatment regimen. One regimen is mentioned in the NTP manual is 2 months of SM, INH, EB and PZA and followed by SM, EB and INH daily for 4 to 7 months.

This manual also describes the logistics of SCC drugs in one chapter titled Drug Distribution Scheme (page 38). This chapter mentions the basic policy on procurement and distribution of SCC drugs, and their monitoring and reporting.
In this country, TBCS is responsible for the logistics of SCC drugs. However, logistics of SR drugs is Municipality's responsibility. This issue will be discussed later.

It is also the national policy to use the blister packed anti-TB drugs for SCC. The specifications of the blister package described in the NTP DRUGS, LOGISTICS AND IEC will be explained in the next chapter.

3.3 Selection of Anti-TB Drugs

Number of anti-TB drugs on NTP drug list is a key indicator in the Manual. Person in charge of drug selection is also the indicator.

In the Philippines, as mentioned previously, selection and procurement of SCC drugs are TBCS's responsibility and those of SR drugs are Municipality's. In this report, the author reviewed only TBCS's drug selection and procurement. Municipality's activities are not mentioned in this report because of the following reasons. Firstly, as far as the author observed and discussed, not all municipalities are selecting and procuring the SR drugs. It varies Municipality by Municipality. Secondly, TBCS is also selecting and procuring SR drugs and distributing them to the IRFO. Many of the SR drugs used at the RHU level seems to be the drugs procured by TBCS. Thirdly, 4 months SCC including RFP will probably be applied for smear negative cases when the revised NTP policy is accepted. In this case, blister packages for SCC can be used for smear negative cases. This means there may be no need for Municipality to procure the current SR drugs.

Regarding the selection of anti-TB drugs at national level, six kinds of anti-TB drugs such as EB, INH, PZA, RFP, SM and Kanamycin (KM) are listed in the National Drug Formulary. Following table shows the pharmaceutical forms and strengths of these anti-TB drug listed in the Formulary.

6 months Short Course Chemotherapy (SCC)

2 months of daily INH, RFP, PZA and 4 months of daily INH and RFP

// For new smear negative cases;

12 months Standard Regimen (SR)

daily INH supplemented by SM daily for one month and twice weekly for another eleven months.

// For re-treatment cases;

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Drug		Pharmaceutical forms and strengths
EB	oral	200mg and 400mg tablets
INH	oral	100mg, 300mg, 400mg tablets 100mg/5ml. 60ml and 120ml syrup
PZA	oral	500mg tablets and capsules
RFP	oral	150mg, 300mg, 450mg, 600mg tablets and capsules 100mg/5ml, 30ml, 60ml syrup / suspension
SM	inj	1g vial
KM	inj	1g vial

From this list, TBCS selects the drugs for the procurement. NTP DRUGS, LOGISTICS AND IEC describe the specifications of four anti-TB drugs such as RFP 450mg capsule, INH 300mg tablet, Pyrazinamide 500mg tablet and EB 400mg tablet.

This document also describes the specifications of blister packages for SCC. There are two types. One is for the initial phase and the other is for the continuation phase. The former is called as Type 1 blister pack and the latter is called as Type 2 blister pack. The followings are the contents of each blister package.

Type 1; 7 days quantity for initial phase, such as

RFP 450mg capsule x 7 capsules	(1 capsule a day)
INH 300mg tablet x 7 tablets	(1 tablet a day)
PZA 500mg tablet x 14 tablets	(2 tablets a day)

Type 2; 7 days quantity for continuation phase, such as

RFP 450mg capsule x 7 capsules	(1 capsule a day)
INH 300mg tablet x 7 tablets	(1 tablet a day)

3.4 Procurement of Anti-TB Drugs

Procurement activities were evaluated according to its cycle such as calculation of quantities, methods of procurement, total cost for procurement, monitoring of procurement and lead time between the order to arrival of drugs are evaluated. The Manual selects three key indicators in this part such as per capita spending on anti-TB drugs, average price paid for anti-TB drugs compared to international price list and average lead time for drug procurement.

In the Philippines, Procurement and Logistics Service (PLS) of DOH is in charge of procurement of all drugs including those for TB.

LTS conducts a domestic public bid once a year. Six domestic private suppliers were nominated by Government according to their blister pack productivity and the importation source of raw materials. Through tender, three suppliers are designated such as supplier bid the lowest price (supplier A), bid second to the lowest (supplier B), and bid third to the lowest (supplier C).

The price of drugs for this order are set at the lowest bid price. These three suppliers share the order. Supplier A will receive 50% of total quantity, supplier B will receive 30% of total, and supplier C will receive 20% of total.

TBCS determine the quantities of SCC drugs, namely blister pack type 1 and 2, for the procurement according to the expected number of TB cases. For example, in 1993, it was determined at first to procure blister packs for 150,000 SCCs. This number was computed by multiplying the whole population of the Philippines and prevalence (0.36%) of smear positive TB and the achievement (60%) of NTP. Some quantity are added as a reserve. As the unit price of blister packs decreased, the quantity was increased to 298,106 for type 1 packs and 237,328 for type 2 packs. In this calculation, the constant reserve stock at central, region, province and peripherals is not taken into consideration.

The quantities of non-blistered drugs such as INH tablets, EB tablets, INH syrup and RFP syrup was set to assist the regional hospitals and offices because these drugs are primarily supposed to be procured by Municipalities.

The names of selected anti-TB drugs for the procurement, their quantities, unit price and total cost in the 1993's drug purchase is shown in the following tables.

Drug	Unit Cost Peso	Quantity	Total cost Peso	US dollars**
Type 1*	29.50	2,064,712	60,909,004.00	2,298,452.98
	32.80	332,968	10,921,350.40	412,126.43
Type 2*	16.33	2,950,608	48,183,428.00	1,818,242.59
	20.85	649,936	13,551,165.60	511,364.74
EB 400mg	65.54/100	362,000	23,725,480.00	895,301.13
INH 300mg	32.00/100	146,000	4,672,000.00	176,301.89
SM 1g	7.25	2,000	14,500.00	547.17
INH 100mg/tsp 120ml. bot.	3.86	320,000	1,235,200.00	46,611.32
RFP 100mg/tsp 60ml. bot.	9.95	280,000	2,786,000.00	105,132.08
	TOTAL COST		165,998,128.64	6,264,080.33

The total cost of anti-TB drugs in the procurement of 1993 was around 166 million

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Pesos. DOH provided all the budget for this procurement. There is no foreign donation in this year. TBCS used to receive donation from the Italian Cooperation, however it was terminated. This total cost is equivalent to around 6.3 million US dollars (consider one US dollar is 26.5 Philippine Peso). As the Philippines population was 60.7 million in the year 1990, per capita spending on anti-TB drugs was 0.10 US dollars, namely ten cents, in 1993.

The unit price of each anti-TB drug is compared to the international price. Following table shows the % average international price paid for the procurement in 1993. The average international price in the International Drug Price Indicator Guide 1993-94 developed by Management Sciences for Health (MSH), USA was referred. The author do not have the average international price of INH syrup and RFP syrup, so the columns for them are kept blank.

% average international price paid for last procurement and its average in 1993 procurement in the Philippines

Drug	Unit Price Peso	US$ (A)	(Per Drug US$ (B)*	MSH Price US$ (C)	% (B)/(C)*100
Type 1**	29.50	1.1132	0.1590	0.2146	74.1%
	32.80	1.2377	0.1768		82.4%
RFP 450mg***				0.1473	
INH 300mg				0.0153	
PZA 1000mg****				0.0520	
Type 2**	16.33	0.6162	0.0880	0.1626	54.1%
	20.85	0.7868	0.1124		69.1%
RFP 450mg***				0.1473	
INH 300mg				0.0153	
INH 300mg	0.32	0.0121	0.0121	0.0153	78.9%
SM 1g	7.25	0.2736	0.2736	0.1692	161.7%
EB 400mg	0.66	0.0247	0.0247	0.0257	96.2%
INH liq. 100mg/ts 120mg/bottle	3.86	0.1457	0.1457		
RFP liq. 100mg/ts 60ml/bottle	9.95	0.3755	0.3755		
				Average	88.1%

N.B.
1US$ = 26.5 Philippine Peso

Unit Price (B)* ; Type 1 and type 2 blister packs contain one week (7 days) quantity of each anti–TB drugs

Type 1**, Type 2** :The MSH Unit Price of Type 1 and 2 blister packs were calucalated from the summation of MSH unit price of each contained anti–TB drugs

RFP 450mg*** ; The MSH Unit price of RFP 450mg was calculated from the summation of MSH Unit Price of RFP 300mg and RFP 150mg.

PZA 1000mg**** ; The MSH Unit Price of PZA 1000mg is equivalent of the two tablets cost of PZA 500mg tablet.

When seeing this table, it is remarkable that even with the blister pack preparation, the combination of RFP 450mg, INH 300mg and PZA 1000mg (Type 1) is 20% to 25% cheaper than the average international price. Type 2 combination, namely RFP 450mg and INH 300mg, is also 30% to 45% cheaper than the average international price. As a whole the average % of the average international price paid for the 1993's procurement is 88.1%.

According to the price of type 1 and 2 blisters, one treatment regimen costs around 480 Peso. It is equivalent to 18.8 US dollars. Even when EB 800mg will be added during the intensive phase, the total cost is 21.6 US dollars. Referring the average international price by MSH, the WHO standard 6 months SCC (2 months of daily INH 300mg, RFP 450mg, PZA 1500mg, EB 800mg, and 4 months of thrice weekly INH 600mg, RFP 450mg) will cost around 17.1 US dollars. However, this WHO regimen contains intermittent (three times a week) drug intake during the continuation phase. If INH 300mg and RFP 450mg will taken daily during the continuation phase like Philippine's SCC, the total drug cost for one WHO SCC is 27.5 US dollars. These comparisons indicate the TBCS and PLS are procuring anti-TB drugs at reasonable unit price.

PLS monitors the procurement process. All the drugs are primarily delivered to the Central Warehouse from the suppliers. The average lead time between the order and arrival of these drugs to the Central Warehouse is around 120 days. These drugs are then sent for quality assurance to the Bureau of Food and Drug (BFAD). It will take one month in average to complete this quality assurance. So, as a whole it will take around 150 days, namely 5 months, after ordering the drugs and before being able to distribute the drugs.

3.5 Distribution of anti-TB Drugs

In the Manual, port clearance, inventory control and distribution system to peripheral facilities are evaluated. However, in the Philippines, all anti-TB drugs are delivered directly to Central Warehouse from domestic supplier and there are no port clearance. So this section starts with inventory control.

3.5.1 Inventory Control

Inventory control system including the existence of stock records and reports, availability of anti-TB drugs and experiences of stock-outs are the indicators in this section.

3.5.1.1 At Central Level (Central Warehouse)

Central Warehouse is a place to keep all drugs at central level. This Warehouse is under the jurisdiction of PLS and it is located around one-hour driving distance from DOH. Central Warehouse is a gymnasium-like one-floor building. Drugs are kept in carton boxes as they were delivered. In this warehouse, there is a separate dark and cool room in a corner. Anti-TB drugs are kept in this room. The carton boxes of each anti-TB drugs or blister packs are piled on the floor separately, but there are no shells.

Inventory control in this Warehouse is done manually, not by computers. Tally system is used at TBCS and Ledger system and stock cards are used to monitor the stock-level and distribution.

Tally is kept by TBCS. TBCS also has a stock-record which shows the stock-level of each anti-TB drugs at Central Warehouse.

Ledgers are kept at the office in this Waichouse. Ledgers are kept by the officers of Warehouse. One ledger card starts when there is a new delivery from supplier. So, ledger is different from delivery to delivery. For example, type 1 blister packages are delivered from three suppliers, and one supplier sometimes delivered type 1 blisters in two times. In such case, ledger is different from supplier to supplier and also different from delivery to delivery even from the same supplier. There is no general stock record which shows the total stock-level of each anti-TB drugs in this Warehouse. So, one have to compute the stock-level by summing the balance in relevant ledgers.

Stock cards are kept and recorded by the stock-keepers. These cards are put with the carton boxes of drugs.

Physical check-ups of the stock level is done every month. However, it seems that there is no reporting system of inventory level at Central Warehouse to TBCS. It was explained that TBCS is keeping the inventory record which describe the latest stock level of each anti-TB drugs or blister packs. According to the ledgers reviewed by the author, the following quantities are the stock level of each anti-TB drugs at this warehouse.

Blister Type 1;	8,608 packs
Blister Type 2;	63,189 packs
INH 300mg;	146,000 bottles (100 tablets/bottle)
EB 400mg;	66,480 bottles (100 tablets/bottle)
Streptomycin 1g;	935,000 vials
RFP syrup;	35,775 bottles (100mg/tsp, 120ml)
INH syrup;	1,536 bottles (100mg/tsp, 120ml)

As author might miss some ledgers and all the distribution might not be registered in this ledgers, the real stock level may be different.

3.5.1.2 Regional Level (Regional Warehouse)

Regional Field Office (IRFO) of DOH has its own warehouse. It is a general warehouse for all drugs and equipment. Author visited one regional warehouse. Same ledger and stock card system is implemented, but it seems that supplies and distributions are not fully recorded in them. The Bill of Landing and Requisition and Issue Voucher are also kept in this warehouse. The former describes the supply from the central to region and the latter records the distribution to the provinces or rural health unit from region. However, the stock-level of each anti-TB drugs are not recorded in these documents.

This Regional Warehouse is also gymnasium-like one floor building, however there are small rooms in the second floor. Cartons of each anti-TB drugs are piled on the floor here and there without well-arrangement. Some of the blister pack cartons are placed on the first floor and some of them are placed on the second floor. So, it was not easy for the author to check the current stock-level. The followings are the stock level of each anti-TB drugs except SM checked

by the author.

Blister Type 1;	19,500+ packs
Blister type 2;	17,000+ packs
EB 400mg;	14,900 tablets
INH 300mg;	29,700 tablets
RFP syrup;	432 bottles (100mg/5ml susp. 120ml)

For blister pack type 1 and 2, one carton is already opened and some of them are already distributed. So, the exact number of each blisters could not be counted.

2.5.1.3 Provincial Level (Provincial Storage)

Provincial Health Office has its own warehouse or stock-room. One provincial stock-room of a Provincial Health Office (PHO) is visited. Stock cards of anti-TB drugs are kept by the provincial TB coordinator. One stock card is used to record in, out and balance of one type of anti-TB drug. For example, blister pack type 1 has one stock card. These stock-cards clearly describe the balance of each anti-TB drugs. According to these stock cards, the followings are the quantity of the current stock level.

Blister Type 1;	1,088 packs
Blister type 2;	484 packs
EB 400mg;	98,500 tablets (985 bottles)
INH 300mg;	39,200 tablets (392 bottles)
RFP syrup;	555 bottles (100mg/tsp, 120ml)
INH syrup;	365 bottles (100mg/tsp, 120ml)

2.5.1.4 Rural Health Unit (RHU)

Author paid a visit to one Rural Health Unit. This Unit has 7 type 1 blister packs, 65 type 2 blister packs, 1,800 tablets of EB 400mg, and 500 tablets of INH 300mg. There is no stock cards nor inventory record.

2.5.2 Availability of anti-TB drugs and experience of stock-out

All the anti-TB drugs selected by the TBCS such as blister pack type 1 and 2, INH 300mg tablet EB 400mg tablet, INH syrup, RFP syrup are available at central, regional and provincial warehouse when author paid visits. At one RHU which the author has visited, all of above drugs except INH syrup and RFP syrup are available.

It was reported that there has been no stock-out experience of type 1 and 2 blister packs at all level in 1993 and 1994.

2.5.3 Distribution system

The distribution channel of anti-TB drugs is integrated into general one. It starts from Central Warehouse, Region Warehouse, Province storage and then to Municipality, namely Rural Health Unit. Before the devolution, there were District Hospitals in between Province and

Municipality, however this level has been omitted.

TBCS supervise the distribution from Central to Region, Regional TB Coordinator supervise from Region to Province. Provincial TB Coordinator supervise from Province to Municipality, namely Rural Health Unit.

The NTP manual describes the Drug Distribution Scheme on page 38. It says that from Region to Province, six months supply will be sent. From Province to District, four months supply will be sent. Then, from District to RHU, two months of supply will be sent. However, because of omission of District and other following reasons, this scheme is changed at this moment.

3.5 3.1 From Central to Region

TBCS is supervising the distribution from Central Warehouse to Regional Warehouse. TBCS computes the quantity of anti-TB drugs to be distributed to each region. At first, 10 % of the drugs are taken to the TBCS because it has an Out-patient clinic in DOH. Remaining 90% are divided to each region according to its expected number of TB cases. The stock-level at Regional Warehouse is not taken into consideration. Actually, stock-level at regions is not reported to TBCS.

This distribution is supposed to be done three times a year, namely every four month. However, due to the following two reasons it is done four to six times a year.

One is the term of drug validity. All anti-TB drugs will expire two years after the manufacture in the Philippines. This is because of the regulation of the Bureau of Food and Drug (BFAD). As mentioned previously, it takes around 120 days to receive drugs after an order and another one month to complete the quality assurance. So when drugs are ready for distribution at Central Warehouse, these drugs are valid one year and 8 months more. It makes TBCS to distribute them as soon as possible.

The second is the different delivery time from suppliers. There are three suppliers for each drug. They deliver drugs in a different time. Even from the same supplier, drugs are not always delivered at the same time. This will also make TBCS more difficult to establish a regular distribution period.

These drugs are transported to the regions by trucks. These trucks are private ones and hired by DOH. They carry all the drugs and equipment, not only TB drugs and they will not leave Central Warehouse until they are fully loaded. So, there will be another delay.

3.5.3 2 From Region to Province

Anti-TB drugs are kept at the Regional Warehouse and then distributed to provinces by the order of Regional TB Coordinator. This distribution quantity is computed according to the requests from provinces or the expected number of TB cases in province calculated by Regional TB Coordinator. It seems that there is no standardized request forms from provinces to region or order forms from Regional TB Coordinator to Regional Warehouse. It also seems that there is no standardized method to calculate the quantity of drugs to be distributed. Same as Central level, stock-level at Province is not considered in this calculation.

As mentioned previously, when region receives the anti-TB drugs, their terms of validity

are around one and a half year. The following table shows the date of expiry and terms of validity of anti-TB drugs stored at one Regional Warehouse. It is understandable that Regional TB Coordinator needs to distribute them without any delay.

Name of drugs	Date of Expiry	Terms of validity
Type 1	March/95	1 months
	August/95	15 months
Type 2	March/95	10 months
	August/95	15 months
EB 400mg	April/95	11 months
INH300mg	April/95	11 months
RFP syrup	April/95	11 months

The distribution of these anti-TB drugs are integrated into that of general drugs and equipment. It is explained at one Regional Warehouse that warehouse officers bring the all the drugs and equipment to province by Regions truck. In other occasions, province officers come to regional warehouse to collect the drugs.

3.5.3.3 From Province to Municipality (RHU)

Auther visited one storage room of IPHO where all anti-TB drugs are kept under the supervision of Provincial TB Coordinator. He controls the inventory and distribute them to RHUs according to their requests.

Distribution is done every one to three months to the RHUs. The quantity of drugs to be distributed is calculated by the provincial TB coordinator. RHU reports the number of cases started treatment during the past certain period and Provincial TB Coordinator compute the quantity. There is no standardized request form. The stock-level at RHU is not primarily taken into consideration.

In terms of calculation methods for the quantity, the following method was explained to the author. Suppose RHU had 20 new SCC cases, 10 SR cases and 2 cases for RFP and INH syrup during last three months;

* For SCC;
  Blister pack Type 1: 20 x 4 wks/mo x 2 mo = 160 packs
  Blister pack Type 2: 20 x 4 wks/mo x 4 mo = 320 packs
* For SR;
  10 x 1 bottle of INH 300mg (100 tablets) = 10 bottles
  10 x 1 bottle of EB 400mg (100 tablets) = 10 bottles
* For Syrup;
  2 x 1 bottle of INH syrup (100mg/5cc, 120ml) = 2 bottles
  2 x 1 bottle of RFP syrup (100mg/5cc, 120ml) = 2 bottles

For the transportation of these drugs, one of the RHU staff who is in charge of this issue

usually comes to the IPHO. This person submits the request form and collect the drugs. After the devolution, anti-TB drugs such as blister pack type 1 and 2 are to be distributed from Central however other essential drugs such as anti-pyretics or anti-biotics are supposed to be purchased by Municipalities. So, the distribution of anti-TB drugs are independent from general distribution channel.

3.6 Use of anti-TB drugs

In the Manual, % of patients treated accurately according to NTP policy, % of patients with correct knowledge of dispensed anti-TB drugs and patient's satisfaction on the service provided are the indicators for the use of anti-TB drugs. These information are obtained by visiting the health facilities and interviewing TB patients. Author could visit only one RHU, two BHSs and one Chest Center. The information obtained there was limited because TB patients do not attend clinic every day.

Twenty-one treatment cards of TB patients who initiated treatment during 1993 were evaluated. Of them, 13 were smear positive and put under SCC, one patient was smear negative but serious and put under SCC. Seven patients were smear negative and put under SR.

SCC drugs are prepared in blister packages, so drug combinations of SCC are accurate. The duration of treatment was also accurate. However for SR drugs, there was sort of confusion because it is a transitional period to change SR regimen to RFP included four months SCC. Some medical officers have already started this RFP included regimen for smear negative cases.

Regarding to the weight of TB patients, all of these 21 cases were weighed at the beginning of treatment. The dosage of drugs in blister packs are fixed, it is explained that patients weigh less than 40 Kg are treated with RFP syrup, INH syrup and Eb 400mg tablets. However, the RHU which was visited has no RFP syrup and INH syrup. It seems that the adult patients weigh less than 40 Kg are given the same blister packs, not modifying the dosages.

In terms of patients interview, only two patients were asked their knowledge of dispensed drugs and satisfaction with the services provided at RHU. There was difficulties in interview. One is the language problem and the other is the prejudice on TB in the community. It seems that patients are not always willing to reply the questions regarding to TB. Even when patient replied that he does not know, it does not always mean it. This can be that he does not willing to tell it to us. However, taking these difficulties into consideration, patients seems to have correct knowledge of drugs and satisfied the service provided.

One of these patients looks weigh apparently less than 40kg, however this patient told the author that he is taking the full dose of blister packs and he develops epigastric discomfort after taking the drugs.

3.7 Private Sector

Existence of government regulation on anti-TB drugs in private pharmacy, availability

of anti-TB drugs and their prices are the indicators in this section.

In the Philippines, there is no government regulation on anti-TB drugs in private sector. Author visited couple of private pharmacies and found that all anti-TB drugs except NTP's blister packages are available at there. For example, the following 11 types of RFP are available at one pharmacy.

RFP 150mg tablets and capsules
RFP 300mg tablets and capsules
RFP 450mg tablets and capsules
RFP 600mg tablets and capsules
RFP syrup 100mg/5cc
RFP syrup 100mg/30cc
RFP suspension 100mg/60cc

Even for the same preparation of RFP, there are different prices because of different manufactures. For example, there are two unit prices of RFP 300mg. One is 22.30 Pesos and other is 17.12 Pesos. There are four different unit prices in PZA 500mg.

The following table shows the unit prices of these anti-TB drugs at private pharmacy. When there are more than one price, the average unit price was calculated and used.

Drug	Unit Price (peso)	(US$) [A]	MSH average (US$) [B]	% [A]/[B]
FFP 300mg	19.71	0.744	0.0927	802.3
INH 100mg	0.31	0.012	0.0041	285.3
INH 300mg	0.75	0.028	0.0153	185.0
PZA 500mg	3.43	0.129	0.0266	999.6
SM 1g	11.00	0.415	0.1692	245.3
EB 400mg	4.45	0.168	0.0257	653.4
			Average %	528.5

As discussed previously, % average international price paid by DOH in the last procurement is 88.1%. So at the private pharmacy, the drugs cost around 6 times higher than the DOH price (528.5/88.1).

It should also be mentioned that blister packed anti-TB drugs are available at private pharmacy. These blisters are not prepared for one week intake like NTP's blisters but for one day intake. At one pharmacy there are five kinds of blister packs available. Following table shows the combination of drugs and cost of these blister packs.

	Cost per blister (peso)	(US$)
M-O-P Compliance Pack	25.25	1.05
RFP450mg; 1 capsule		
INH400mg; 1 tablet		
PZA500mg; 3 tablets		
Combi Pack	29.67	1.12
RFP225mg+INH200mg; 2 capsules		
PZA500mg; 3 tablets		
ECONOPACK	23.35	0.88
INH400mg; 1 tablet		
RFP450mg; 1 tablet		
PZA500mg; 3 tablets		
QUADPACK	28.65	1.08
Pyrina Capsule; 3 capsules		
RFP150mg+PZA500mg+INH150mg		
EB 400mg; 3 tablets		
SCC Kit	39.00	1.47
EMB Forte tablet; 2 tablets		
EB 500mg+INH200mg		
RFP450mg; 1 tablet		
PZA500mg; 3 tablets		

These drugs can be dispensed only with preparation. The author prepared prescription by himself and purchased them with this prescription by himself. There were no difficulties in purchasing these drugs. However, it seems that even without any prescription these anti-TB drugs can be bought at private pharmacy.

It is deadly needed to establish regulation to control this free market of anti-TB drugs. The emergence of drug resistant cases are strongly suspected if this kind of situation continues.

4. Discussions and Recommendations

Anti-TB drugs management of the Philippines are reviewed by utilizing the Manual. At this moment, DOH is procuring the anti-TB drugs with its own budget. NTP has enough stock of anti-TB drugs particularly Type 1 and 2 blister packages. Anti-TB drugs are available at region, province and municipality level. It is a remarkable achievement of the country whose GNP per capita is 730 US dollars. To sustain this activities, several issues need to be discussed and modified. NTP is now revising its policy according to the current WHO TB control policy. Some of the following issues discussed here are already included in the NTP policy revisions.

4.1 Drug Policy Issues

Philippine has its National Drug Formulary and NTP has its written NTP drug policy document. Treatment regimens for smear positive cases and smear negative cases are written clearly in the NTP manual. Blister pack preparation of anti-TB drugs for smear positive cases, namely SCC, is an NTP policy. These issues regarding to drug policy are highly appreciated. This blister pack formation, particularly, is contributing the effectiveness of TB control activities in this country. However, several issues are needed to be discussed.

One is the term of validity of anti-TB drugs. According to the policy made by BFAD, all anti-TB drugs expire two years after the manufacture. This short term of validity is affecting the effectiveness of logistics system in NTP. As described above chapters, this makes the logical distribution system very difficult. In the IUATLD's TUBERCULOSIS GUIDE, the following years are mentioned as the duration of time after the manufacturing date that drugs may be used safely (on condition that they are kept in proper conditions).

INH; 5 years
RFP; 3 years
PZA; 3 years
SM; 3 years
EB; 5 years

The term of validity of these drugs can be three years after the manufacture in this country although these drugs are prepared in the blister packages. TBCS is now putting its effort on this issue.

Second issue is the logistics of anti-TB drugs for smear negative cases, namely SR. At this moment, drugs for SR are supposed to be procured and provided by Municipalities. It is worried that this policy may affect the security of drugs and therefore the effectiveness of TB control activities because of the following reasons. One is the price of anti-TB drugs in this procurement. The number of TB cases for SR is small at Municipality level. When procuring the small quantity of anti-TB drugs, the prices are usually more expensive. It is not economic to procure anti-TB drugs by Municipality. One medical office in RHU told the author that he faced the difficulty to have Municipality procure these drugs because the priority of TB control is not so high in the Municipality.

As TBCS is planning to replace this SR with four month regimen including RFP. In this new regimen, the same blister packed anti-TB drugs can be used, so it will be a good opportunity to simplify the logistics system into one channel.

Third issue is the treatment regimen. To establish an effective logistics system, standardization of treatment regimens are needed. TBCS is now planning to change the regimens for smear negative cases and re-treatment cases according to the current WHO recommendation. This effort is highly appreciated.

4.2 Selection of Anti-TB Drugs

TBCS is in charge of the selection of anti-TB drugs. At this moment, the following drugs are selected for procurement by TBCS.

RFP 450mg tablet
INH 300mg tablet
PZA 500mg tablet
SM 1g vial for injection
EB 400mg tablet
INH 100mg/tsp 120ml bottle
RFP 100mg/tsp 60ml bottle

As described previously, drugs for SCC are prepared in blister packs. The one day dosage of this blister packs are RFP 450mg, INH 300mg and PZA 1000mg (2 tablets of PZA 500mg) for initial phase and RFP 450mg and INH300mg for continuation phase of SCC. Concerning the selection of these dosages, two issues need discussions.

First one is the dosage of PZA. One gram (1g) of PZA is not enough for the adult patients weigh around kg (probably the average weight of TB patients in the Philippines). For these patients, 1200 mg is desirable. This issue can be managed by changing the dosage of PZA tablet to 400mg (3 tablets a day) or 600mg (2 tablets a day).

Second issue is the dosage of RFP and INH. These drugs are selected for blister pack preparation. However, only one dosage is selected for each drug, namely 450mg for RFP and 300mg for INH. To modify the dosages of these drugs according to the weight of the patients, another dosages of these drugs are necessary. It would be better to introduce RFP 150mg tablets and INH 100mg tablets. These problems can be managed by providing the INH and RFP syrups, however, these drugs are quite expensive compared with the tablets.

4.3 Procurement of anti-TB drugs

Procurement and Logistics Services of DOH is in charge of procurement. This office is procuring anti-Tb drugs through domestic public bid. It should be mentioned that the price paid by PLS for this bid is 88.1% of the international average price. The effort made by PLS and others to procure these drugs at these low prices should be highly appreciated. The price of anti-TB drugs for one SCC is US$ 18.8 which is one of the cheapest price in the world although the dosage of PZA is 1000 mg not 1200 mg nor 1500 mg and EB is not included in this SCC. The Bureau of Food and Drug is conducting the quality assurance of these drugs. It seems that the procurement system is well-established.

The quantity of these drugs for the procurement is calculated by TBCS. This calculation is a morbidity method. However in this calculation the stock-level of central warehouse and the regional warehouses are not taken into consideration. It may cause the over-procurement of anti-TB drugs. This is due to the lack of stock-level monitoring and reporting system. The short term of validity of drugs as discussed above is also one of the contributing factors. This issue will be discussed later in the chapter of Drug Use.

The average lead time between order of drugs and arrival of the drugs at the central warehouse is 120 days. Taking into consideration that all the drugs are manufactured from the imported raw materials in the Philippines, it is expected that this period can be reduced. At this moment the term of validity of these drugs are only two years, it is needed to reduce this period to establish the effective distribution system.

4.4 Distribution of anti-TB drugs

Drugs for SCC is distributed from central to regions, provinces and then RHUs. These drugs are kept at the general medical store at each level. The quantity of drugs to be distributed is calculated by TBCS at central level, Regional TB coordinator at regional level and Provincial TB coordinator at provincial level based on the morbidity data of TB cases. At this moment anti-TB drugs particularly the blister packages are available at each level.

Inventory control of these drugs are done by general medical store at each level. Ledger and tally system is introduced. However, the stock-level of each anti-TB drugs are not always available. At Central Warehouse, there is no general stock record which describe the stock-out level of each anti-TB drugs although tally system is introduced. At the visited Regional Warehouse, drugs are not stored in an arranged manner and there is no stock records. At the provincial storage, anti-TB drugs are well arranged and there are stock records which describe the stock-level. To establish a effective logistics system, the ongoing data on stock-level of each anti-TB drugs is badly needed. NTP is needed to put more consciousness on this matter. To visit the warehouse more often and to set a stock record of these drugs at NTP side can be helpful.

The calculation of quantity of drugs to be distributed is based on the morbidity data of TB cases. However there is no standardized national request form for this distribution, and the stock-level of drugs is not taken into consideration. It may cause the mal-distribution of drugs. Actually at one RHU where the author visited, there were 1800 tablets of EB 400mg and 500 tablets of INH 300mg which will expire within couple of months. According to the morbidity data at this RHU, it seems that these drugs will not be fully used before the expiry date. TBCS is now planning to implement the drug request form which is basically similar to WHO's recommended form. This effort is highly appreciated.

Buffer stock at each level is not set although it is written in the NTP manual. This issue, however, is somehow understandable because the term of validity of anti-TB drug is only two years. What is practically needed at each level is to distribute these drugs before the expiry dates. To establish an effective buffer system like six months at central, three months at regional and three months at provincial, the terms of validity needs to be extended to three years.

4.5 and 4.6 Use of Drugs and Private sectors

As these issues were discussed in each respective chapters above, this part is omitted here.

5. Acknowledgement

The author would like to extend its sincere appreciation to the members of the DOH-JICA Public Healht Project, Staff of TBCS, Staff of Central Warehouse, Regional VII TB Coordinators, Staff of Region VII Warehouse, Cebu Province TB Coordinators, Staff of Catmon Rural Health Unit and other relevant staff for their tremendous support to my visit to the Philippines. Particularly the support by the Dr Masashi Suchi, Chief Advisor of DOH-JICA Project, Dra Corazon Teoxon, Officer In Charge of TBCS and Dra Elaine Teleron, Region VII TB Coordinator was of great help.

Annex 1-

SUMMARY REPORT ON TB LABORATORY ACTIVITIES FOR SHORT TERM ASSIGNMENT CONCERNING THE DOH-JICA HEALTH DEVELOPMENT PROJECT

AKIKO FUJIKI
JICA Short Term Consultant on TB Laboratory Work
24th April – 21st May 1994

1. Objectives and Activities:

JICA TB Laboratory work specialist has mainly concentrated on ' ing activities during her stay with the Project,

1) To check the quality of smear slides for situation analysis of direct smear examination.
2) To discuss and study on manual preparation of smear examination for new NTP Policy.
3) To give advice on TB Reference Laboratory set up.
4) To collect information and to make recommendations to the Project activities.

Here in this report, the situation and problems of direct smear examination in project areas will be summarized.

2. Evaluation of smear examination:

Stained smear slides were collected for one month in March from Argao RHU, Oslob RHU and Alcantara RHU. The evaluation of smear examination was made with these smear slides according to the following points;

1) smear area size
2) thickness of smear
3) evenness of smear
4) decolourizing condition
5) smear cleanness
6) sputum quality
7) smear reading accuracy

Specimen Collected:

Institution	No. of Specimen	No. of Positive	No. of Negative
Argao RHU	73 (100)	4 (5)	69 (95)
Oslob RHU	53 (100)	1 (2)	52 (98)
Alcantara RHU	11 (100)	0	11 (100)

Smear preparation and staining techniques: (Fig. 1-3)

Argao RHU – All sputum specimen collected were of good quality with more than 10 leucocytes per field but almost 80% of the sputum smears were too thin and almost 90% of the smears had an uneven distribution of leucocytes. Concerning staining techniques, most of the smear slides were properly stained.

Oslob RHU – 83% of sputum specimens collected were of good quality of sputum but majority (94%) of smears were too thin smear and had an uneven distribution of leucocytes (89%). All smear slides were contaminated with many precipitants. All of them were under decolourized.

Alcantara RHU – More than 90% of sputum specimens collected were of good quality of sputum. 72 % of the smears were uneven smeared slides and 61% were thin smeared slides.

Smear slide reading techniques: (Table 1)

Argao RHU – 93% (68/73) of slides were read correctly. Out of 5 incorrectly read slides, all of them were false negative or read (+++)ve slide as negative. Sensitivity and specificity were 44% (4/9) and 100% (64/64) respectively.

Oslob RHU – Out of 53 slides, 52 smears were read correctly but 1 slide was false positive or read (–)ve slide as (++)ve.

Alcantara RHU – All of the slides were read correctly.

3. Overall Comments and Recommendations:

1) Good quality of smear preparation should be stressed to laboratory workers to make a reliable smear examination. Most of the smears examined were poorly prepared in size, thickness and evenness. Proper sputum specimens have been submitted by TB suspects/patients as it is shown in Fig 1–3.

2) The reporting scale of smear examination results should be standardized among medical technologists. The interpretation of national standard scale for smear reading varies among RHUs (Table 2).

3) Some improvement should be considered to eliminate the precipitants in the solution. Majority of smear slides collected in 3 institutions were contaminated with many precipitants. Improvements can be expected by filtrating carbol fuchsin solution and checking the quality of ready made staining solution.

4) Refresher training of TB microscopy should be urgently conducted for midwives, medical technologists and those who work for TB smear examination. Practical guideline/manual for TB microscopy at RHU level should be made.

5) Monitoring/supervision should be strengthened for quality control of direct smear examination. Existing validators should be more properly utilized for this purpose. Refresher training on quality control of smear examination is needed for them.

6) A logistics supply of reagents and equipments should be strengthened.

7) Cebu Chest Center Reference Laboratory, which is under construction, is expected to do the following tasks: 1) sputum smear examination, 2) reagent supply to microscopy centers, 3) training, 4) validation of smear examination, 5) culture and sensitivity test.

   Manpower (at present only one) is insufficient to carry out all the task at the moment. Two or three more technical personnels are needed and accumulation of technical experience for the laboratory is necessary.

   The activity of the reference laboratory should not be expanded unless enough manpower in quantity and quality is provided. It should be concentrated at present on sputum examination and training activities.

Table 1. COMPARISON OF REPORTED AND ASSESSED SMEAR RESULTS

Result by	Reported in Argao			Reported in Oslob			Reported in Alcantara		
Assessor	+	–	Total	+	–	Total	+	–	Total
+	4	5	9	0	0	0	0	0	0
–	0	64	64	1	52	53	0	11	11
Total	4	69	73	1	52	53	0	11	11

Agreement rate:	93%	(68/73)	98%	(52/53)	100%	(11/11)
Sensitivity :	44%	(4/9)	–		–	
Specificity:	100%	(64/64)	98%	(52/53)	100%	(11/11)

Table 2 PROPORTION OF EVELUATION RESULT FOR STAINED SMEARS

ARGAO RHU

	Good (%)	Poor (%)	Total (%)
Specimen Quality	73 (100.0)	0 (0.0)	73 (100.0)
Size	8 (11.0)	65 (89.0)	73 (100.0)
Thickness	16 (21.9)	57 (78.1)	73 (100.0)
Evenness	8 (11.0)	65 (89.0)	73 (100.0)
Staining	69 (94.5)	4 (5.5)	73 (100.0)
Cleanness	21 (28.8)	52 (71.2)	73 (100.0)

ALCANTARA RHU

	Good (%)	Poor (%)	Total (%)
Specimen Quality	10 (90.9)	1 (9.1)	11 (100.0)
Size	4 (36.4)	7 (63.6)	11 (100.0)
Thickness	4 (36.4)	7 (63.6)	11 (100.0)
Evenness	3 (27.3)	8 (72.7)	11 (100.0)
Staining	6 (54.5)	5 (45.5)	11 (100.0)
Cleanness	10 (90.9)	1 (9.1)	11 (100.0)

OSLOB RHU

	Good (%)	Poor (%)	Total (%)
Specimen Quality	44 (83.0)	9 (17.0)	53 (100.0)
Size	3 (5.7)	50 (94.3)	53 (100.0)
Thickness	3 (5.7)	50 (94.3)	53 (100.0)
Evenness	6 (11.3)	47 (88.7)	53 (100.0)
Staining	0 (0.0)	53 (100.0)	53 (100.0)
Cleanness	0 (0.0)	53 (100.0)	53 (100.0)

Table 3 REPORTING SCALE USED FOR SMEAR EXAMINATION BY RHUS

	National Standard	Catmon RHU	Argao RHU	Oslob RHU
(–)	No AFB found / whole* smear	No AFB in 5 horizontal lines	No AFB in 4 vertical lines	No AFB/whole# smear
(+)	1–5 AFB/whole smear	1–5 AFB in 5 horizontal lines	1–5 AFB in 4 vertical lines	1–5 AFB/VF
(++)	6–24 AFB/whole smear	6–13 AFB in 5 horizontal lines	6–10 AFB in 4 vertical lines	6–24 AFB/VF
(+++)	25 AFB and more in most fields	14 AFB and more in 5 horizontal lines	11–20 AFB in 4 vertical lines	25 AFB and more/VF
(++++)	Numerous in most fields	----	20 AFB and more in 4 vertical lines	Numerous AFB/VF

* whole smear: 3 horizontal lines & 2 vertical lines

whole smear: entire smear

Fig. 1 Proportion of Evaluation Result for Stained Smears in Argao RHU

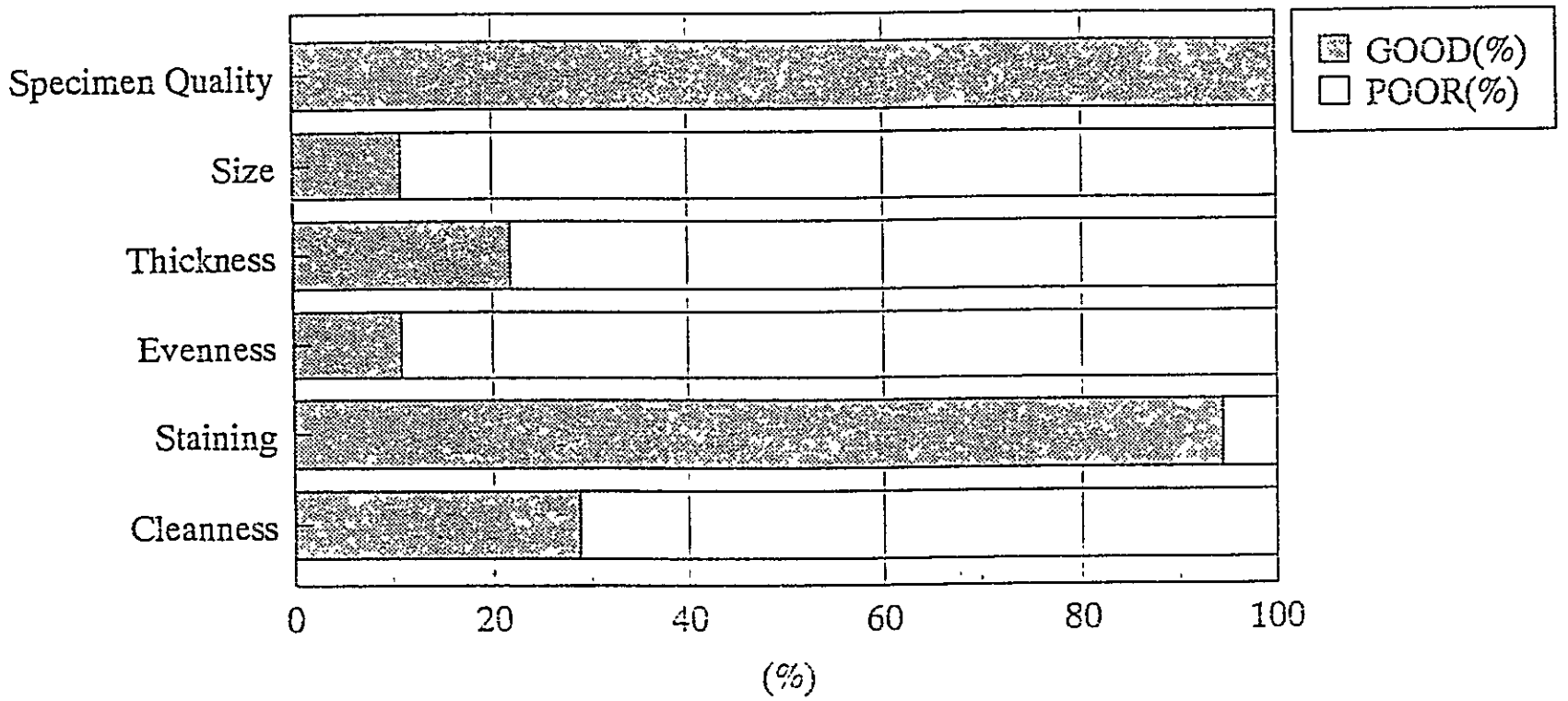


Fig. 2 Proportion of Evaluation Result for Stained Smears in Oslob RHU

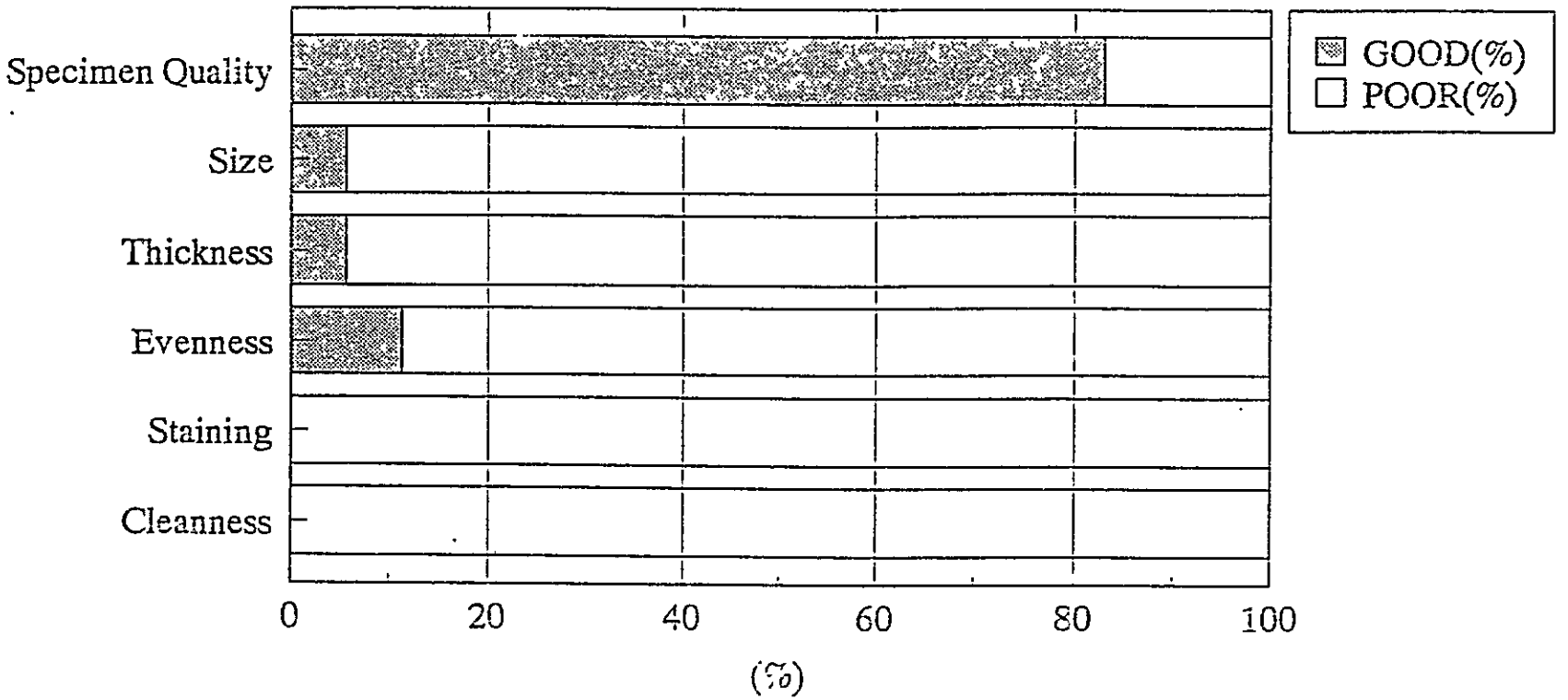
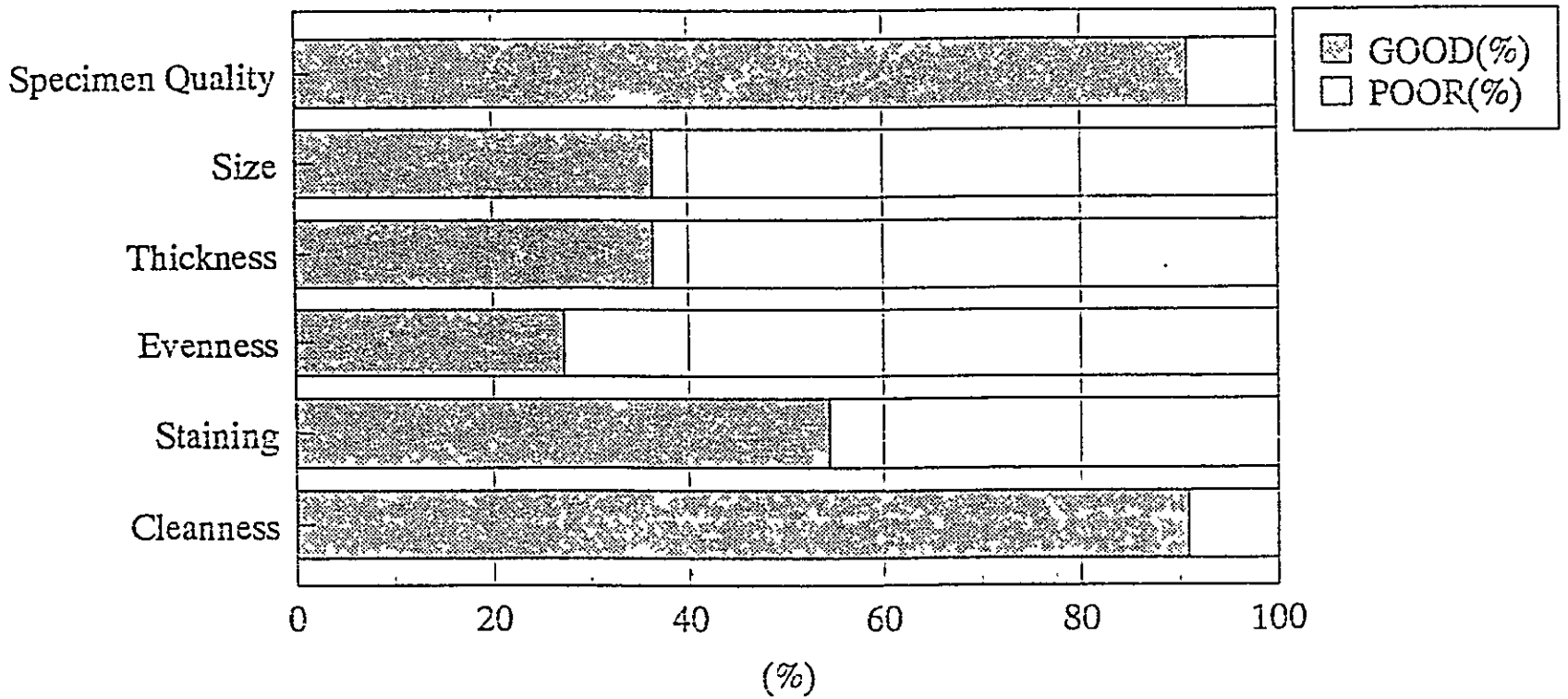


Fig. 3 Proportion of Evaluation Result for Stained Smears in Alcantara RHU



Annex G

MINUTES OF THE
THIRD JOINT COORDINATING COMMITTEE MEETING
DO-JICA Public Health Development Project

DATE : November 9, 1994
TIME STARTED : 10: 35 a.m.
TIME ENDED : 12: 15 p.m.

VENUE : Reference Laboratory of Cebu Chest Center, Vicente Sotto Memorial Medical Center Compd., B. Rodriguez St., Cebu City

CHAIRMAN : DR. MANUEL G. ROXAS
Undersecretary for Public Health Services,
Department of Health, Manila

ATTENDANCE : Members Present

DR. CORAZON V. TEOXON
OIC-TB Control Service,
DOH, Manila

DR. JOSE R. RODRIGUEZ
Director III
DOH-IRFO 7, Cebu City

DR. JESUS FERNANDEZ
Provincial Health Officer II
Cebu IPHO

DR. MEDALLA BORROMEO
For Dr. Tomas Fernandez
Cebu City Health Officer II

MR. EIJI IWASAKI
Asst. Resident Representative
JICA Philippine Office

DR. SHOICHI ENDO
Leader,
JICA, Consultation Survey Team

DR. TORU MORI
Member
JICA, Consultation Survey Team

MS. JUNKO NEMOTO
Member
JICA, Consultation Survey Team

MR. AKIHIKO HASHIMOTO
Resident Representative
JICA Philippine Office

DR. MASASHI SUCHI
Chief Adviser
DOH-JICA Project, Cebu City

MR. YOSHINORI TERASAKI
Coordinator
DOH-JICA Project, Cebu City

OBSERVERS AND COUNTERPARTS PRESENT:

DR. VIVIAN LOFRANCO
MS IV/National Coordinator
TB Control Service, DOH, Manila

DR. NORIHIKO YODA
First Secretary
Embassy of Japan

DR. ELAINE R. TELERON
MS II/Regional TB Medical Coordinator
DOH-IRFO 7, Cebu City

DR. LUCIA S. FLORENDO
MS IV/Provincial Coordinator
DOH-IRFO 7, Cebu City

DR. ENRIQUE SANCHO
MS II/Chief
Cebu Chest Center

MS. COLITA C. AUZA
Nurse V/Regional TB Nurse Coordinator
DOH-IRFO 7, Cebu City

MS. MA. CAROLYN DACLAN
Technical Assistant
DOH-JICA Project, Cebu City

MINUTES PROPER : (See Annex A for Minutes in Detail)

I. Approval of Minutes of the Second Joint Coordinating Committee Meeting

II. Progress Report . . . . . Dr. Masashi Suchi

DOH-JICA PROJECT ACTIVITIES (April 1994 - March 1995)

1. Activities
   - 1.1 Strengthening of TB Laboratory Function
   - 1.2 Intensification of Recording/Reporting System
   - 1.3 Improving logistic scheme
   - 1.4 Enhancing IEC Activity
   - 1.5 Implementation of planned seminars
   - 1.6 Technology Exchange Training
2. Missions
3. Dispatch of Japanese Experts
4. Counterpart Training in Japan
5. Equipment

III. Annual Work Plan . . . . . Dr. Elaine Teleron

Tentative Schedule of Implementation for Japanese Fiscal Year 1995- 1996

1. Expansion of ISA
2. Activities
   - 2.1 Expansion of the New NTP Guideline
   - 2.2 Intensification of Recording/Reporting System
   - 2.3 Improving Logistics scheme
   - 2.4 Strengthening TB Laboratory Function
   - 2.5 Enhancing IEC Activities
   - 2.6 Implementation of Planned Seminars
3. Dispatch of Japanese Experts
   - Long-term
   - Short-term
4. Counterpart Training in Japan
5. Provision of Equipment

IV. Discussions of Issues and Concerns

1. Reference Laboratory
2. Delay in nomination of trainee and MOA
3. Furniture for Ref. Lab.
4. Field testing
5. Manpower for Ref. Lab.
6. Dispatch of Experts
7. Counterpart Training & Clinical Aspect of TB
8. Change of date of next JCCM
9. Comments

V. Other Matters

Signing of Minutes of Discussions on the Consultation Survey Team concerning the DOH-JICA The Public Health Project.

Annex A

Minutes in Detail of
the Third Joint Coordinating Committee Meeting
DOH-JICA Public Health Development Project
DOH-IRFO 7, Cebu City
November 9, 1994

I. APPROVAL OF MINUTES OF THE SECOND JOINT COORDINATING COMMITTEE MEETING

Reactions and comments to the minutes of the second JCC meeting were gathered from the group. As there were no comments, the minutes of meeting were approved as it is.

II. Progress Report
DOH-JICA PROJECT ACTIVITIES (April 1994 - March 1995)
1. Activities
1.1 Strengthening of TB Laboratory Function

Equipment were installed to Cebu Chest Center to strengthen its functions like X-ray machines and the establishment of a reference laboratory. The Reference laboratory functions as a routine laboratory for direct smear examination and as a training laboratory. Refresher Training Courses on Laboratory Works were conducted, participated by 32 Medical Technologists in the ISAs. The maximum number of participants were 10 Med.tech./batch. The inputs made were purely on direct smear examination.

Quality control of smear examinations will also be done.

1.2 Intensification of Recording/Reporting System
1.3 Improving logistics scheme
1.4 Enhancing IEC Activity

Field testing activities in [illegible] areas of ISAs are undergoing representing the rural and urban areas. Meetings were held for the finalization of the protocol for field testing and orientation workshop to all field health personnel before its implementation. With the field testing activities, recording/reporting system is intensified.

1.5 Implementation of planned seminars
A Seminar on the basic concepts of TB and TB Control will be done for Doctors and Nurses early next year.

1.6 Technology Exchange Training
A visit to [illegible]CA TB Control Project in Nepal is scheduled on February next year to observe TB control activities and to exchange knowledge and experiences.

2. Missions
The Consultation Survey Team was received from 2nd to the 10th of November 1994. Its purpose is to work out the details of the DOH-JICA Project activities.

3. Dispatch of Japanese Expert
Two long term experts are dispatched to the Project site namely the Chief Advisor which term will end by August 31, 1995 and the Coordinator by December 9, 1995. So far, there were four (4) short-term experts that had visited the Project in the fields of Laboratory network and Logistics, Epidemiology, Radiology and twice for Bacteriology.

4. Counterpart Training in Japan
There were 2 counterparts sent to Japan for training. One is for TB Control and the other for Laboratory Works which is currently ongoing, participated by one (1) Medical technologist from Cebu IPHO.

5. Equipment
The approved list of equipment for 1994 is as follows: 15 Binocular Microscopes for the field units, 1 copier with sorter, 1 OHP (desk top), 1 Screen, 1 Sound system, 1 Slide projector for Cebu IPHO, 5 Printing machines for Mandaue & Lapu-lapu cities, TBCS, Manila, Region 7 & Cebu IPHO, 50 Portable sound system for the RHUs, 6 Motorcycles for the new ISAs.

The activities planned for this fiscal year will be implemented until March 1995.

II. Annual Work Plan
There are two major activities for Japanese Fiscal Year 1995- 1996 namely, the expansion of ISA and the usual activities undertaken last year.

1. Expansion of ISA
By April 1995, expansion of the present ISA to 2 areas, the City of Cebu and Danao to cover two-thirds of the population of Project area.

2. Activities

2.1 Expansion of the New NTP Guideline
It was proposed that the New NTP guideline presently field tested in the 2 areas of the ISAs will be introduced to the entire ISAs from April 1995 to March 1996. The other program of activities are to be done with the field testing implementation (from no. 2.2 to 2.6)

2.2 Intensification of Recording/Reporting System
With the implementation of the new NTP guidelines, quality of recording/reporting system at the RHU level will be improved.

2.3 Improving Logistics scheme
This will be achieved through the establishment of a suitable buffer stock system in each level.

2.4 Strengthening of TB Laboratory
Activities to be undertaken will be quality control of smear/culture examinations and conduction of Refresher courses to Medical technologists.

2.5 Enhancing IEC Activities
A suitable motivating system in the community level will be established.

2.6 · Implementation of Planned Seminars
A seminar for Med. tech., Doctors and PHNs in the new ISAs will be conducted by May to June 1995.

3. Dispatch of Japanese Experts
Long-term experts are dispatched namely the Chief advisor from September 1, 1992 to August 31, 1995 and Project Coordinator from December 10, 1992 to December 9, 1995. Short-term experts on the fields of Bacteriology, TB Control, Epidemiology and Radiology will be dispatched next fiscal year.

4. Counterpart Training in Japan
Two slots for counterpart training in Japan are open next fiscal year namely TB Control from June '95 to Oct. '95 and Laboratory works for TB Control from Sept. '95 to Feb. '96.

5. Provision of Equipment
The list of equipment for 1995 -96 are as follows, 1 Computer & Printer, 1 Copier with Sorter, 1 OHP desk top, 11 OHPs (portable), 1 Slide projector, 12 Screens (portable), 12 Loud speakers, 10 Motorcycles, 3 Printing machines, 30 speakers (handy type).

V. Discussion of Issues and Concerns
Concerns pertaining to the Progress Report:
1. Reference Laboratory

Dr. Rodriguez explained about the responsibility of DOH-IRFO 7 to get the electricity for reference laboratory. At present, the power supply came from VSMMC. The Regional Health Office had made representations with the electric company for the installation of a transformer to supply fully its electricity demand. The electric company has inspected the building, so it is hoped that by the end of November this year electricity will be installed. He added that, as to manpower the office has approved 2 items namely, 1 Medical technologist and 1 laboratory aide under the 1995 budget. It is aspired that a Med. Tech. can be hired not later than June next year. Inasmuch as these 2 positions are insufficient, a proposal was made for 1 Med. tech. in the 1996 budget. The short-term solution planned to avail of their services at this time, is to hire the personnel on a contractual basis.

Dr. Sancho enumerated the actual staff of Cebu Chest Center namely, 2 PHNs, 1 X-ray technician, 2 administrative personnel, 1 Chief and in the reference lab., 1 senior laboratory technician and 1 Med. Tech from Cebu IPHO. The actual staffing pattern required by the laboratory are: 1 chemist for reagent preparation, 2 Med. Techs., 1 aide, 1 clerk, and 1 security guard.

For the need of a chemist, a pharmacist is suggested. In the present set-up, the RHU Med. Tech. are preparing their own reagents with the supervision of the Lab. technician.

It was confirmed that a permanent Med. Tech. who will work in the reference laboratory will be sent to Japan for training. It is requested by Dr. Suchi that nomination of this trainee will be done ahead of time, to facilitate all the necessary documents for his/her participation.

Dr. Rodriguez explained that some delays occurred because of the governments' procedures but it is assured that a Med. tech. will be appointed on time for him/her to participate in the training course.

Dr. Roxas explained that difficulties are met in hiring of personnel due to the attrition law. But since this is the commitment of the Philippine government, it will be approved. Region 7 also gave much effort to provide the requirements needed. To facilitate the manpower requirements, the total staffing pattern of the facility should be requested at this time.

Mr. Terasaki mentioned that the deadline of submission for the training on Laboratory Works will be on January or February next year. It is convenient that applications will be submitted simultaneously for the 2 trainings.

For the training on TB Control, Dr. Rodriguez suggested that trainee should come from the field. Dr. Sancho, Chief of Cebu Chest Center was nominated by the body for this training.

2. Delay in nomination of trainee and MOA

Dr. Fernandez cited two points namely :
1) Delay in nomination of trainee. The delay occurred because of some misunderstanding. The provincial government need to be convinced of the necessity in sending personnel for training but ultimately one (1) IPHO Med. Tech. was sent to Japan. But now, there is already a good coordination with DOH-IRFO 7, in fact assistance are provided to support the program. To mention, some staff are asked to facilitate in the conduct of trainings. However, it is requested that information will be sent ahead of time so as not to disrupt their present assignments.

2) Memorandum of Agreement for the JICA donated vehicle. He informed that he received the MOA for the vehicle but he has to confer it with the Governor of who will sign it. He further added that the MOA is too restrictive and detailed.

Mr. Terasaki mentioned regarding the 2 vehicle allocated for the Regional Health Office 7 and Cebu IPHO. The agreement between JICA and DOH was not accomplished yet, because it is planned that both vehicles shall be used at the same time. The JICA side is also waiting for the utilization of the vehicles.

Dr. Rodriguez explained that it took time to accomplish the MOA to make it satisfactory to all parties concerned. The most important point is that it should be utilized for monitoring of the TB Program, if it is not in use, the vehicle can be utilized by other program staff. The MOA shall be signed by the Provincial Officer and approved by the Provincial Governor. The detailed references

can be eliminated.

Dr. Teleron reiterated that it takes a lot of time for the vehicle to be used because of the modifications made to the MOA. The draft of the MOA is based on the set of guidelines agreed between DOH-IRFO 7 and JICA Office which is currently practiced by the Office.

Dr. Fernandez expressed that the agreement should be consulted first with the province since it is stipulated there that vehicle registration and insurance will be the responsibility of the province.

Dr. Roxas recapitulated that for the MOA detailed references can be eliminated since it will be reviewed. But it should be stated that, it will be used by personnel implementing the program and it should be specified who shall maintain it. In most of the loaned vehicle from donor country, they are maintained by the agency where it is utilized.

Mr. Terasaki said that the contract is between the IRFO 7 and IPHO so agreements for modifications should be made by the two parties. The most important point that must be considered is the proper use and maintenance of the vehicle.

Mr. Hashimoto presented that for maintenance purposes budgetary allocation should be available.

3. Furniture for Ref. Lab.

As to the furniture, Dr. Rodriguez aired out that the problem arise in the capital outlay which should not exceed P1,500.00. The alternatives undertaken was to purchase the materials and have it made. This expenditures is taken from the Regional budget.

Concerns of the Annual Work Plan:

4. Field testing

Dr. Teleron asked to TBCS pertaining to certain aspects of the guidelines that touch on the other components of the new NTP policies.

Dr. Tcoxon mentioned that here in Cebu, we are testing for the feasibility of the procedures for diagnosis, treatment and recording and reporting system. In Region 6 a field testing on logistics are also conducted. These guidelines can be utilized in the ISAs.

Dr. Suchi asked if the Project can expand the field testing activities to the other ISAs. Through such activity action research can be realized in the field level. The process for expansion is yet to be planned, whether to implement it gradually or at the same time.

Dr. Fernandez shared his views in the expansion of the new NTP guideline. These requires a lot of preparation but it is advisable to implement a uniform NTP guideline in the entire Cebu province.

Dr. Endo recommended that the present policies be finalized prior to its expansion to other areas.

It is one of the purpose of the field testing to have a uniform guideline, so it is done in a small area. Even with these 2 areas, certain aspect of the guidelines need to be modified.

Dr. Teoxon confirmed on the difficulties in having 2 different guidelines implemented in an area. She requested that they will be given enough time to review the plan of action for 1995 to consider the proposal of expanding the field testing activities to the entire province. This may be feasible by having a control group, one that is under the JICA assistance and those that are not. For those that are not covered by JICA, TBCS will try to gather the resources needed, and if it is possible, will accomodate the training and implementation of the new guideline. It was asked that considerable time be given to develop the whole proposal.

5. Manpower for Reference Laboratory

Dr. Teleron cited a solution to the manpower problem of the reference laboratory. In future, the facility is envisioned to serve 3 regions namely, region 6, 7 and 8 as a head zone. Even now, it accepts trainees from these areas. It is proposed that if possible they will be asked to contribute for the provision of manpower to maximize the utilization of this facility.

This suggestion is feasible to let the other national employee from Region 6 or 8 to man the laboratory as a regular staff through the issuance of a Department Order and if they agreed for a transfer of assignment.

Dr. Suchi emphasized that the Project area should be given priority. Strengthening of laboratory activities has just started and many constraints are yet to be sorted out.

Dr. Roxas agreed to consider the suggestion to put priority to Cebu province.

6. Dispatch of Experts

Dr. Teleron clarified with regards to the expert on Bacteriology that will be dispatched next year, if culture and sensitivity examination can be initiated.

It is desired that these procedures will be introduced since an expert on bacteriology will be received twice next year.

7. Counterpart Training in Japan and Clinical Aspect of TB

Dr. Roxas opened up two concerns namely:

a) Number of counterpart trainees that will be sent to Japan. As observed in the annual plan there is quite a number of short-term experts that will be dispatched in the project site in a year. It was requested that training should not be limited to 2 slots per year because of the felt need to train the Filipino staff. It is appreciated if this concern will be looked into.

It was cited by Dr. Suchi that commonly counterpart trainees are limited to around 2 participants in a year in a TB Control Project.

Mr. Hashimoto stated that for its initial phase of implementation, a number of counterparts will be sent for training but usually decreases towards the end of the Project.

It is assured that this concern will be noted and feedback to JICA by Dr. Endo.

b) The Clinical side of TB disease should also be emphasized and a phthisiologist should be dispatched. This is important especially to those difficult to manage cases like resistant TB.

Dr. Suchi mentioned that in the seminars that were conducted, lectures on the clinical side of tuberculosis were provided. These seminars were conducted by Japanese experts on TB Control although it geared towards the public health side.

As to the clinical side of TB, Dr. Lofranco informed that doctors are trained in the treatment policies of TB prior to the implementation of the new NTP guidelines.

Dr. Roxas elucidated that training of doctors in terms of specialization are needed so as to boost the morale of government doctors and thus the public will seek the services of the health centers.

It is with this proposition that the function of Cebu Chest Center is enhanced through provision of a good X-ray and laboratory services. On the other hand, since the country' system of field personnel are generalist rather than specialist, it is difficult to train them. But inspite of this, it is envisioned that Cebu Chest Center can be a good referral unit in this area as explained by Dr. Suchi.

It is essential that cooperation with the private sectors be established as viewed by Dr. Endo.

Dr. Teleron shared that Region 7 has formed the Regional Advisory Council for TB which is participated by government and private physicians in the field of pulmonary medicine. They serve as consultants in TB management and shall in the future investigate the system in X-ray reading.

Dr. Roxas recognize the importance of this council for the NTP.

8. Change of date of the next JCCM

There was a move to change the date of the next JCCM to September instead of November due to the occurrence of trainings towards the end of the last quarter of the year. The Japanese side explained that for their planning, it is very convenient because they will submit the annual plan to JICA headquarters by the end of November or early December.

It was agreed that the meeting date will remain as it is, every second Wednesday of November.

Dr. Lofranco asked for the consideration of the assignment of the Project Chief Adviser which will terminate by the end of August 1995.

9. Comments

Dr. Yoda expressed his sincere gratitude to the cooperation of the Filipino side in the activities of the Project. Public health projects as he heard have a good reputation since it reaches the grass root level, effective to alleviate the economic status of the people and beneficial to support the nation. It is hoped that this project will yield good results. He committed to try his best to support the Project.

Mr. Hashimoto urged the body to hasten all the preparation so as to fully use the reference laboratory like the provision of manpower and installation of electricity.

Dr. Endo stated that he is very appreciative that many problems were confronted and for the support afforded by the Regional Health Office. For the introduction of the NTP guidelines revisions are needed.

THE CHAIRMAN:

MANUEL G. ROXAS, M.D., M.P.H.
Undersecretary for Public Health Services,
Department of Health
Manila

Annex H

THE MINUTES OF DISCUSSIONS BETWEEN THE JAPANESE CONSULTATION SURVEY TEAM AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES ON THE TECHNICAL COOPERATION FOR THE PUBLIC HEALTH DEVELOPMENT PROJECT

The Japanese Consultation Survey Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Shoichi Endo, visited the Republic of the Philippines from November 2 to 10, 1994 for the purpose of reviewing the activities concerning the Public Health Development Project (hereinafter referred to as "the Project"), and discussing the future implementation plan of the Project.

During its stay , the Team exchanged opinions and had a series of discussions with the Philippine authorities over the implementation of the Project.

As a result of the discussions, both sides agreed upon the matters referred to in the document attached hereto.

Cebu, November 9, 1994

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I. GENERAL REVIEW

The Project started on September 1, 1992 for five years, with the purpose of developing a public health service system in the defined area of the Republic of the Philippines, focusing on the tuberculosis control program as its model component.

In accordance with the Record of Discussions signed on April 3, 1992 by both sides, JICA has dispatched 2 long-term experts and 14 short-term experts to the Philippines and has accepted 6 counterpart personnel as trainees in Japan, and also has provided equipment to activate the implementation of the Project.

Both sides reviewed the activities in regard to the implementation of the Project. Based on the common understanding of the present situation of the Project, both sides discussed the future implementation plan of the Project.

II. SUMMARY OF DISCUSSIONS

Both sides agreed upon the following matters:

1. For the establishment of the Reference Laboratory of the Cebu Chest Center necessary measures regarding health personnel and infrastructures should be taken by the Philippine side.

2. The new National Tuberculosis Control Program Guidelines should be implemented based on the recommendations made through the field tests. The training program for its nationwide expansion should be planned carefully.

3. Expansion of the Intensive Service Area of the project should be conducted in an appropriate way.

III. JOINT COORDINATING COMMITTEE MEETING

The Team attended the 3rd Joint Coordinating Committee Meeting of the Project and participated in the discussion.

IV. ACHIEVEMENT OF TENTATIVE SCHEDULE OF IMPLEMENTATION

The technical cooperation activities under the Project which have been carried out by the end of October 1994 are presented in ANNEX I.

V. TENTATIVE SCHEDULE OF IMPLEMENTATION

According to the present situation of progress of the Project, both sides jointly formulated the Implementation Plan of the Project.

The timetable of the Implementation Plan of the Project is presented in ANNEX II.

ANNEX I

1. Dispatch of Japanese Experts
   (1) Long-term Experts
   - Chief Advisor 1
   - Coordinator 1

   (2) Short-term Experts
   - Tuberculosis Control 3
   - Epidemiology 3
   - Bacteriology 3
   - Sociological Survey 2
   - Supervision & Monitoring 1
   - Radiology 1
   - Laboratory Network and Logistics 1

2. Counterpart Training in Japan
   - Group training course in Tuberculosis Control II 4
   - Group training course in Laboratory Works for Tuberculosis 2

3. Equipment
   - Laboratory Equipment
   - Microscopes
   - Teaching Materials
   - Vehicles & Motorcycles
   - Personal Computers
   - X-ray Equipment
   - Others

4. Renovation of the Reference Laboratory of the Cebu Chest Center

ANNEX II

TENTATIVE SCHEDULE OF IMPLEMENTATION
FOR THE PUBLIC HEALTH DEVELOPMENT PROJECT

JAPANESE FISCAL YEAR (April to March)	1992/93	1993/94	1994/95	1995/96	1996/97	1997/98
	9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8 9 10 11 12 1 2 3	4 5 6 7 8
1. Dispatch of Japanese Experts to the Philippines						
(Long term experts)						
Chief Advisor	———	———	———	———	———	———
Coordinator	———	———	———	———	———	———
Others						
(Short term experts)						
Tuberculosis Control	—	— 2	— 2	--	--	--
Epidemiology		— —	—	--	--	--
Bacteriology		— —	— —	-- --	-- --	—
Sociological Survey		— —				
Supervision & Monitoring		—				
Laboratory Network and Logistics			—			
Radiology			—	--		
Others						
2. Counterpart Training in Japan						
Tuberculosis Control	— 2	———	———	———	———	
Laboratory Works for Tuberculosis Control		———	———	———	———	
Others						
3. Provision of Machinery and Equipment	———	———	——— ———	———	———	
4. Dispatch of Japanese Mission to the Philippines	Consultation —		Consultation Survey —		Evaluation --	

Note : This schedule is formulated tentatively on the assumption that the necessary budget be acquired by both sides.
This schedule is subject to change within the framework of the Record of Discussions as the necessity arises in the course of Project implementation.