№

フィリピン国
結核対策プロジェクト
運営指導調査団報告書

平成１１年１１月

国 際 協 力 事 業 団
医　療　協　力　部

医 協 一
Ｊ Ｒ
99－35

序　　文

フィリピン共和国政府は、結核対策を中心とする公衆衛生のモデルを構築するべく、プロジェクト方式技術協力をわが国に要請し、これを受けて国際協力事業団は1992年から５年間にわたり公衆衛生プロジェクトを実施しました。

フィリピン共和国公衆衛生プロジェクトは1997年８月31日に終了しましたが、同プロジェクトの実施により保健省が新たに策定した治療完了に重点を置く結核対策新指針の実施モデルを確立し、そこで得られた成果をもとに、結核対策新指針の全国展開を進めるため、実施エリアを拡大するのに必要な技術的支援を行う新たなプロジェクト方式技術協力を要請してきました。これを受けて国際協力事業団は、1997年９月１日から５年間の予定で、結核対策プロジェクトを開始しました。

当プロジェクトは、専門家の派遣、研修員受入れおよび機材供与を軸に、技術協力を実施してきました。今般これらの状況を踏まえ、PDMや対象地域拡大の計画ほかについて先方と協議を行うために、1999年10月５日から1999年10月14日までの日程で、財団法人結核予防会結核研究所国際協力部企画調査科長須知雅史氏を団長とする運営指導調査団を派遣しました。本報告書は、同調査団が実施しました調査、協議およびその結果について取りまとめたものです。

ここに調査団員各位ならびに調査にご協力を賜りました関係各位に、深甚なる謝意を表します。

平成11年11月

国際協力事業団
理事　阿部　英樹

リージョン４保健局にて

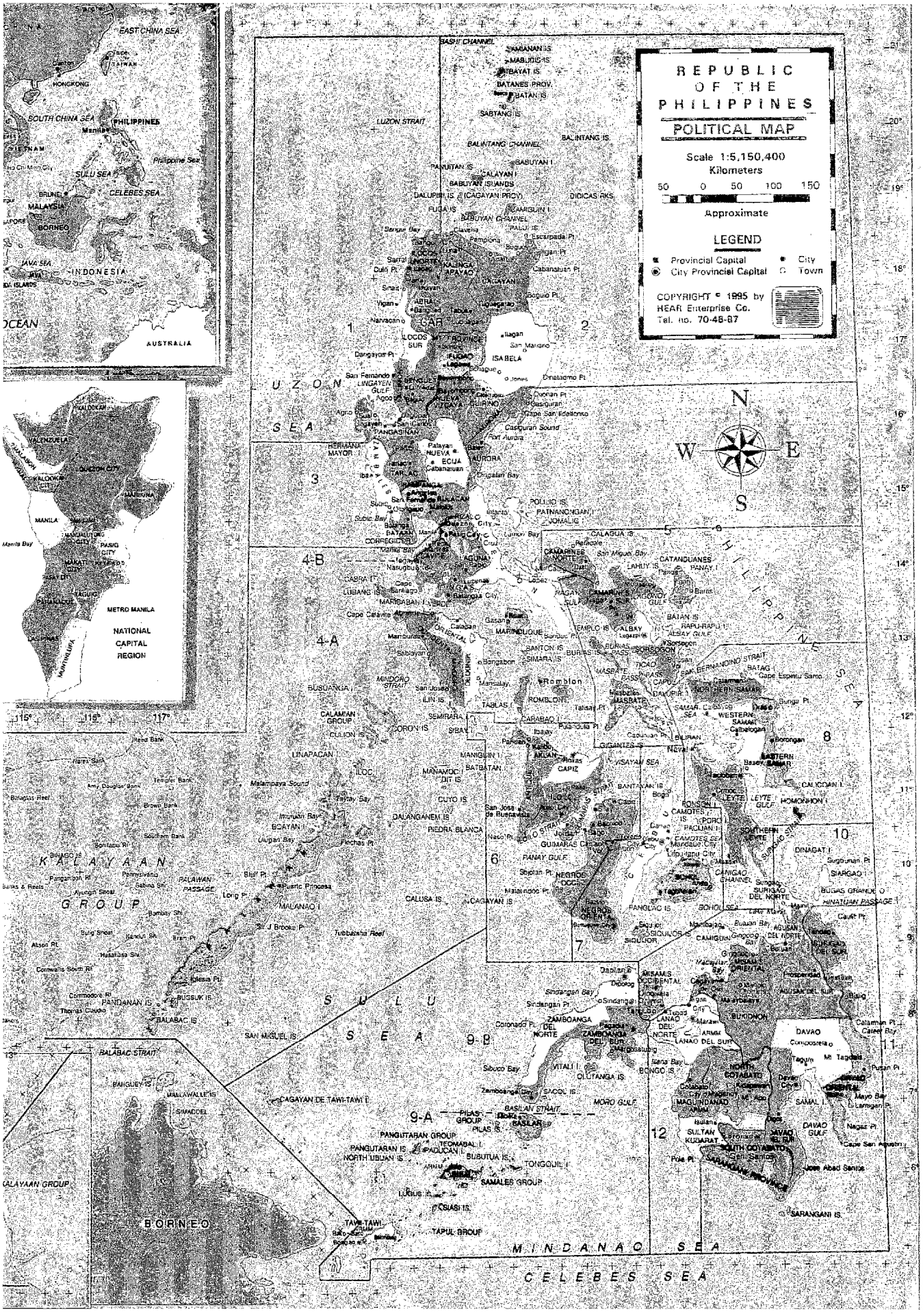
リザール州保健局表敬

協議風景

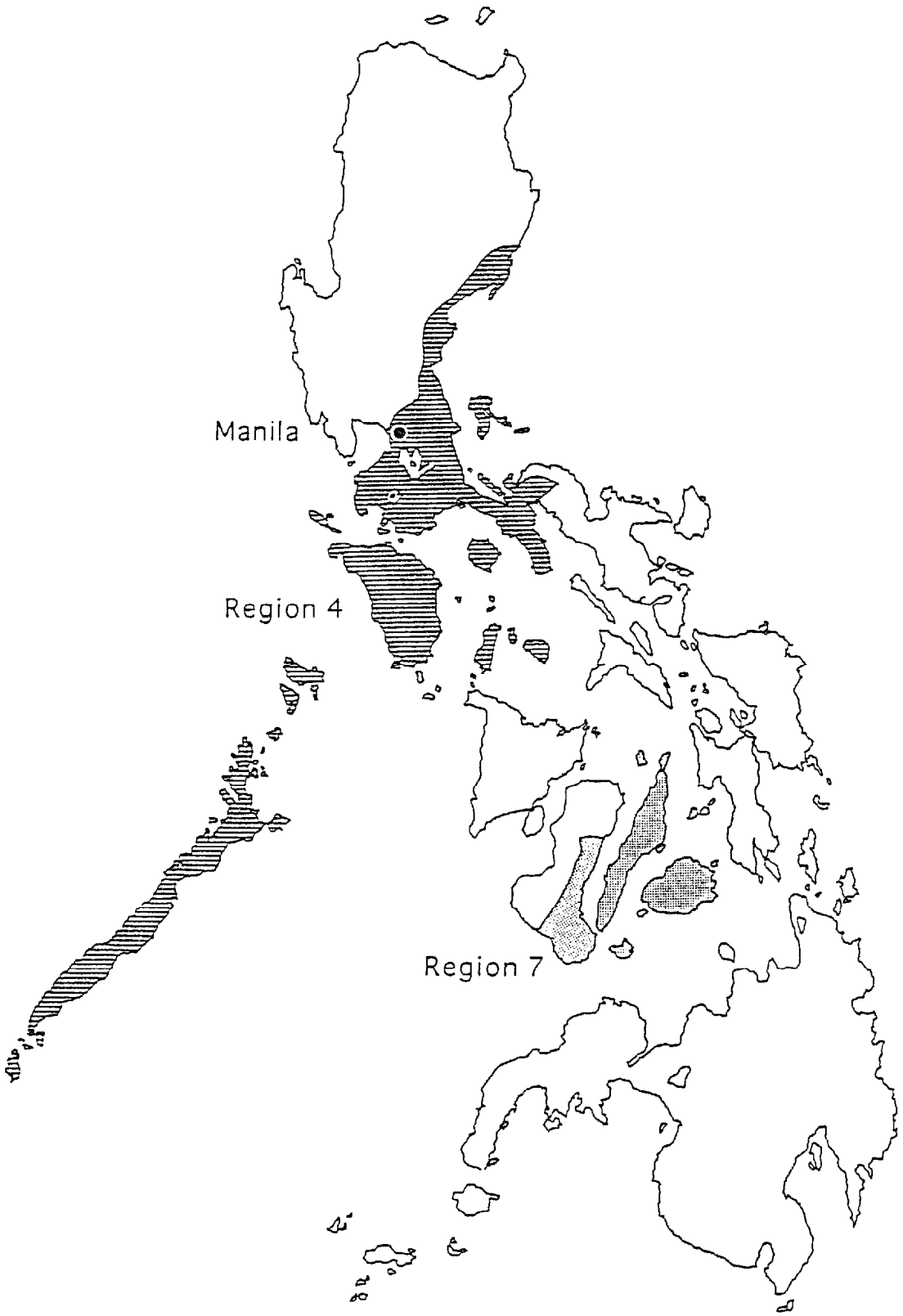
協議風景

・地図

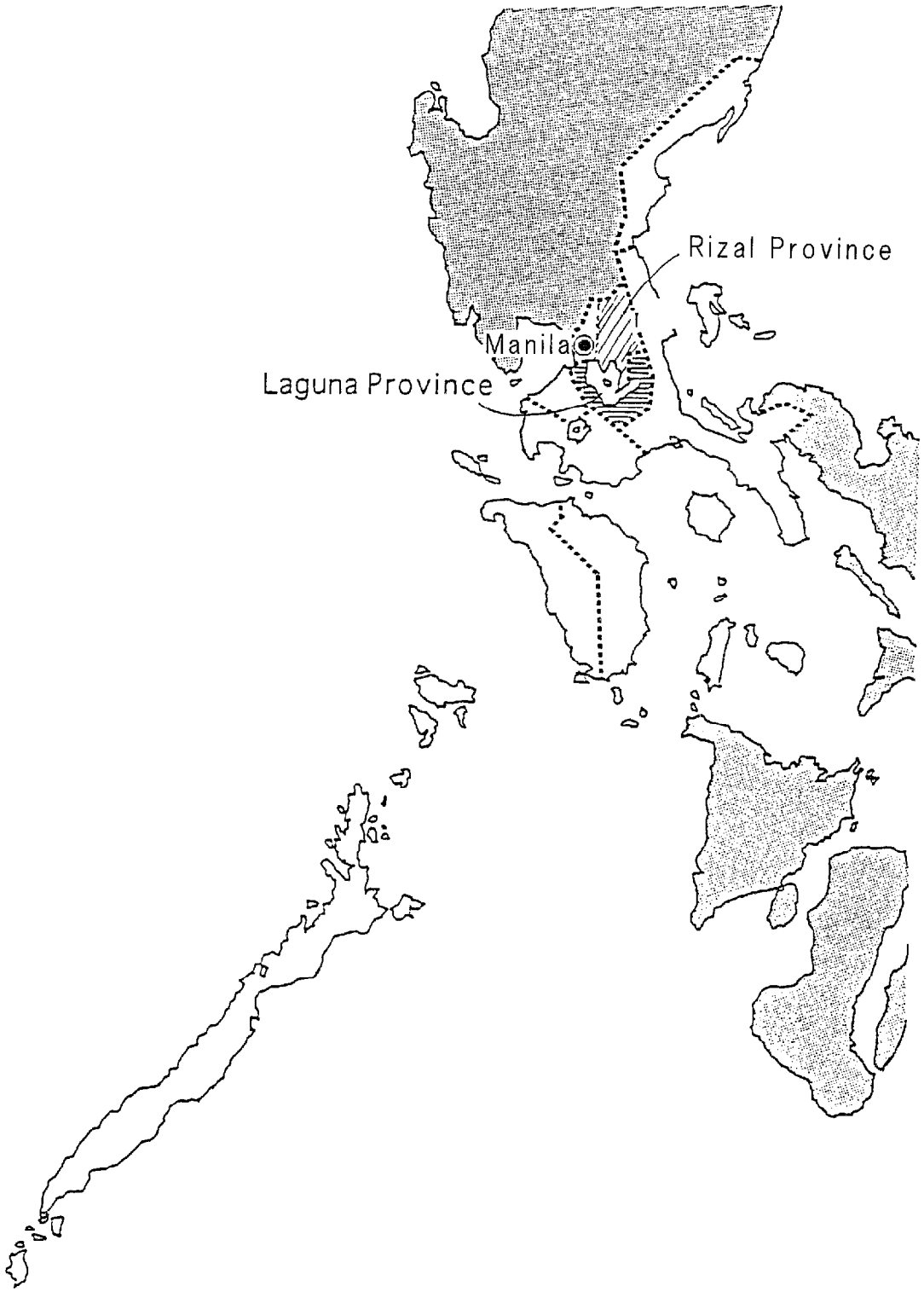

CHINA
Taiwan
0 100 200 km
0 100 200 mi
Luzon Strait
Aparri
South China Sea
Luzon
Bagulo
Philippine Sea
San Fernando
Quezon
MANILA
Batangas
Legaspi
Mindoro
Samar
Panay
Iloilo
Bacolod
Leyte
Cebu
Palawan
Guimaras Island
Puerto Princesa
Negros
Cagayan de Oro
Butuan
Sulu Sea
Iligan
Mindanao
Davao
Zamboanga
Jolo
MALAYSIA
INDONESIA
Celebes Sea
INDONESIA


REPUBLIC OF THE PHILIPPINES
POLITICAL MAP
Scale 1:5,150,400
Kilometers
50 0 50 100 150
Approximate
LEGEND
Provincial Capital
City Provincial Capital
City
Town
COPYRIGHT © 1995 by HEAR Enterprise Co.
Tel. no. 70-48-87
EAST CHINA SEA
SOUTH CHINA SEA
PHILIPPINES
Manila
VIETNAM
Philippine Sea
SULU SEA
CELEBES SEA
BRUNEI
MALAYSIA
BORNEO
JAVA SEA
INDONESIA
AUSTRALIA
METRO MANILA
NATIONAL CAPITAL REGION
LUZON
VISAYAS
MINDANAO
LUZON STRAIT
SIBUTU PASSAGE
BALABAC STRAIT
CELEBES SEA
MINDANAO SEA
SULU SEA
KALAYAAN GROUP
CAGAYAN DE TAWI-TAWI
TAWI-TAWI
TAPUL GROUP
SAMALES GROUP
PANGUTARAN GROUP
PILAS GROUP
BASILAN
ZAMBOANGA
DAVAO
CAMIGUIN
BUTUAN
SURIGAO
CAGAYAN DE ORO
ILIGAN
COTABATO
GENERAL SANTOS
DAVAO GULF
MORO GULF
LINGAYEN GULF
LAGUNA DE BAY
MANILA BAY
VERDE ISLAND PASSAGE
SAN BERNARDINO STRAIT
SURIGAO STRAIT
HINATUAN PASSAGE
LEYTE GULF
ILOILO STRAIT
MINDORO STRAIT
BALINTANG CHANNEL
BASHI CHANNEL
BABUYAN CHANNEL
SIBUTU PASSAGE
SULU SEA
SAMAR SEA
VISAYAN SEA
1
2
3
4-A
4-B
5
6
7
8
9-A
9-B
10
11
12

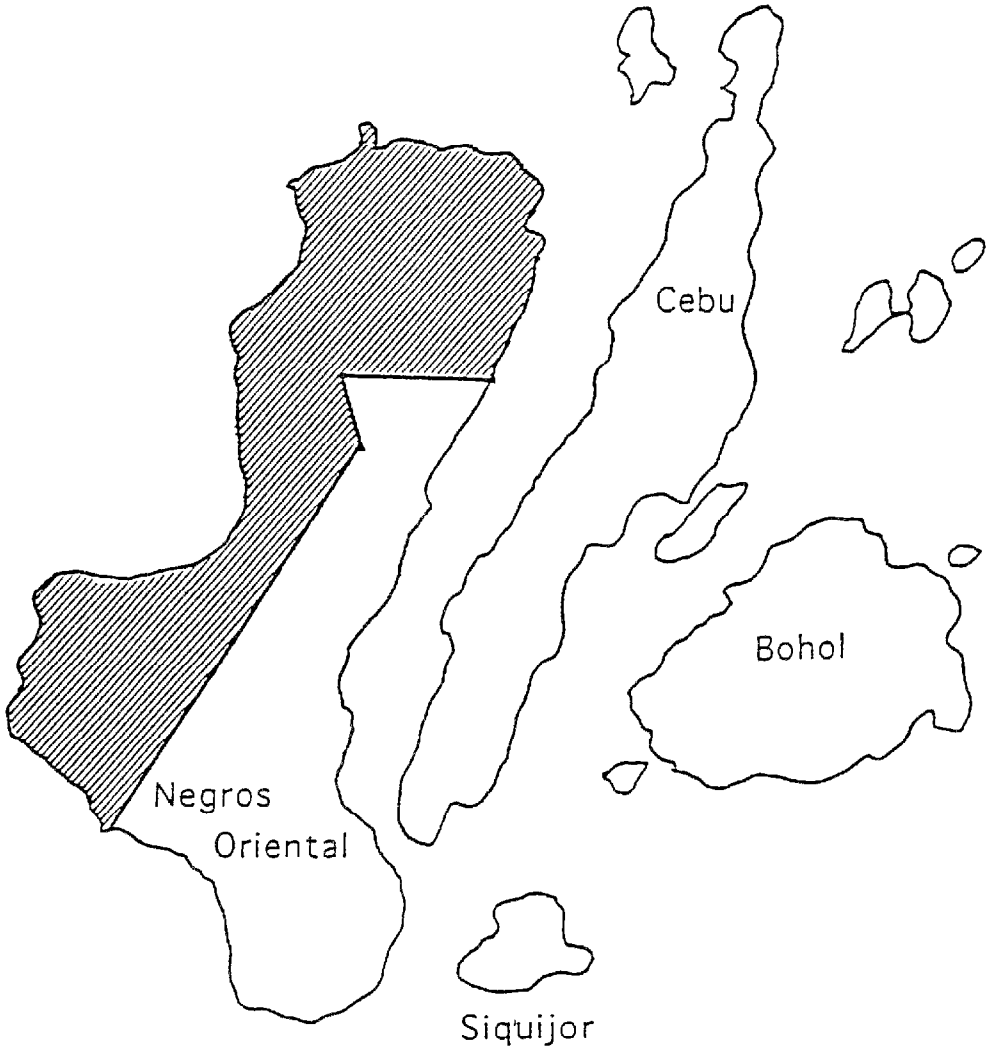
REPUBLIC OF THE PHILIPPINES



REGION 4



REGION 7



目　　次

１．運営指導調査団派遣

１－１　調査団派遣の経緯と目的

フィリピン共和国（以下、フィリピン）は、世界的にみて有数の結核高蔓延国である。また、死因統計をみても結核はフィリピンにおける死因の第５位にあたるきわめて深刻な疾患のひとつである。しかしながら、フィリピンの結核対策は、患者管理ではなく患者発見の優先により、無駄な検査が多く診断の質が低かったり、患者管理の不徹底による不規則な治療や治療中断が多く、結核対策全般にかかるシステムの改善が必要であった。

このような状況のもと、わが国は1992年９月から５年間にわたり、結核対策を中心とする公衆衛生プロジェクトをセブ州をプロジェクトサイトとして実施し、WHOとの連携を図り、保健省が新たに策定した治療完了に重点を置く結核対策新指針の実施モデルを確立した。そこで得られた成果をもとに、フィリピンは結核対策新指針の全国展開を進めるため、実施エリアを拡大するために必要な技術的支援を行う新たなプロジェクト方式技術協力を要請してきた。

これを受けてわが国は、1997年６月に事前調査団を派遣し、８月に討議議事録（以下R／D）を締結し、1997年９月から５年間にわたりプロジェクト方式技術協力「結核対策プロジェクト」を実施することとした。

プロジェクト開始から２年を経過した現時点で、これまでの進捗状況のレビューを行い、プロジェクト・デザイン・マトリックス(PDM)、対象地域拡大の計画ほかについて先方と協議を行った。協議結果はミニッツに取りまとめたが、先方次官の都合により署名・交換に至らなかったため、わが方団長の署名を残して後日先方の署名を取り付けた。

１－２　調査団の構成

担当	氏名	所属
団長　総括	須知　雅史	財団法人結核予防会結核研究所国際協力部企画調査科長
団員　協力計画	伊藤　賢一	国際協力事業団医療協力部医療協力第一課職員

１－３　調査日程

日順	月日	曜日	移動および業務	
			須知団長	伊藤団員
	10月４日	月	無償資金協力「結核対策強化計画」基本設計調査団長	
1	10月５日	火		13:10 JL741便でマニラ着
2	10月６日	水		家族計画・母子保健プロジェクト（フェーズⅡ）・エイズ対策プロジェクトと打合せ

3	10月７日	木	9:00 無償資金協力基本設計調査団の結果につきJICA事務所へ報告 13:30 保健省にて無償資金協力のミニッツ署名
4	10月８日	金	9:15 無償資金協力基本設計調査結果につき日本大使館へ報告 13:00 プロジェクトチームと打合せ
5	10月９日	土	国内打合せおよびミニッツ案作成準備
6	10月10日	日	報告書作成準備
7	10月11日	月	7:30 第４リージョン保健局表敬 9:00 リサール州保健局表敬 13:00 プロジェクトチームと打合せ
8	10月12日	火	9:00 ミニッツ案協議 13:00 保健省とPDM案協議
9	10月13日	水	9:00 保健省とミニッツ案他につき最終協議 17:00 JICA事務所へ報告
10	10月14日	木	10:00 日本大使館へ報告 14:30 JL742便でマニラ発

１－４　主要面談者

(1) フィリピン側関係者

1) 保健省

＜公衆衛生局＞

Dr. Milagros L. Fernandez: Undersecretary for Office for Public Health Services

＜結核対策課＞

Dr. Mariquinta J. Mantala: Director, Tuberculosis Control Service(TBCS)

Dr. Nora Serapio-Cruz: Head, Plans & Program Division, TBCS

2) リージョン４

Dr. Rosario H. Famaran: Assistant Director, Regional Health Office IV

Dr. Rosenda Pang Ramos: Medical Specialist IV, Reginal Health Office IV

Ms. Blesiva Z. Pinon : Nurse V, Regional Health Office IV

3) リサール州

Dr. Cristina T. Dela Cruz: Provincial Health Officer II, Rizal Province

(2) 日本側関係者

1) 日本大使館

福田　光　　一等書記官

2) JICA事務所

黒柳　俊之　　次長

有本　祐子　　所員

3) 結核対策プロジェクト

遠藤　昌一	チーフアドバイザー
小原　克美	調整員
大角　晃弘	専門家（結核対策）

２．総　　括

先方と合意に至った事項については別添ミニッツのとおりである。

２－１　プロジェクト・デザイン・マトリックス（PDM）について

Ｒ／Ｄに記載されているMaster Planおよび1998年の運営指導調査団でのワークショップの結果に基づき、先方と協議のうえPDMを作成した。Project PurposeやOutputについては現実に動いているプロジェクトの進捗や運営状況を踏まえてＲ／ＤのMaster Planに近いものとし、Activityについては成果の①から③に対応するものとして、おおむね「実施準備→研修実施→結核対策プログラム施行→記録・報告を含むデータ管理→監督・モニタリング・評価(巡回指導)」に沿って活動が実施されているため、そのような記述とした。成果④に対応する活動としては、ワークショップでニーズが高かった検査の強化の部分を盛り込み、包括的に現実の動きを反映するものとした。また、指標についてはプロジェクトがOutcomeとして用いている入手可能なものをあげた。成果の指標のうち新登録患者中陽性率と検痰中陽性率の数字および範囲の設定で議論もあったが、基本的な線として別添PDMのとおり設定することとした。作成結果は別添ミニッツANNEX 1のとおりであるが、引き続き先方と活動を展開していくなかで必要あれば見直すこともありうる。

２－２　対象州拡大計画について

1999年度の後半と2000年度についてはリサール州とブラカン州へ拡大していくことが確認された。リサール州については、開始が近いこともあり、結核コーディネーターや看護婦の配置等も問題なく進んでいるものと思われる。ただし、実質的に最終年度となる2001年度については計画の詳細は未定であるが、先方からはヌエバシハ州が提案されており、実施可能性や他州の可能性の検討も含め、今後 Joint Coordinating Committee 等で詳細を練ることが重要である。また、ブラカン州等リージョン３への展開に際しては、別途実施中の家族計画・母子保健プロジェクト（フェーズⅡ）との調整・連携を十分にしておくことが必要である。

２－３　成果の達成状況について

患者発見成績ではセブ・ボホール・ネグロスオリエンタル・ラグナ州第１地区でおおむね80%前後の新登録患者中の塗抹陽性患者の割合が得られていて、良好な進捗状況である。しかし、シキホール州では47%とやや低い。有症状者中の陽性率ではどこも20%前後であった。治癒率をみるとシキホール州とラグナ州第１地区で低く、対策のいっそうの強化のため短期専門家の派遣により対応を検討することも視野に入れるべきであろう。

３．プロジェクト・デザイン・マトリックス（ＰDM）

３－１　基本方針

(1) 現状

昨年の運営指導調査団派遣の際に、Project Cycle Management（PCM）ワークショップを１日行い、問題分析・目的分析を行った。それに基づき、同調査団に参団したコンサルタントにPDM試案（以下PDM-C）を作成してもらい（附属資料④参照）、プロジェクトおよび相手国側に図ったところ、現場では使いづらいとの声があがっている旨報告があった。プロジェクト開始時に現地で仮作成した PDM（以下PDM - P）は附属資料③のとおり。

(2) 方針案

上位目標、プロジェクト目標、成果

Ｒ／Ｄに合わせた表現ぶりにする。すなわち、以下のとおり。

1) 上位目標

フィリピンにおける結核がコントロールされる。

2) プロジェクト目標

結核対策計画の拡大についてのマネージメントが向上する。

3) 成果

①　セブ州での結核対策新指針政策・戦略の実施の維持、およびリージョン７の他州への拡大。

②　リージョン４のラグナ州における結核対策新指針のデモンストレーション地域の確立。

③　結核対策新指針政策・戦略の実施の他州への拡大。

④　国立結核リファレンスラボラトリーの機能確立。

4) 活動

PDM-Cであげられている成果および活動、PDM - Pであげられている活動、Ｒ／Ｄであげられている活動を踏まえて、成果ごとに活動を記述する。3)成果の①から③については、おおむね「実施準備→研修実施→結核対策プログラム施行→監督・モニタリング（巡回指導）→記録・報告を含むデータ管理」に沿って活動が実施されているため、そのような記述とする。また3)成果④については、「リファレンスラボの確立」「研修の実施」「精度管理の実施」「モニタリングシステムの確立」等を盛り込む。

5) その他

・抗結核薬の確保については、基本的にフィリピン側の問題であるため、外部条件とした。

・モデル地域だけでなく、全国への拡大に対する関与もしている点については、プロジェ

クト目標のなかで全国に対する関与を担保とし、成果レベルでは対象州での言及にとどめることとする。

・PDMはあくまでプロジェクト運営管理・評価の手段として用いる。

3－2　PDM

先方と合意に至ったPDMについてはANNEX１(表１－(1)、表１－(2)参照。プロジェクトの要約部分（上位目標、プロジェクト目標、成果、活動）については３－１の基本方針どおりでおおむね合意を得た。それ以外の部分についての主な留意点は以下のとおり。

(1) 前提条件・外部条件

1992年の地方自治法の施行以降、一般保健プログラムの実施については州や市町村などの各地方自治体に運営が委ねられており、結核対策の実施部分もその例外ではない。各州に拡大するにあたって、州以下自治体の政策的関与なしにはプロジェクトが成功しないため、「地方自治体が政治的にも財政的にもプロジェクトを支援する」ことを前提条件とした。

外部条件についてはPDMに記載されているとおりであるが、成果からプロジェクト目標に至るための外部条件「結核対策新指針にとって機能的な保健サービスが残る」は、保健省が現在Health Sector Reformを進めていることから、今後ますます重要になってくると思われる。

(2) 指標

上位目標の指標は、フィリピン側の結核対策の計画の数値目標に準拠した。

プロジェクト目標の指標は、結核対策において一般的に使用される「治癒率85%」とした。これは対象州についてであって、全国での治療成績を意味するものではない。現実的には、80%前後が確保されれば、おおむね達成したとみて差し支えないものと思われる。

成果の指標は、３－１(2)成果①から③について、a.全ルーラルヘルスユニット（保健所）およびヘルスセンターで結核対策新指針が実施されるb.新登録の肺結核患者のうち少なくとも50%が喀痰検査陽性であるc.喀痰検査の陽性率が少なくとも10%であるd.治癒率が85%である、とした。また、成果④については、e.質のよい顕微鏡センターの割合とf.偽陽性と偽陰性の割合を指標とした。

<表1－(1)>

ANNEX I

Project Design Matrix (PDM)

Project Title: Tuberculosis Control Project in the Philippines　　Target: TB Patients　　Duration: September 1, 1997 - August 31, 2002
Project Site: Region VII(Cebu, Negros Oriental, Siquijor, Bohol), Region IV(Laguna) and others　　Date: October 14, 1999

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Tuberculosis in the Philippines is controlled.	By the year 2010, 1. Annual risk of TB infection is 1%. 2. Prevalence of smear positive cases is 1 per 1,000. 3. TB mortality rate is 10 per 100,000.	Prevalence Survey Vital Statistics	Socio-economic status does not worsen.
Project Purpose Management of National Tuberculosis Program (NTP) with regard to expansion of the implementation of NTP is improved.	By the end of the Project, cure rate of 85% in new smear positive cases is achieved in the expansion area.	Quarterly Performance Report	Governmental commitment to TB control is sustained.
Output 1. Implementation of the model of new NTP policies and strategies is maintained in Cebu Province and is expanded to three other provinces in Region VII.	1 In each province, 1-1 All Rural Health Units (RHUs)/Health Centers (HCs) implement new NTP. 1-2 Smear positive proportion among the newly registered pulmonary tuberculosis (TB) cases is at least 50%. 1-3 Positive rate of smear examination is at least 10%. 1-4 Cure rate is 85%.	Quarterly Performance Report Monitoring Report	1. Functioning health service for new NTP remains.
2. NTP demonstration site is established in Laguna Province, Region IV.	2 In demonstration site as a whole, 2-1 All RHUs/HCs implement new NTP. 2-2 Smear positive proportion among the newly registered pulmonary TB cases is at least 50%. 2-3 Positive rate of smear examination is at least 10%. 2-4 Cure rate is 85%.		
3. Implementation of the new NTP policies and strategies is expanded to other provinces.	3 In each province, 3-1 All RHUs/HCs implement new NTP. 3-2 Smear positive proportion among the newly registered pulmonary TB cases is at least 50%. 3-3 Positive rate of smear examination is at least 10%. 3-4 Cure rate is 85%.		
4. Laboratory service network with National Reference Laboratory with quality assurance system is established.	4-1 One microscopy center of good quality is accessible for at most 1) 100,000 population in rural areas and 2) 200,000 in urban areas. 4-2 False-positive slide reading is not more than 5% and false-negative slide reading is not more than 2%.		

Note: This matrix is subject to change in the course of the Project implementation when both sides recognize the necessity to change.

<表1－(2)>

ANNEX I (Continued)

Project Design Matrix (PDM)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Activity 1-1 Conduct advocacy meeting with Local Government Units (LGUs) and baseline survey on health service at RHUs/HCs. 1-2 Train health workers involved in new NTP. 1-3 Initiate and implement new NTP. 1-4 Develop a system for data management including appropriate recording/reporting. 1-5 Supervise, monitor and evaluate new NTP performance. 2-1 Choose demonstration area. 2-2 Conduct advocacy meeting with LGUs and baseline survey on health service at RHUs/HCs. 2-3 Train health workers involved in new NTP. 2-4 Initiate and implement new NTP. 2-5 Develop a system for data management including appropriate recording/reporting. 2-6 Supervise, monitor and evaluate new NTP performance. 3-1 Select provinces to expand new NTP. 3-2 Conduct advocacy meeting with LGUs and baseline survey on health service at RHUs/HCs. 3-3 Train health workers involved in new NTP. 3-4 Initiate and implement new NTP. 3-5 Develop a system for data management including appropriate recording/reporting. 3-6 Supervise, monitor and evaluate new NTP performance. 4-1 Establish National TB Reference Laboratory. 4-2 Train validators and microscopists for their technical improvement. 4-3 Develop and implement quality assurance. 4-4 Initiate and implement a monitoring system for quality assurance.	**Input** Inputs by the Japanese side 1. Dispatch of Japanese experts Chief Advisor Coordinator Experts in TB Control Bacteriology Epidemiology Other necessary fields 2. Training of Philippine counterpart personnel in Japan 3. Provision of Equipment Inputs by the Philippine side 1. Counterparts and administrative personnel 2. Provision of offices, buildings and facilities 3. Counterpart budget for the implementation 4. Drugs and other supplies and consumables		1. Sufficient drug is supplied regularly. 2. Enough personnel are allocated. 3. Trained personnel do not leave his/her job. 4. Adequate building/space and laboratory equipment are available for National TB Reference Laboratory. **Pre-condition** Local governments support the Project both politically and financially.

Note: This matrix is subject to change in the course of the Project implementation when both sides recognize the necessity to change.

４．調査団所見

４－１　無償資金協力との関連について

今回は国立結核リファレンスラボラトリーの建設・機材供与にかかる無償資金協力基本設計調査団に引き続き本調査団が派遣された。プロジェクト方式技術協力側としては右ラボラトリーの機能強化がプロジェクトの要素のひとつとなっており、プロジェクトの成功のためにも不可欠な位置づけとなっている。ラボラトリーの建設場所および運営組織が熱帯医学研究所（RITM）となっていることから、プロジェクトとしては研究志向のラボラトリーではなく、対策に直結するラボラトリーとなるかを注視する必要がある。

４－２　保健省の組織改革について

保健省は現在re‐engineeringと称し組織改編を進めている最中であり、カウンターパートである保健省結核対策課（TBCS）もその対象となっている。内容としては本省のスリム化とリージョン保健局の強化を図るものも含まれており、実質的に機能しているTBCSの人員11名のうち本省に残るのは４人のみとの情報もある。またTBCSは、疾病予防対策課のもとに置かれ、他の疾病対策との統合が計画されているようであるが、今後中央のリーダーシップが保たれるか注目していく必要もあろう。

４－３　プロジェクトの進捗状況について

各州における活動が順調に進捗しているほか、特記事項として精度管理システムを確立したことがあげられる。顕微鏡検査精度管理センターが第７リージョンの各州に１カ所、ラグナ州に２カ所設立され、セブのリファレンスラボラトリーの職員が精力的に巡回し指導を行っている。これによって顕微鏡検査の精度管理事業のモデルを示したことは、今後の全国展開においてきわめて大きな貢献であったといえよう。また、精度管理のマニュアルが各機関に承認され、これにより州の精度管理センターの指導要領として使用されることになった。別途実施中の顕微鏡検査の第二国研修では、プロジェクト側から技術的支援を行っているが、同マニュアルの使用によりますます連携が緊密になり、プロジェクト内のみならずプロジェクト外でも効果的な協力に大きく資していると考えられる。

附属資料

① ミニッツ

② R／D（1997年８月14日締結）

③ 開始当初に仮作成されたPDM（PDM－P）

④ 1998年運営指導調査団ワークショップの結果を受け仮作成されたPDM（PDM-C）

⑤ 1999年第１・２四半期概要報告

⑥ 結核対策についてのフィリピン側計画（草案段階）

① ミニッツ

MINUTES OF DISCUSSIONS
BETWEEN THE JAPANESE MANAGEMENT CONSULTATION TEAM
AND THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF
THE REPUBLIC OF THE PHILIPPINES
ON THE JAPANESE TECHNICAL COOPERATION
FOR THE TUBERCULOSIS CONTROL PROJECT

The Japanese Management Consultation Team (hereinafter referred to as "the Team") organized by the Japan International Cooperation Agency (hereinafter referred to as "JICA") and headed by Dr. Masashi Suchi visited the Republic of the Philippines (hereinafter referred to as "the Philippines") for the purpose of reviewing the activities of the Tuberculosis Control Project (hereinafter referred to as "the Project"), and discussing the future implementation plan for the Project.

During its stay, the Team exchanged views and had a series of discussions with the Philippine authorities concerned about the implementation of the Project.

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

Manila, October 14th, 1999

Dr. Masashi Suchi
Leader
Management Consultation Team
Japan

Dr. Milagros L. Fernandez
Undersecretary for Office for Public Health Services
Department of Health
The Republic of the Philippines

ATTACHED DOCUMENT

1. GENERAL REVIEW

The Project started on September 1, 1997, for the purpose of improving management of National Tuberculosis Program (hereinafter referred to as "NTP") with regards to expansion of the implementation of the new NTP policies and strategies.

In accordance with the Record of Discussions (hereinafter referred to as "R/D") signed on August 14, 1997 by both sides, JICA has dispatched 4 long-term experts to the Philippines, has accepted 6 counterpart personnel as trainees in Japan and 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.

2. SUMMARY OF DISCUSSIONS

Both sides agreed upon the following matters:

(1) Confirmation of the Project Design Matrix (PDM)

Based on R/D, the results of the workshop held during the stay of the Consultation Team dispatched on August 1998 and the actual project performance up to present, both sides agreed to conduct Project activities in accordance to PDM shown in ANNEX I. This matrix is subject to change in the course of the implementation of the Project when both sides recognize the necessity to change.

(2) Expansion Plan

2-1) The Project has a plan to expand the new NTP policies and strategies as follows:

Fiscal Year 1999: each half of Rizal Province and Bulacan Province

45

Fiscal Year 2000: the other half of Rizal Province and Bulacan Province

Fiscal Year 2001: under consideration

2-2) The Philippine side will take necessary measures to initiate the implementation of new NTP smoothly to the above-mentioned provinces. Coordination with local governments to ensure allocation of sufficient health personnel and budget should be done.

3. ACHIEVEMENT OF TENTATIVE SCHEDULE OF IMPLEMENTATION

The technical cooperation activities under the Project which have been carried out by the end of September 1999 are shown in ANNEX II.

4. 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 of the Project is shown in ANNEX III.

ANNEX I

Project Design Matrix (PDM)

Project Title: Tuberculosis Control Project in the Philippines Target: TB Patients Duration: September 1, 1997 - August 31, 2002
Project Site: Region VII(Cebu, Negros Oriental, Siquijor, Bohol), Region IV(Laguna) and others Date: October 14, 1999

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Tuberculosis in the Philippines is controlled.	By the year 2010, 1. Annual risk of TB infection is 1%. 2. Prevalence of smear positive cases is 1 per 1,000. 3. TB mortality rate is 10 per 100,000.	Prevalence Survey Vital Statistics	Socio-economic status does not worsen.
Project Purpose Management of National Tuberculosis Program (NTP) with regard to expansion of the implementation of NTP is improved.	By the end of the Project, cure rate of 85% in new smear positive cases is achieved in the expansion area.	Quarterly Performance Report	Governmental commitment to TB control is sustained.
Output 1. Implementation of the model of new NTP policies and strategies is maintained in Cebu Province and is expanded to three other provinces in Region VII. 2. NTP demonstration site is established in Laguna Province, Region IV. 3. Implementation of the new NTP policies and strategies is expanded to other provinces. 4. Laboratory service network with National Reference Laboratory with quality assurance system is established.	1 In each province, 1-1 All Rural Health Units (RHUs)/Health Centers (HCs) implement new NTP. 1-2 Smear positive proportion among the newly registered pulmonary tuberculosis (TB) cases is at least 50%. 1-3 Positive rate of smear examination is at least 10%. 1-4 Cure rate is 85%. 2 In demonstration site as a whole, 2-1 All RHUs/HCs implement new NTP. 2-2 Smear positive proportion among the newly registered pulmonary TB cases is at least 50%. 2-3 Positive rate of smear examination is at least 10%. 2-4 Cure rate is 85%. 3 In each province, 3-1 All RHUs/HCs implement new NTP. 3-2 Smear positive proportion among the newly registered pulmonary TB cases is at least 50%. 3-3 Positive rate of smear examination is at least 10%. 3-4 Cure rate is 85%. 4-1 One microscopy center of good quality is accessible for at most 1) 100,000 population in rural areas and 2) 200,000 in urban areas. 4-2 False-positive slide reading is not more than 5% and false-negative slide reading is not more than 2%.	Quarterly Performance Report Monitoring Report	1. Functioning health service for new NTP remains.

Note: This matrix is subject to change in the course of the Project implementation when both sides recognize the necessity to change.

ANNEX I (Continued)

Project Design Matrix (PDM)

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Activity 1-1 Conduct advocacy meeting with Local Government Units (LGUs) and baseline survey on health service at RHUs/HCs. 1-2 Train health workers involved in new NTP. 1-3 Initiate and implement new NTP. 1-4 Develop a system for data management including appropriate recording/reporting. 1-5 Supervise, monitor and evaluate new NTP performance. 2-1 Choose demonstration area. 2-2 Conduct advocacy meeting with LGUs and baseline survey on health service at RHUs/HCs. 2-3 Train health workers involved in new NTP. 2-4 Initiate and implement new NTP. 2-5 Develop a system for data management including appropriate recording/reporting. 2-6 Supervise, monitor and evaluate new NTP performance. 3-1 Select provinces to expand new NTP. 3-2 Conduct advocacy meeting with LGUs and baseline survey on health service at RHUs/HCs. 3-3 Train health workers involved in new NTP. 3-4 Initiate and implement new NTP. 3-5 Develop a system for data management including appropriate recording/reporting. 3-6 Supervise, monitor and evaluate new NTP performance. 4-1 Establish National TB Reference Laboratory. 4-2 Train validators and microscopists for their technical improvement. 4-3 Develop and implement quality assurance. 4-4 Initiate and implement a monitoring system for quality assurance.	**Input** Inputs by the Japanese side 1. Dispatch of Japanese experts Chief Advisor Coordinator Experts in TB Control Bacteriology Epidemiology Other necessary fields 2. Training of Philippine counterpart personnel in Japan 3. Provision of Equipment Inputs by the Philippine side 1. Counterparts and administrative personnel 2. Provision of offices, buildings and facilities 3. Counterpart budget for the implementation 4. Drugs and other supplies and consumables		1. Sufficient drug is supplied regularly. 2. Enough personnel are allocated. 3. Trained personnel do not leave his/her job. 4. Adequate building/space and laboratory equipment are available for National TB Reference Laboratory. **Pre-condition** Local governments support the Project both politically and financially.

Note: This matrix is subject to change in the course of the Project implementation when both sides recognize the necessity to change.

ANNEX II-1. ACHIEVEMENT OF INPUT

(As of September 1999)

TABLE I. Dispatch of Japanese Experts

(1) Long-term

- Dr. Shoichi Endo (Chief Advisor)	September 1, 1997 - up to now
- Mr. Yoshinori Terasaki (Coordinator)	September 1, 1997 - August 31, 1999
- Dr. Akihiro Okado (TB Control)	April 10, 1998 - up to now
- Mr. Katsumi Ohara (Coordinator)	August 17, 1999 - up to now

(2) Short-term

- Dr. Masashi Suchi (TB Control)	November 19, 1997 - December 17, 1997
- Dr. Akihiro Okado (TB Control)	February 16, 1998 - March 13, 1998
- Ms. Akiko Fujiki (Bacteriology)	April 1, 1998 - April 29, 1998
- Ms. Akiko Fujiki (Bacteriology)	August 18 ,1998 - September 15, 1998
- Dr. Masashi Suchi (TB Control)	January 25, 1999 - February 6, 1999
- Ms. Akiko Fujiki (Bacteriology)	March 10, 1999 - March 28, 1999
- Ms. Akiko Fujiki (Bacteriology)	May 17, 1999 - June 12, 1999

TABLE II. Counterpart Training in Japan

- Ms. Lucy Aguiman (Laboratory Works for TB Control)	September 29, 1997 - February 15, 1998
- Dr. Ma. Vicenta Vasquez (TB Control Program Management)	May 5, 1998 - June 21, 1998
- Dr. Mary Angeles Pinero (TB Control)	June 15, 1998 - October 18, 1998
- Ms. Cristino Narciso (Laboratory Works for TB Control)	September 28, 1998 - February 7, 1999
- Ms. Maria Lilia D. Pajo Pague (TB Control)	May 4, 1999 - August 15, 1999
- Ms. Lourdes P. Galvez (Laboratory Works for TB Control)	August 23, 1999 - December 12, 1999

TABLE III. Provision of Equipment

- Microscope	100
- Vehicle	5
- Computer	3
- Copier	2

These equipment are provided in Fiscal Year 1997. For Fiscal Year 1998 and 1999, equipment are now under procurement or under customs clearance.

ANNEX II-2 Progress of the Project activities

(1) Case-finding activities (January to June 1999)

Province	New smear (+)	%	Relapse	%	New smear (-)	%	Extra Pulmonary new	%	Total
Cebu	1,524	78.9%	37	1.9%	349	18.1%	22	1.1%	1,932
Bohol*	264	82.5%	10	3.1%	45	14.1%	1	0.3%	320
Negros Oriental	497	79.5%	19	3.0%	97	15.5%	12	1.9%	625
Siquijor	99	46.7%	0	0.0%	113	53.3%	0	0.0%	212
Laguna I	447	83.2%	3	0.6%	86	16.0%	1	0.2%	537
Laguna II*	185	74.9%	5	2.0%	57	23.1%	0	0.0%	247

(2) Laboratory activities (January to June 1999)

Province	Diagnosis	3 sputum specimen	%	Positive cases	%
Cebu	7,700	7,369	96.1%	1,578	20.5%
Bohol*	1,417	1,280	90.3%	248	17.5%
Negros Oriental	2,735	2,333	85.3%	492	18.0%
Siquijor	298	239	80.2%	80	26.8%
Laguna I	2,211	2,030	91.8%	475	21.5%
Laguna II*	1,027	856	83.3%	233	22.7%

(3) Treatment activities (1998)

Province	Quarter	No. of registered cases	Cured	Completed	Died	Fail	Lost	Transferred Out	No. of evaluated cases
Cebu Province	2nd	488	80.9%	1.8%	5.7%	2.9%	7.0%	1.6%	488
Cebu City	2nd and 3rd	364	78.0%	0.8%	2.5%	4.4%	8.2%	6.0%	364
Suquijor	2nd	31	35.5%	35.5%	3.2%	3.2%	19.4%	3.2%	31
Laguna I	3rd and 4th	305	52.1%	14.8%	2.0%	8.5%	21.6%	1.0%	305

* In these areas, new NTP was started from May 1999.

ANNEX III-1 TENTATIVE SCHEDULE OF IMPLEMENTATION FROM APRIL 1999 TO MARCH 2000

ITEM		4	5	6	7	8	9	10	11	12	1	2	3
ACTIVITIES	1. Implementation of the model of new NTP policies and strategies is maintained in Cebu Province and is expanded to three other provinces in Region VII. 2. NTP demonstration site is established in Laguna Province, Region IV. 3. Implementation of the new NTP policies and strategies is expanded to other provinces. 4. Laboratory service network with National Reference Laboratory with quality assurance system is established. (Preparatory Phase)	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══
MISSION	MANAGEMENT CONSULTATION TEAM							◇					
DISPATCH OF JAPANESE EXPERTS	LONG TERM 1) Dr. Shoichi Endo (Chief Advisor)	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══
	LONG TERM 2) Dr. Akihiro Okado (TB Control)	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══	═══
	LONG TERM 3) Mr. Yoshinori Terasaki (Coordinator)	═══	═══	═══	═══	═══							
	LONG TERM 4) Mr. Katsumi Ohara (Coordinator)					═	═══	═══	═══	═══	═══	═══	═══
	SHORT TERM 1) Ms. Akiko Fujiki (Bacteriology)		═	═								═	═
	SHORT TERM 2) Dr. Masashi Suchi (TB Control)								═				
	SHORT TERM 3) Ms. Akiko Fujiki (Bacteriology)								═				
	SHORT TERM 4) (TB Control)											═	═
	SHORT TERM 5) (Epidemiology)												═
C/P TRAINING IN JAPAN	1) Dr. Maria Lilia D. Pajo Pague(TB Control)		═══	═══	═══	═							
	2) Ms. Lourdes P. Galvez (Laboratory Service)					═	═══	═══	═══	═			
	3) Dr. Ernesto Eusebio S. Villalon III (TB Program management)										═══	═══	
PROVISION OF EQUIPMENT						◇						◇	

ANNEX III-2 TENTATIVE SCHEDULE OF IMPLEMENTATION: ACTIVITIES

I.ACTIVITIES FOR THE OUTPUT OF THE PROJECT	YEAR 3 SEP99 -AUG00	YEAR 4 SEP00 -AUG01	YEAR 5 SEP01 -AUG02
1 Implementation of the model of new NTP policies and strategies is maintained in Cebu Province and is expanded to three other provinces in Region VII.	═══	═══	═══
2 NTP demonstration site is established in Laguna Province, Region IV.	═══	═══	═══
3 Implementation of the new NTP policies and strategies is expanded to other provinces.	═══	═══	═══
4 Laboratory service network with National Reference Laboratory for quality assurance is established.	═══	═══	═══

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

ANNEX III-2 (Continued) TENTATIVE SCHEDULE OF IMPLEMENTATION: INPUTS

II.INPUTS BY JICA	YEAR 3 SEP99 -AUG00	YEAR 4 SEP00 -AUG01	YEAR 5 SEP01 -AUG02
1. Dispatch of Japanese experts			
1.1 Long Term			
(1) Chief Advisor	----------	----------	----------
(2) Coordinator	----------	----------	----------
(3) Tuberculosis Control	----------	----------	----------
(4) Bacteriology			
(5)Other related fields mutually agreed upon as necessary			
1.2 Short Term			
(1) Tuberculosis Control	---- ---	---- ---	---- ---
(2) Epidemiology	--	--	--
(3) Bacteriology	---- ---	---- ---	---- ---
(4)Other related fields mutually agreed upon as necessary			
2. Counterpart Training in Japan			
(1) Tuberculosis Control	-----	-----	----
(2) Laboratory Works for Tuberculosis Control	-----	-----	-----
(3) National Tuberculosis Program Management	---	---	---
3. Provision of equipment	----------	----------	----------
4. JICA study mission	management consultation		evaluation
III.INPUTS BY THE PHILIPPINE SIDE			
1. Assignment of counterpart personnel	----------	----------	----------
2. Provision of office spaces for Japanese experts			
DOH- Central Office	----------	----------	----------
DOH- Regional Offices	----------	----------	----------
3. Provision of anti-tuberculosis drugs and laboratory supplies	----------	----------	----------
4. Meeting of Coordinating Committees			
Joint Coordinating Committee	---	---	---
Technical Working Group	---	---	---
*The committee may meet more often as the need arises.			
5. Submit annual activity report	---	---	---

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

② R／D（1997年８月14日締結）

RECORD OF DISCUSSIONS
ON THE JAPANESE TECHNICAL COOPERATION
FOR
TUBERCULOSIS CONTROL PROJECT

With regard to the Japanese technical cooperation for Tuberculosis Control Project in the Republic of the Philippines, Mr. Hiroshi Goto, Resident Representative of Philippine Office, Japan International Cooperation Agency, held a series of discussions with the Philippine authorities concerned. The discussions were in accordance with the results of the Japanese Preliminary Study Team conducted in the Republic of Philippines from May 29 to June 7, 1997.

As a result of the discussions, both sides agreed to recommend to their respective Governments the matters referred to in the document attached hereto.

Manila, August 14 , 1997

HIROSHI GOTO
Resident Representative
Philippines Office
Japan International Cooperation
Agency

ANTONIO LOPEZ, MD., M.P.H.
Assistant Secretary and Officer in
Charge , Office for Public Health
Services , Department of Health
Republic of the Philippines

ATTACHED DOCUMENT

I. COOPERATION BETWEEN BOTH GOVERNMENTS

1. The Government of the Republic of the Philippines will implement the Tuberculosis Control Project (hereinafter referred to as "the Project") in cooperation with the Government of Japan.

2. The Project will be implemented in accordance with the Master Plan which is given in Annex I.

II. MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN

In accordance with the laws and regulations in force in Japan, the Government of Japan will take, at its own expense, the following measures through Japan International Cooperation Agency (hereinafter referred to as "JICA"), , according to normal procedures under the Colombo Plan Technical Cooperation Scheme.

1. DISPATCH OF JAPANESE EXPERTS
   The Government of Japan will provide the services of the Japanese experts as listed in Annex II.

2. PROVISION OF MACHINERY AND EQUIPMENT
   The Government of Japan will provide such machinery, equipment and other materials (hereinafter referred to as "the Equipment") necessary for the implementation of the Project as listed in Annex III. The Equipment will become the property of The Government of the Republic of the Philippines upon delivery C.I.F. to the Philippine authorities concerned at the ports and /or airports of disembarkation.

3. TRAINING OF PHILIPPINE PERSONNEL IN JAPAN
   The Government of Japan will receive Philippine personnel connected with the Project for technical training in Japan.

4. SPECIAL MEASURES TO BE TAKEN BY THE GOVERNMENT OF JAPAN
   To ensure the smooth implementation of the Project, the Government of Japan will take, in accordance with the laws and regulations in force in Japan, special measures through JICA for supplementing a portion

of the local cost expenditures necessary for the execution of the middle level trainees training program.

III. MEASURES TO BE TAKEN BY THE GOVERNMENT OF THE PHILIPPINES

1. The Government of the Philippines will take necessary measures to ensure self-reliant operation of the Project during and after the period of Japanese technical cooperation, through the full and active involvement in the Project of by all related authorities, beneficiary groups and institutions.

2. The Government of the Philippines will ensure that the technologies and knowledge acquired by the Philippine nationals as a result of Japanese technical cooperation will contribute to the economic and social development of the Philippines.

3. The Government of the Philippines will grant, in the Philippines, privileges, exemptions and benefits to the Japanese expert referred to in II-1 above and their families, which are no less favorable than those accorded to experts of third countries working in the Philippines under the Colombo Plan Technical Cooperation Scheme.

4. The Government of the Philippines will ensure that the Equipment referred to in II-2 above will be utilized effectively for the implementation of the Project in consultation with the Japanese experts referred to in Annex II.

5. The Government of the Philippines will take necessary measures to ensure that the knowledge and experience acquired by the Philippine personnel from technical training in Japan will be utilized effectively in the implementation of the Project.

6. In accordance with the laws and regulations in force in the Philippines the Government of the Philippines will take necessary measures to provide at its own expense for the Project:
   (1) Services of the Philippines counterpart personnel and administrative personnel as listed in Annex IV;
   (2) Land, buildings and facilities as listed in Annex V;
   (3) Supply or replacement of machinery, equipment, instruments, vehicles, tools, spare parts and other materials necessary for

implementation of the Project other than the Equipment provided through JICA under II-2 above;

(4) Means of transport and travel allowances for the Japanese experts for official travel within the Philippines; and

(5) Assistance to find suitably furnished accommodations for the Japanese experts and their families.

7. In accordance with the laws and regulations in force in the Philippines the Government of the Philippines will take necessary measures to meet:

(1) Expenses necessary for transportation within the Philippines of the Equipment referred to in II-2 above as well as for the installation, operation and maintenance thereof;

(2) Customs duties, internal taxes and any other charges imposed in the Philippines on the Equipment referred to in II-2 above; and

(3) Running expenses necessary for the implementation of the Project.

8. The Government of the Philippines will provide anti-tuberculosis drugs and laboratory supplies necessary for implementation of the Project.

IV. ADMINISTRATION OF THE PROJECT

1. Undersecretary for Public Health Services, Department of Health, as the Project Director, will bear overall responsibility for administration and implementation of the Project.

2. Director, the Tuberculosis Control Services, Department of Health, as the Project Manager, will be responsible for the managerial and technical matters of the Project.

3. Director, Regional Health Office, Region IV and VII, will be responsible for administrative and managerial matters of the Project in his/her area and for advising on technical matters to the Local Government Units.

4. The Provincial Health Officer will be responsible for administrative and technical matters of the Project in his/her province under the Project.

5. The Local Government Units will be responsible for implementation of the tuberculosis services activities in their area under the Project.

6. The Japanese Chief Advisor will provide necessary recommendations and advice to the Project Director and Project Manager on any matters pertaining to the implementation of the Project.

7. The Japanese experts will provide necessary technical guidance and advice to the Philippine counterpart personnel on technical matters pertaining to the implementation of the Project.

8. For the effective and successful implementation of technical cooperation for the Project, a Joint Coordinating Committee and a Technical Working Group will be established whose functions and composition are described in Annex VII.

V. JOINT EVALUATION

Evaluation of the Project will be conducted jointly by the two Governments through JICA and the Philippine authorities concerned, at the middle and during the last six months of the cooperation term in order to examine the level of achievement.

VI. CLAIMS AGAINST JAPANESE EXPERTS

The Government of the Philippines shall bear claims, if any arises, against the Japanese experts engaged in technical cooperation for the Project resulting from, occurring in the course of, or otherwise connected with the discharge of their official functions in the Republic of the Philippines except for those arising from the willful misconduct or gross negligence of the Japanese experts.

VII. MUTUAL CONSULTATION

There will be mutual consultation between the two Governments on any major issues arising from, or in connection with, this Attached Document.

VIII. MEASURES TO PROMOTE UNDERSTANDING OF AND SUPPORT FOR THE PROJECT

For the purpose of promoting support for the Project among the people of the Philippines, the Government of the Philippines will take appropriate measures to make the Project widely known to the people of the Philippines.

IX. TERM OF COOPERATION

The duration of the technical cooperation for the Project under the Attached Document will be five(5) years from September 1, 1997.

ANNEX

I MASTER PLAN

1 Overall Goal

To reduce tuberculosis problem in the Philippines

2 Project Purpose

To improve management of National Tuberculosis Program (hereinafter referred to as "NTP") with regards to expansion of the implementation of the new NTP policies and strategies

3. Output of the Project

(1) National Tuberculosis Reference Laboratory is established.

(2) Implementation of the model of new NTP policies and strategies is maintained in Cebu Province and is expanded to three other provinces in Region VII.

(3) NTP national demonstration site is established in Laguna Province, Region IV.

(4) Implementation of the new NTP policies and strategies is expanded to some other provinces.

4. Activities of the Project

(1) Technical advice to the Tuberculosis Control Service - Department of Health with regards to expansion of the implementation of the new NTP policies and strategies

(2) Improvement of tuberculosis service such as case-finding and treatment integrated into general health services, mobilization of primary health care services to implement Directly Observed Treatment, Short Course, and strengthening of bacteriological laboratory service. For this purpose a demonstration area will be developed.

(3) Implementation of simple, efficient and effective recording and reporting system for management of tuberculosis service at the health facilities and supervision, monitoring and evaluation

(4) Strengthening IEC activities for tuberculosis control and related activities

(5) Establishing a surveillance system for management of NTP, monitoring of epidemiological impact of NTP and evaluation of the Project

(6) Establishing a laboratory service network with reference laboratory for ensuring the quality of bacteriological service

(7) Conducting operational research in defined areas to identify a better model of program implementation

(8) Holding various meeting such as seminars and workshops to motivate decision makers, health professionals of NGOs and private sectors for better cooperation in the implementation of new NTP policies and strategies

(9) Training program in order to improve and maintain the technical level of health personnel

(10) Others mutually agreed upon as needed

II LIST OF JAPANESE EXPERTS

1. Long-term experts

   (1) Chief Advisor (This Expert might also serve concurrently as the expert on tuberculosis control)
   (2) Coordinator
   (3) Experts in the following fields
      (a) Tuberculosis control
      (b) Other related fields mutually agreed upon as necessary

2. Short-term experts in the following fields

(1) Tuberculosis control
(2) Bacteriology
(3) Epidemiology
(4) Radiology
(5) Other related fields mutually agreed upon as necessary

III LIST OF MACHINERY AND EQUIPMENT

1. Machinery and equipment for:

   (1) transportation and communication
   (2) survey, monitoring and evaluation activities
   (3) the improvement of NTP activities
   (4) IEC

2. Machinery and equipment in other related fields mutually agreed upon as necessary

IV LIST OF PHILIPPINE COUNTERPART AND ADMINISTRATIVE PERSONNEL

1. Project Director

2. Project Manager

3. Counterpart personnel in the following fields.

   (1) Tuberculosis control
   (2) Bacteriology
   (3) Epidemiology
   (4) Radiology
   (5) Others mutually agreed upon as necessary

4. Administrative personnel

   (1) Coordinator
      (a) Project coordinator of Tuberculosis Control Services, Department of Health
      (b) Regional NTP coordinators

(c) Provincial/Chartered City NTP coordinators
(d) Rural health Units or District Health Office Representatives

(2) Secretary
(3) Drivers
(4) Other supporting staff mutually agreed upon as necessary

V LIST OF LAND, BUILDINGS AND FACILITIES

1. Sufficient space for implementation of the Project

2. Offices and necessary facilities for the Japanese experts

3. Facilities such as electricity, gas, water, sewerage system, telephones and furniture necessary for Project activities and operational expenses for utilities

4. Other facilities mutually agree upon as necessary

VI JOINT COORDINATING COMMITTEE AND TECHNICAL WORKING GROUP

1. Joint Coordinating Committee

(1) Functions
The Joint Coordinating Committee will meet at least once a year and whenever necessity arises, and work :
(a) To review and authorize the an Annual Work Plan of the Project under the framework of the Record of Discussions
(b) To review overall progress of the Project
(c) To discuss other major issue reverent to the Project

(2) Composition
(a) Chairperson:
Undersecretary for Public Health Services, Department of Health
(b) Members:
Philippine Side:
1) Director, Tuberculosis Control Services, Department of Health
2) Director, Regional Health Office, Region VII

3) Director, Regional Health Office, Region IV
4) Director, Foreign Assistance Coordinating Services, Department of Health
5) Representative of National Economic Development Agency
6) Representative of Local Government Units

Japanese Side:
1) Chief Advisor
2) Coordinator
3) Other Experts
4) Resident Representative of JICA in the Philippines
5) Other personnel to be dispatched by JICA, as necessary

Note: A representative of WHO/WPRO will be invited to be a member of Joint Coordinating Committee for the better coordination with WHO Program.
Official(s) of the Embassy of Japan may attend the Joint Coordinating Committee meeting as observer(s).

2. Technical Working Group

(1) Functions

The Technical Working Group will meet at least quarterly and whenever necessity, and work :

(a) To monitor the implementation of the Project;
(b) To submit to Joint Coordinating Committee and participating agencies quarterly report;
(c) To formulate and propose to Joint Coordinating Committee the Annual Work Plan of the Project;
(d) To coordinate with Local Government Units; and
(e) To make decisions on operational matters.

(2) Composition

Philippine Side:

(a) Project coordinator of Tuberculosis Control Services, Department of Health
(b) Regional NTP coordinators
(c) Provincial/Chartered City NTP coordinators
(d) Rural health Units or District Health Office Representatives

Japanese Side:

(a) Chief Advisor
(b) Coordinator
(c) Other Experts

TENTATIVE SCHEDULE OF IMPLEMENTATION
FOR
TUBERCULOSIS CONTROL PROJECT IN THE PHILIPPINES

Mr. Hiroshi Goto, Resident Representative of the Japan International Cooperation Agency (hereinafter referred to as "JICA") in the Republic of the Philippines and Philippine authorities concerned have jointly formulated the Tentative Schedule of Implementation for Tuberculosis Control Project in the Philippines (hereinafter referred to as "the Project") as attached hereto.

The schedule has been formulated in connection with the attached document of the Record of Discussion signed between JICA and the Philippine authorities concerned for the Project, on condition that the necessary budget be allocated for the implementation of the Project and that the schedule is subject to change within the framework of the Record of Discussion when necessity arises in the course of implementation of the Project.

Manila, August 14 , 1997

HIROSHI GOTO
Resident Representative in the
Republic of the Philippines
Japan International Cooperation
Agency

ANTONIO LOPEZ, MD., M.P.H.
Assistant Secretary and Officer in
Charge, Office for Public Health
Services , Department of Health

TENTATIVE SCHEDULE OF IMPLEMENTATION OF THE PROJECT: ACTIVITIES

I. ACTIVITIES FOR THE OUTPUT OF THE PROJECT	Year 1 Sept. 1997 - Aug. 1998	Year 2 Sept. 1998 - Aug. 1999	Year 3 Sept. 1999 - Aug. 2000	Year 4 Sept. 2000 - Aug. 2001	Year 5 Sept. 2001- Aug. 2002
1. Establishment of National Tuberculosis Reference Laboratory	==========	==========	==========	==========	==========
2. Maintenance of implementation of new NTP policies and strategies in Cebu Province and expansion of implementation of new NTP policies and strategies to three other provinces in Region VII	==========	==========	==========		
3. Establishment of NTP national demonstration site in Laguna Province, Region IV	==========	==========	==========		
4. Assistance in expansion of the implementation of the new NTP policies and strategies to cover some other provinces			=======	==========	==========
NOTE: This schedule is subject to change within the framework of the Record of Discussion when the necessity arises during the course of the Project implementation					

TENTATIVE SCHEDULE OF IMPLEMENTATION OF THE PROJECT: INPUTS

II. INPUTS BY JICA	Year 1 Sept. 1997 - Aug. 1998	Year 2 Sept. 1998 - Aug. 1999	Year 3 Sept. 1999 - Aug. 2000	Year 4 Sept. 2000 - Aug. 2001	Year 5 Sept. 2001- Aug. 2002
1. Dispatch of Japanese Experts in the Philippines					
1.1 Long Term					
a. Chief Advisor	==========	==========	==========	==========	==========
b. Coordinator	==========	==========	==========	==========	==========
c. Tuberculosis Control	=====	==========	==========	==========	==========
d. Bacteriology	=====	==========	==========		
e. Other related fields mutually agreed upon as necessary					
1.2 Short Term					
a. Tuberculosis Control	= =	= = =	= = =	= = =	= = =
b. Epidemiology	=	=	=	=	=
c. Bacteriology		= = =	= = =	= = =	= = =
d. Other related fields mutually agreed upon as necessary					
2. Counterpart Training in Japan					
a. Tuberculosis Control	====	====	====	====	====
b. Laboratory Works for Tuberculosis Program Management	====	====	====	====	====
c. National Tuberculosis Program management	=	=	=	=	=
3. Provision of Equipment	=	=	=	=	=
4. JICA study mission	Consultation Team		Advisory Team		Evaluation Team

III. INPUTS BY THE PHILIPPINE SIDE	Year 1 Sept. 1997 - Aug. 1998	Year 2 Sept. 1998 - Aug. 1999	Year 3 Sept. 1999 - Aug. 2000	Year 4 Sept. 2000 - Aug. 2001	Year 5 Sept. 2001- Aug. 2002
1. Assignment of counterpart personnel	==========	==========	==========	==========	==========
2. Provision of office space for Japanese experts					
DOH - Central Office	==========	==========	==========	==========	==========
DOH - Regional Office	==========	==========	==========	==========	==========
3. Provision of anti-tuberculosis drugs and laboratory supplies	==========	==========	==========	==========	==========
4. Meeting of Coordinating Committees					
Joint Coordinating Committee	=	=	=	=	=
Technical Working Group	=	=	=	=	=
* The Committee may meet more often as the need arises					
5. Submit annual activity report	=	=	=	=	=

③ 開始当初に仮作成された PDM（PDM-P）

Narrative Survey	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Tuberculosis problem reduced	Annual Risk of Infection reduced by 7% a year Prevalence of smear positive cases reduced by 7% a year Mortality reduced by 5% a year	Prevalence Survey Prevalence Survey Vital Statistics	Socio-economy in the RP is stable or improving Political commitment is sustained
Project Purpose Improve Management of NTP in the Expansion Area	By year 2002, the cure rate of smear positive cases will be at least 85% in the Expansion Area	Quarterly performance report Monitoring Report Regular Program Review	Commitment of the Government and Cooperation of LGUs will be maintained
Output 1. Demonstration Area established in one Province in Region 4 2. New NTP implemented in 3 provinces of Region 7 3. Implementation of the New NTP in 11 other Provinces assisted 4. Laboratory Service network with Reference Laboratory for ensuring the quality of bacteriological service established	1. All RHUs/City HCs in the Expansion Area implement the New NTP 2. Smear positive proportion among the newly registered Pulmonary TB patients at least 50% 3. Positive rate of smear examination at least 10% 4. False slide reading not more than 5% 5. One Microscopy Center of good quality established in at least every 2 RHUs	Quarterly performance report Monitoring Report	Enough number of the Health Workers at RHUs/City HCs Turnover of worker is minimal Regular drug supply from the Government DOH will lead Expansion to 11 other Provinces Administrative Support for prompt distribution of equipment provided by JICA

Activities	Inputs
1. Conduct Advocacy meeting with LGUs and other Organization 2. Conduct Baseline Survey on the Health Services at RHUs/City HCs 3. Train the Health Workers 4. Supervise and Monitor NTP performance regularly 5. Develop quality control system of field microscopy 6. Develop the system for regular distribution of drugs and other supplies 7. Develop system for data management	JICA Experts Long Term Medical Officers 2 x 5 years Lab Tech 1 x 2 years Short Term Medical Officers 3 months x 5 years Lab Tech 3 months x 5 years Training of Philippine workers in Japan and provision of fund for training of workers in the Philippines Microscopes, laboratory equipment, training equipment and vehicles The Philippine Provision of TB Coordinators at Regional and Provincial levels Drug and other supplies Additional fund for training of workers in the Philippines

PDM 試案

Project title: DOH-JICA Tuberculosis Control Project **Target:** TB patients **Duration:** 1997

Area: Region VII (Cebu Prov., Negros Oriental Prov. Bohol Prov.); Region IV (Laguna Prov.) Date: 1998/8/30

Narrative Summary	Verifiable Indicator	Means of verification	Important Assumption
Overall Goal: A. TB problem is reduced in the target areas. B. TB problem is reduced in the Philippines.	A. Rate of new smear (+) per pop. by age in the target areas. B. Rate of new smear (+) per pop. by age in the nation.		1. Minimum sufficient activities for TB control are sustained.
Project Purpose: A. Diagnosis and treatment of TB is properly done. B. TB problem is reduced in the target areas.	A. B. Rate of new smear (+) per pop. by age in the target areas.		2A. Risk of TB infection does not become higher. 2B. TB reduction in the target areas have enough impact at national level.
Output: 1. Sufficient number of microscopic centers are established. 2. Quality of basic technique of microscopy is improved. 3. Quality validation system is established. 4. Manpower for DOTS at Municipality is adequate. 5. DOTS method is followed by RHUs and BHCs. 6. Drugs supply is improved. 7. Modality of treatment is standardized among private sector and hospitals. 8. Appropriate supervision for diagnosis and treatment is conducted. 9. Patients are well informed about TB. 10. Project implementation framework is established.	1. No. of centers with at least one MT and one workable microscope at Reg. / Prov. / Mun. 2. Positive rate. 3-1. Nat'l Ref. Lab. is established by year ..... 3-2. 4. 5-1. Sputum negative conversion rate at 2nd and 3rd month of treatment. 5-2. % of new pulmonary smear (+) lost. 6. % of treated patients per diagnosed. 7. 8. No. of supervisory visit per mo. 9. % of symptomatic per pop. 10. Demarcation of all activities are documented.		3B. Risk of TB infection does not become higher. 4. RH / PH / MH laboratories are properly managed. 5. Trained personnel stay in the project. 6. RHUs/BHCs are fairly trusted.

Activity: 1-1. Technical support for maintenance of existing microscopes (R, P, M, Hu). 1-2. Supervision of maintenance of existing microscopes (R, P, M). 1-3. Advocacy activities to Provinces and Municipalities for assignment of MTs (P, M). 1-4. Establishment of RH/PH/MH labs (R, P, M). 2-1. Trainers training for microscopy (T, R, P, M). 2-2. Training of MTs on microscopy (Hu). 2-3. Training of HWs on specimen collection (Hu, B) 3-1. Advocacy activities to Provinces and Municipalities for assignment of validators (P, M). 3-2. Training for validators (R, P, M). 3-3. Establishment of National Reference Lab (T). 3-4. Standardization of validation module (N). 3-5. Training on QA to NTP coordinators (R, P, M) 4-1. Initiation of collaborative linkage among LGUs. 4-2. Advocacy activities to Provinces and Municipalities creation of integrated health service (P, M). 5-1. Establishment of recording and monitoring system for DOTS (R, P, M, Hu, B). 5-2. Training on treatment recording / reporting (DOTS) (Hu, B).		7. Actual support from LGUs can be obtained (assignment of MTs and validaters, budget allocation for drugs). 8. Trained personnel stay in the project. 9. National Reference Lab. is properly managed. 10. HWs at RHUs and BHU are well motivated. 11. Transferred patients are properly followed (referral system among RHUs and between private sectors and hospitals is appropriate). 12. Health staff at LGUs can allocate sufficient time and effort for TB control program (duty is not overload). 13. Sufficient drugs are available.

6-1. Training of RHU staff on DOTS/NTP to optimize drug distribution to patients (Hu, B). 6-2. Advocacy activity for budget allocation for drugs (T, P, M). 6-3. Improvement of procurement procedure (T, M). 6-4. Training on logistics (T, R, P, M, Hu). 6-5. Establishment of coordination system for logistics (T, R, P, M. Hu, Pr). 7-1. Orientation seminars and training on NTP for private sector and hospitals (T, R, P, M, Hu, Pr, Ho: participatory approach). 8-1. Formulation of a guideline of microscopy and treatment supervision (N). 8-2. Training on NTP (R, P, M, Hu). 8-3. Training of supervisors on diagnosis, DOTS, drug allocation (R, P, M). 9-1. Training on health education (Hu, B). 9-2. Health education to patients (Hu, B). 9-3. Information campaign (N). 10-1.Clarification of responsibilities of above activities and outputs. 10-2.Establishment of a coordination system among implementing agencies. 10-3.Establishment of project implementation monitoring mechanism.		14. Transportation system for drug distribution is appropriate. 15. Private sector and hospitals follow NTP / DOTS. 16.Operational budget for supervision activities is available at LGUs. Precondition:

⑤ 1999年第１・２四半期概要報告

フィリピン結核対策プロジェクト

１９９９年度第１および第２四半期報告（４－９月）

チーフアドバイザーが４月から７月まで一時休暇帰国をよび療養帰国のため、プロジェクトに不在であったため、プロジェクトの第１及び第２四半期報告を合わせて報告するする。

Ⅰ　今期活動状況

1.1. 今期計画の進行状況

Laguna 州に新しく配置される検査技師９名の顕微鏡検査基礎研修が行われた。この事により第１および第２地区全地区の検査センターに検査技師（３４名）が配属され、顕微鏡検査が滞りなく行われることになった。

プロジェクトスタッフがカウンターパートと共に巡回指導を精力的に行った。可成りの数の RHU で治療の経過を見る菌検査の遅れが見られる。 Laguna では診療記録の悪い RHU を選択的に研修を行った。

病院の協力を得るため Siquijor 州の病院およびヴィセントソット記念病院の職員に対して研修を行い、 RHU との連携システムを検討した。

Regional Offices ４および３のスタッフと共に Rizal および Bulacan 州を訪れ、新結核対策の実施の可能性を検討し、本年度中に職員の研修を終えるよう、計画を立てる事にした。

Laguna 第２地区および Bohol では、今回の菌検査および患者の登録状況の第２四半期報告が新結核対策開始後最初なので、四半期報告書作成の実務研修を行った。

Laguna 州において新結核対策が旨く行われていない 10 の RHUs のスタッフについて再教育をおこなった。

Laguna 州において新しく就任した RHU レベルの職員について研修を行った。

結核研究所の下内先生が国からの研究費でセブとネグロスの NGO の新結核対策についての役割特に DOTS について研修を行った。

藤木短期専門家が来比し、精度管理について指導を行った。次の項で述べる精度管理システムの確立に対する彼女の貢献は大きい。

1.2. 成果の達成状況

1.2.1. 事業の達成

Laguna 州の第２期地区および Bohol 州において新結核対策の実施が始められた。これで本プロジェクトが人口 682 万フィリピン人口の約 10% をカバーすることになった。

菌陰性X線陽性患者の治療要否を決める放射線医、結核専門医、地域の医師会代表等からなる診断委員会がメトロドウマゲテ、ラプラプ市、ラグナ両地区に組織された。ラグナの委員会は州全域のRHUに紹介される菌陰性全員について検討している。これら委員会がRHUに紹介された菌陰性患者の30-40%を治療不要または結核以外の治療が必要と判定している。呼吸器症状がありX線写真に異常のある患者を正しく診断する事により、無駄な結核薬の使用を省く事が出来るばかりでなく、結核以外の呼吸器疾患に適切な治療を処方する事が出来る。さらに委員会はそれぞれの専門分野の地域の代表によって構成されているので、新結核対策の診療が地域の医師会および住民の信頼を獲得することに役立つものと期待する。

顕微鏡検査精度管理センターがRegion 7の各州に一ヶ所、Lagunaに2ヶ所設立された。セブReference Labのスタッフが精力的に巡回し、精度管理の指導を行った。この事は顕微鏡精度管理事業がReference Lab.の指導のもとに州のセンターによって実施できること、また今後全国に新結核対策を展開した場合の顕微鏡検査精度管理の実施方法を示しており、当プロジェクトをよびRegion 7が全国に於ける菌検査向上に対して大きく貢献するものと考えられる。

昨年9月精度管理のWriteshopに於いて作成されたマニュアルがWHO,DOH TBCSおよびJICAにより検討され、公認された。これは州の精度管理センターの活動の指導要領として使用され、また研修教材として使用する事が出来るので、特に第2国研修がやり易くなる。

1.2.2. 結核診療上の成果

1月から6月までの患者発見成績は次の通りである。

	症状者	3回検痰率	陽性率	陽性者人口10万対率 *	新登録中陽性者率
Cebu	7,700	96.1%	20.5%	107.0	80.8%
Negros	2,735	85.3	18.0	96.0	82.5
Siquijor	298	80.2	26.9	219.3	46.7
Bohol	1,417	90.3	17.5	**	85.6
Laguna I	2,211	91.8	21.5	146.6	83.8
Laguna II	1027	83.3	22.6	**	77.3

* 年率に訂正した。 ** これらに地区では新結核対策が5月中旬に開始されたので年率の算定が不可能であった

セブ、ネグロス、シキホールおよびラグナでは前期成績とほぼ同じであり、患者発見が一定の水準に達したものと考えられる。陽性者発見の人口対率が州によってかなりの差が見られる。これは結核蔓延の差よりも他の医療機関の分布の差や住民のRHUのサービスに対する評価によるものの方が大きいと考えられる。保健教育やRHUの診療の向上に努めるべきである。

新登録患者中陽性患者の比率はシキホール以外は 77% 以上と好成績である。

新発見菌陽性者の治療成績を見ると：
セブ州で 1998 年 4-6 月に登録された 488 中 395, (80.9%) が治癒している。
セブ市でも　　4-9 月に登録された 364 中 284,(78.0%) が治癒している。
これに反し
シキホールでは 4-6 月に登録された 30 中 11.(35.5%) しか治癒していない。 Completed が 35.5%, Lost が 19.4% と多い。
ラグナ第 1 地区では 1998 年 7-12 月に登録された 306 中 156(52.0%) しか治癒していない。 Completed が 14.7%、 Lost が 21.6% にも及ぶ。

II 問題点

前項で述べたように、治癒率が Siqujor と Laguna で極端に低い。 Completed は治療終了後も喀痰を採取して減らすことが出来るので、 Nurses および Midwives をそのように教育すればよい。 Lost は胃の症状等小さな苦情でで服薬拒否が多い。これは医師を含め全職員が患者教育を強化するように努めなければならない。患者は食欲が無くなれば栄養が落ち、結核の治療に悪いと思っている。栄養よりも服薬の大切さを教育すべきである。また RHU の診療サービスの質を向上させ、患者の信頼を高める事が大切である。

III 特記事項

3.1. 寺崎調整員が小原克美氏に替わった。
3.2 会計検査院の検査があり、セブを視察した。 Dr Teleron の説明により、プロジェクト実施が非常に良好であると評価された。
3.3 8 月 27 日 "TB Alert" 宣言の式で大統領から Region 7 とセブ州が表彰された。
3.4 チーフアドバイザー遠藤が縦隔腫瘍の摘出で 6 月 2 日から 7 月 30 日まで療養休暇を取った。帰任直後平常勤務に戻った。
3.5 National Tuberculosis Reference Laboratory 建設のために基礎調査団が 9 月 21 日から来比した。結果については来期報告書に述べる。

IV 次期計画

4.1. Rizal と Bulacan に新しく新結核対策の展開を開始する。両州とも人口 2 百万なので、 2 分し、本年度半分の地区に研修を行い来年度早々に実施、来年度後の半分に研修および実施を行う。
4.1.1 Launching Ceremony を Rizal および Bulacan で行う。
4.1.2 両州とも Baseline Survey と同時に Municipal Mayor に新結核対策を説明し、協力を願う。
4.1.3. 本期中に監督者の研修を行う。
4.2 耐性菌分布の調査の準備、プロトコールを完成し、研修を始める。
4.3 短期専門家須地・伊藤氏と共に PDM を完成させる。

⑥ 結核対策についてのフィリピン側計画（草案段階）

DRAFT DIRECTIONAL PLAN AND GOALS FOR 1999 – 2004 OF THE NATIONAL TB CONTROL PROGRAM

1. SITUATIONAL ANALYSIS

1.1 Epidemiologic trend

Tuberculosis has been a major health problem of the Philippines for decades. It is the fifth leading cause of mortality and morbidity. Figure 1 shows a downward trend of TB mortality rate until 1992 but it went up slightly in 1993. There were 24,580 reported deaths due to TB with a rate of 39.7 per 100,000 in 1993 for an average of 68 deaths per day. There are more deaths among the males (65%) and among the productive age group (60%). There is regional and provincial variation as to distribution of TB deaths.

TB morbidity showed a variable trend. It decreased in the early 1980's but increased in the late '80s. In the early '90s it again started to decline. In 1993, there were 159,049 reported TB cases for a rate of 237.5 per 100,000. The increase maybe attributed to the intensified case finding efforts of the DOH which started in 1988.

The 1997 National TB Prevalence Survey (NPS) gave a more accurate measure of TB burden in the country. The more sensitive indicator, the annual risk of TB infection (probability of a child getting infected with TB within a year) or ARI showed an insignificant decline in 15 years, from 2.5% in 1983 to 2.3% in 1997. The prevalence of culture positive TB cases remained the same(8.1%). But a substantial reduction occurred among those diagnosed through direct sputum microscopy (6.6 per 1000 to 3.1 per 1000). Prevalence of those with x-ray shadows suggestive of TB remained the same at 4.2%. However, the prevalence of those with extensive lung lesions (moderate and far-advanced) decreased by 58%. Extrapolating to 1998 population, there are about 100,000 new TB cases developing annually and about 226,000 existing old and new TB cases.

TB situation is worse among those living in the urban poor areas in Metro Manila, Metro Cebu and Metro Cagayan. Special study of the NPS showed ARI of 6.6% and prevalence of smear (+) cases is 5.6 per 1000.

Another source of information is the Field Health Services Information System which gathers data from the health centers. The number of TB cases in the last five years is highest in 1996 (281,000) of both smear and x-ray (+)). The number could have been influenced by the information campaign and the availability of drugs. The regions with the highest rate of new smear (+) is

Region 5. There is a need to validate whether this is reflection of the current epidemiological situation or better case finding efforts.

Ranking of provinces and cities using three indicators namely (1) TB mortality rate, (2) new smear (+) per 100,000 and (3) proportion of old smear (+) cases is attached.

Prevalence of multi-drug resistant cases is less than 10% as gathered by three studies (NPS, Tan-Torres and Yu).

1.2 Quality of life issues

TB is a chronic infectious disease which may lead to cure, death or chronicity. The latter condition leads to disability. There is no data on the prevalence of disabilities among TB cases. However, in a study conducted by the ILO-SSS in 1997 showed that TB is the number two cause of disability claims among its members.

1.3 Mandate/legal basis

Executive Order no. 119 dated January 30, 1987 created the TB Control Service under the Office for Public Health Services. It is mandated to "formulate plans, policies, programs, standards and techniques relative to the control of morbidity and mortality form tuberculosis; provide consultative, training and advisory services to implementing agencies and conduct studies and research related to tuberculosis." Currently, it has 36 plantilla positions. There are two divisions namely, the Plans and Programs and the Monitoring and Evaluation.

1.4 Historical milestones

1910 - Philippine Tuberculosis Society, a private agency, was organized. It is subsidized by the government.
1930 - TB Commission was created by virtue of Act No. 3743 under the Phil. Health Service (now DOH)
1943 - Powers and function of TB Commission were transferred to Bureau of Health
1950 - Division of Tuberculosis was created under the Secretary of Health
1954 - Enactment of Tuberculosis Law (R.A. 1136)
1968 - TB Control Program implementation in RHUs. Sputum microscopy used as diagnostic tool. INH and Streptomycin used for treatment

1978 - Nationwide Implementation of the National TB Control Program
1986 - E.O. 119 created the TB Control Service with 40 personnel, under the Office for Public Health Services
1987 - Nationwide implementation of Strengthened National TB Control Program. Short Course Chemotherapy given for sputum (+) and x-ray cavitary cases
1988 - Issuance of Manual of Procedures
- Introduction of Itinerant Team Approach to selected regions/provinces
1990 - Italian Grant to Regions, V, VIII, X
- PHDP (World bank) assistance to cities and selected provinces by providing 310 casefinding packages
1993 - Formation of National TB Advisory Council
- Organization of Phil. Coalition Against TB (PhilCAT)
1994 - Field testing of New NTP Policies and Guidelines in Cebu province under DOH-JICA Project
- Establishment of first TB Reference Laboratory in Cebu City under DOH-JICA Project
- Hospital based NTP was launched
- First MANUEL L. QUEZON MEMORIAL AWARD given to Outstanding NTP performers
1995 - Establishment of TB Reference lab. in Regions I, IX, XI
- TARGET: STOP TB was launched in August with the slogan "SIGAW NG BAYAN TB AY LABANAN"
1996 - **Proclamation No. 840** declaring August 19 of every year as the NATIONAL TB DAY
- TARGET STOP TB Part II launched in August with the slogan "TB AY LABANAN, GAMUTAN AY TUTUKAN"
- WHO supported C.R.U.S.H. TB Project in Batangas, Antique and Iloilo City implementing D.O.T.S. Strategy **(TUTOK GAMUTAN)**
- Consensus on TB Among Children issued by the Philippine Pediatric Society
1997 - Second National Prevalence Survey (1997)
- Start of second phase of JICA project
1998 - Signing of a Memorandum Circular No. 98-155 on Local Government Tuberculosis Control Strategy by Pres. Joseph E. Estrada on August 19, 1998

1.5 The National TB Control Program

There are two major program components: (1) case finding or identifying TB cases using sputum microscopy and (2) case holding or ensuring that TB cases complete the prescribed treatment. Support activities are: (1) provision of

technical assistance including training, (2) monitoring and evaluation, (3) health education, (4) research. and (5) collaboration with other agencies. There are about 1,700 microscopy centers nationwide which are mainly based at the Rural Health Units. A substantial percentage is manned by designated microscopists such as nurses or midwives. Drugs are centrally procured and distributed through the regional and provincial health offices. Three categories of regimen is provided by the health centers.

Currently, directly observed treatment short course (D.O.T.S) strategy is being implemented in about 10% of the population and being expanded to another 30% in 1998. Assistance are being given by JICA, WHO, CIDA/World Vision, AusAID and World Bank.

Programmatic constraints are: (1) inadequate budget for drugs, (2) poor quality of diagnostic tests, (3) poor treatment compliance (5) irregular program supervision and monitoring and (5) weak coordination with private sector.

1.6 Budgetary trends

Figure 2 showed the decline of budgetary support to NTP. From a high of P229 m. in 1993 it went down to P145 m. in 1997. Although it nominally increased to P170 m. in 1998, the inflation has significantly reduced it value. Hence, there is a mismatch of the budget and quantity of drugs needed to treat identified TB patients.

II. VISION, GOALS AND OBJECTIVES

2.1 ***Vision*** A country where TB is no longer a health problem.

2.2 ***Mission:*** Ensure that TB diagnostic and treatment services are available and affordable to the clients in collaboration with the local government units and other agencies.

2.3 ***Goal:*** Control TB by the year 2015 to the following level:

a. Annual risk of TB infection is 1%
b. Prevalence of smear (+) case is 1 per 1000
c. TB mortality rate is 10 per 100,000.

2.4 ***Health status objective by the year 2004***

Reduce tuberculosis problem to the following level;

a. Annual risk of infection from 2.3% to 1.8%
b. Prevalence of smear (+) cases from 3.1 per 1000 to 2.4
c. TB mortality rate from 32.5 per 100,000 to 23.9

2.5 *Health risk reduction:*

a. Increase proportion of TB symptomatics taking action from 50% to 80%.

b. Increase contact tracing to at least 80% of smear (+) cases.

2.6 *Health service objectives*;

a. Increase TB case detection from 50% to 70%.

b. Increase cure rate from around 60% to 85%

c. Ensure that at least 70% of hospitals and health centers provide sputum microscopy of good quality.

d. Ensure that at all smear (+) cases are provided with full course of treatment.

3. STRATEGIES:

3.1 Expansion of DOTS to all provinces and cities.

In 1996, the DOTS strategy had been piloted in three provinces and cities and outcomes were favorable. In 1998, almost 40% of population is covered by this strategy and by the year 2001 all areas will be adopting the DOTS. The five components of this strategy are: (1) sputum microscopy services, (2) drugs, 93) supervised treatment, (4) monitoring forms and (5) funds.

3.2 Establishment of public-private sector collaboration system

Inasmuch as a significant proportion of TB symptomatics and TB patients consult private practitioners, there is a need to establish and sustain collaborating mechanisms between the public and private sector. This is to ensure that patients once they are diagnosed are fully cured.

3.3 Advocacy for increase in investment to NTP.

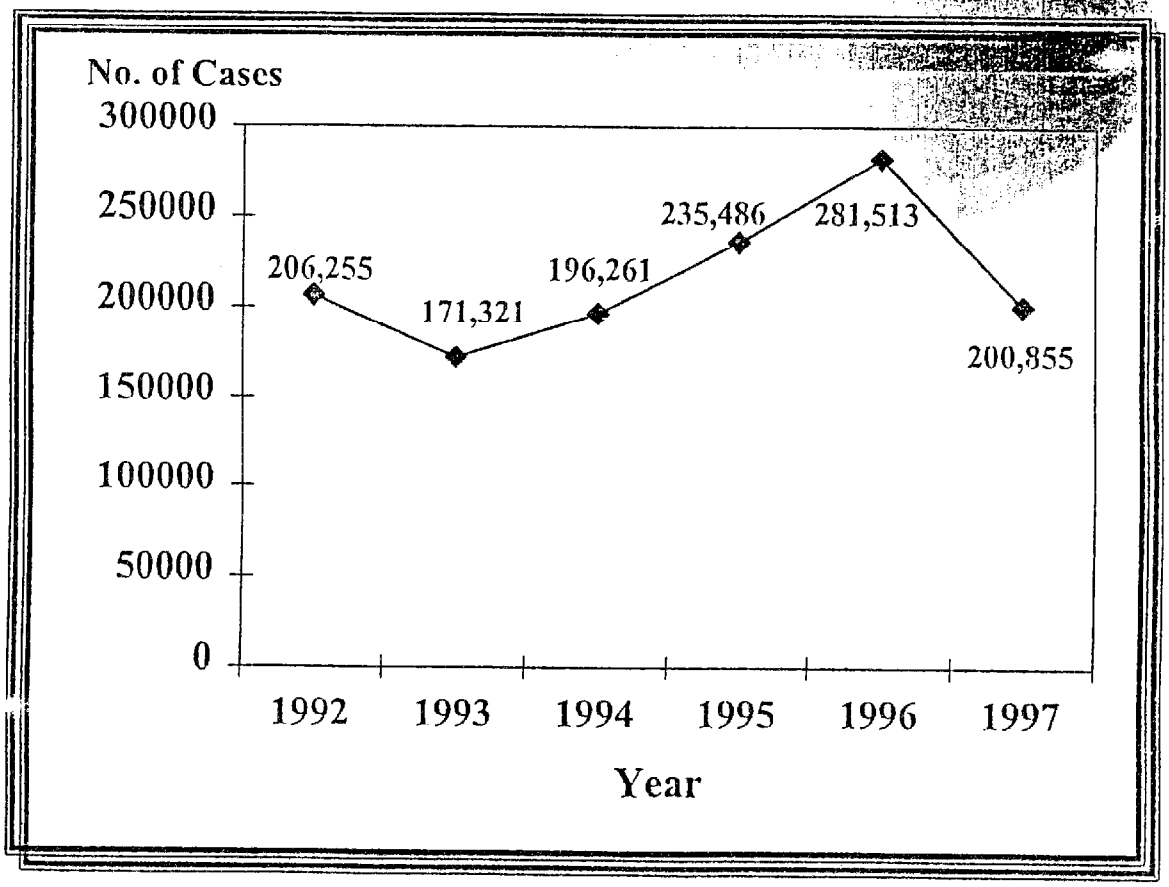
Access to free and regular supply of drugs is critical to the success of the program. The diminishing budget for NTP from the national government necessitate finding ways to finance the TB control services. This may involve increasing the share of LGUs, tapping international and local funding agencies, earmarking sickness benefits from social security agencies, cooperative, etc.

3.4 Strengthening of IEC.

Public knowledge about TB is still poor as manifested by the stigma the still exist. Also, patient's knowledge about his illness is till inadequate which contribute to poor treatment compliance. It is imperative to design and implement a health education program that would be appropriate for the identified audience.

4. BUDGETARY REQUIREMENTS (ATTACHED)

Number of Reported TB Cases Philippines, 1992-1997



BUDGETARY REQUIREMENT OF THE DIRECTIONAL PLAN 1999 - 2004

PROGRAM: *NATIONAL TUBERCULOSIS CONTROL PROGRAM*

(in thousands)

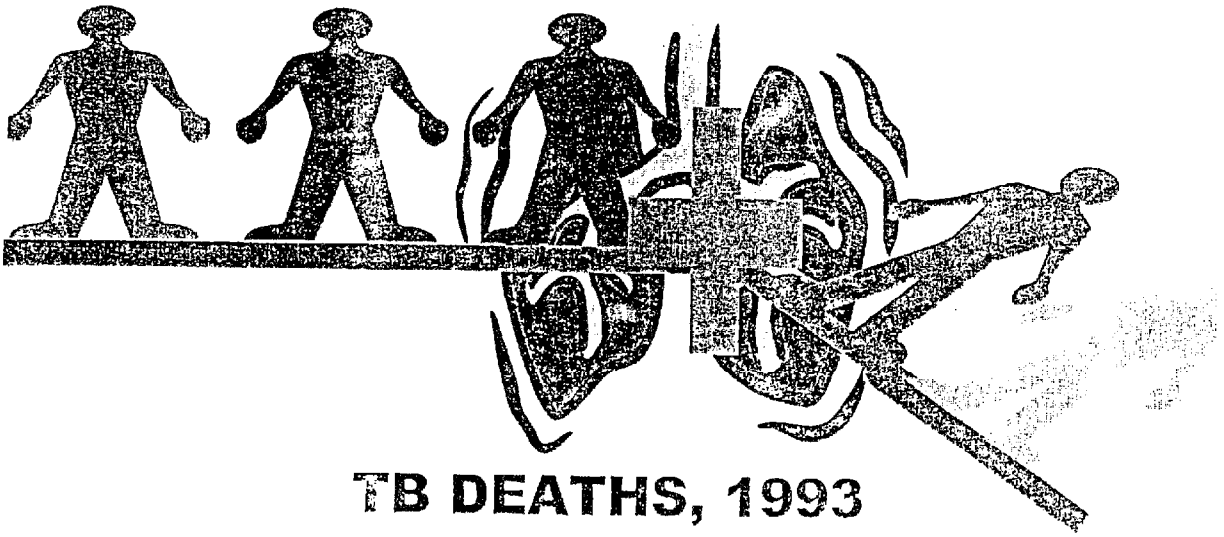
ACTIVITY	1999			2000			2001		
	FOREIGN COST	LOCAL COST	TOTAL COST	FOREIGN COST	LOCAL COST	TOTAL COST	FOREIGN COST	LOCAL COST	TOTAL COST
Purchase of drugs, lab. Supplies and others		432,420	432,420		475,662	475,662		523,228	523,228
Freight		2,000	2,000		2,300	2,300		2,645	2,645
Capability building	4,000	6,000	10,000	9,000	5,000	14,000	3,000	5,000	8,000
Monitoring/ Evaluation	1,500	1,500	3,000	2,500	1,725	4,225	2,500	1,984	4,484
Advocacy/IEC		6,000	6,000		7,000	7,000		6,000	6,000
Research		1,500	1,500		2,000	2,000		2,500	2,500
Office operations		2,000	2,000		2,300	2,300		2,645	2,645
Equipment	45,000	3,000	48,000	45,000	40,000	85,000	40,000	30,000	70,000
National Ref. Lab	50,000		50,000						
TOTAL	**100,500**	**454,420**	**554,920**	**56,500**	**535,987**	**592,487**	**45,500**	**574,002**	**619,502**

BUDGETARY REQUIREMENT OF THE DIRECTIONAL PLAN 1999 - 2004

PROGRAM: ***NATIONAL TUBERCULOSIS CONTROL PROGRAM***

(in thousands)

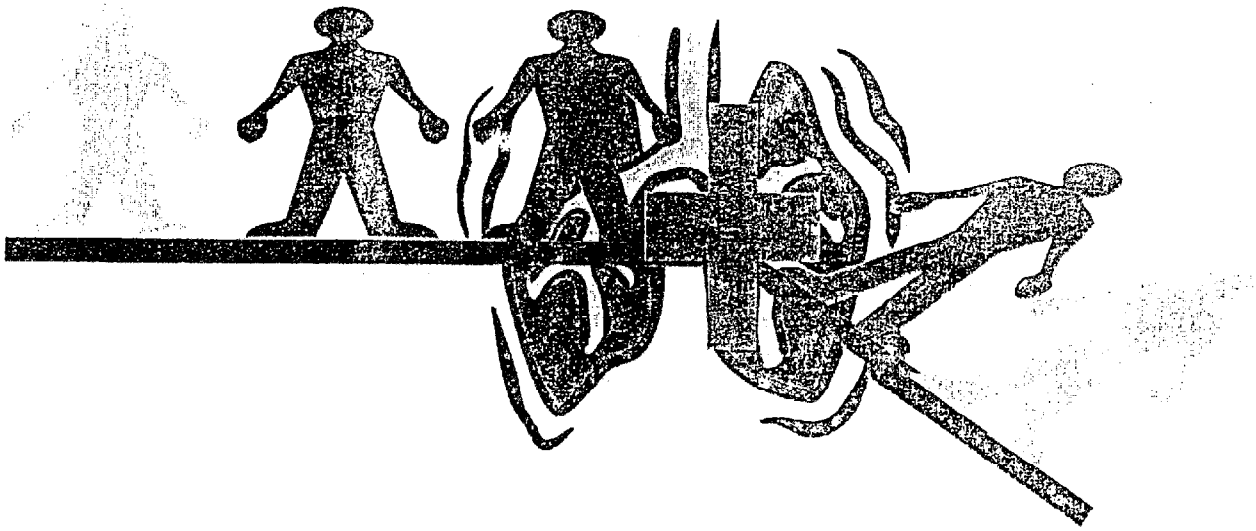
ACTIVITY	2002			2003			2004		
	FOREIGN COST	LOCAL COST	TOTAL COST	FOREIGN COST	LOCAL COST	TOTAL COST	FOREIGN COST	LOCAL COST	TOTAL COST
Purchase of drugs, lab. Supplies and others		575,551	575,551		633,106	633,106		696,417	696,417
Freight		3,042	3,042		3,498	3,498		4,023	4,023
Capability building	3,000	3,000	6,000	25,000	25,000	50,000	2,000	2,000	4,000
Monitoring/ Evaluation	2,500	2,281	4,781	2,000	2,624	4,624	2,000	3,017	5,017
Advocacy/IEC		5,000	5,000		4,000	4,000		4,000	4,000
Research		2,000	2,000		2,000	2,000		2,000	2,000
Office operations		3,042	3,042		3,498	3,498		4,023	4,023
Equipment	40,000	3,000	43,000	40,000	3,000	43,000	40,000	3,000	43,000
National Ref. Lab									
TOTAL	**45,500**	**596,916**	**642,416**	**67,000**	**676,726**	**743,726**	**44,000**	**718,479**	**762,479**



TB DEATHS, 1993

RANKING OF PROVINCES

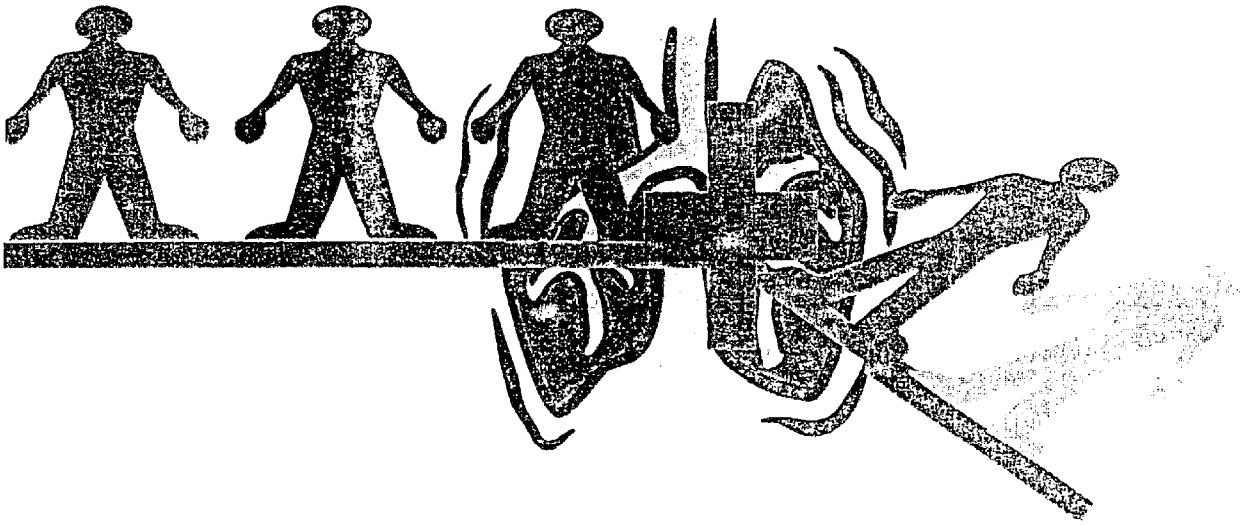
Rank	Provinces	Rate/100,000	No.
1	SIQUIJOR	90.6	72
2	MARINDUQUE	75.7	150
3	AKLAN	71.9	298
4	CATANDUANES	70.2	144
5	ANTIQUE	67.6	300
6	ROMBLON	61.3	151
7	ILOILO	60.4	873
8	NEGROS OCC.	60.3	914
9	N. SAMAR	58.6	246
10	4TH DIST.MUN.NCR	55.3	533
11	CAMARINES S.	54.6	677
12	LEYTE DEL SUR	53.8	193



TB DEATHS, 1993

RANKING OF PROVINCES

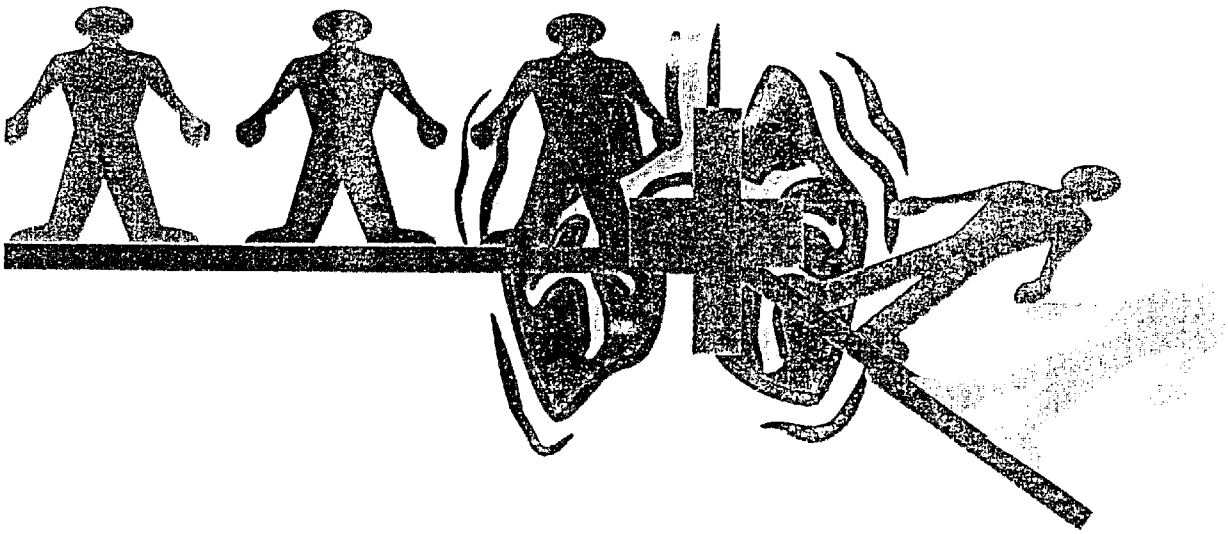
Rank	Provinces	Rate/100,000	No.
13	SORSOGON	51.8	292
14	LA UNION	51.3	309
15	LAGUNA	51.3	697
16	LANAO N.	50.9	219
17	BATANES	49.5	8
18	BATAAN	49.2	233
19	CAMARINES N.	47.9	210
20	PANGASINAN	47.9	931
21	ZAMBALES	44.7	181
22	QUEZON	44.7	601
23	SURIGAO N.	44.7	162
24	3RD DIST.MUN.NCR	44.4	402



TB DEATHS, 1993

RANKING OF PROVINCES

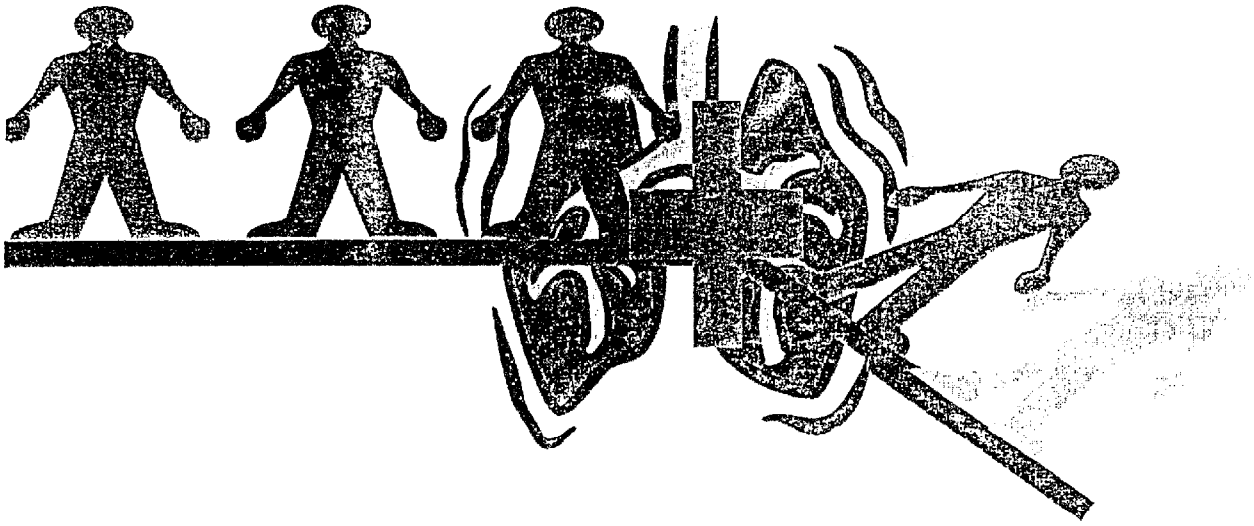
Rank	Provinces	Rate/100,000	No.
37	CAGAYAN	35.7	324
38	CAPIZ	35.7	188
39	ILOCOS SUR	35.6	200
40	CAVITE	35.5	408
41	NUEVA ECIJA	35.4	402
42	SURIGAO SUR	34.5	172
43	ISABELA	34.0	408
44	2ND DIST.MUN.NCR	33.9	383
45	MISAMIS OR.	33.7	165
46	AGUSAN NORTE	33.0	86
47	MINDORO ORIENTAL	32.9	199
48	BATANGAS	32.4	398



TB DEATHS, 1993

RANKING OF PROVINCES

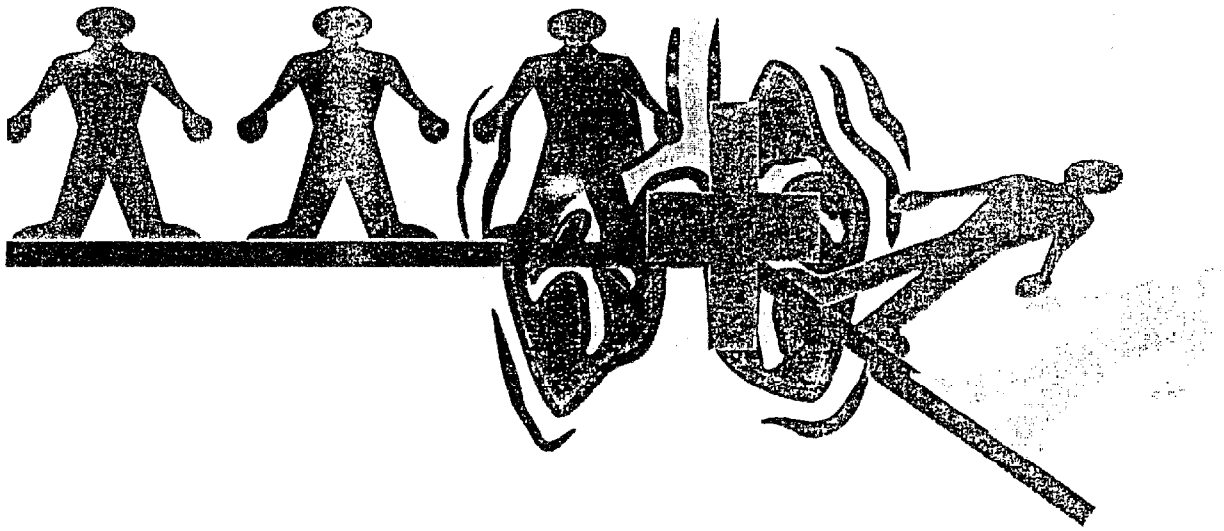
Rank	Provinces	Rate/100,000	No.
49	PAMPANGA	31.3	448
50	SOUTH COTABATO	30.0	181
51	BILIRAN	29.2	37
52	DAVAO NORTE	27.9	333
53	QUIRINO	24.9	32
54	MASBATE	23.9	154
55	SULTAN KUDARAT	22.9	111
56	GUIMARAS	22.7	28
57	PALAWAN	22.0	108
58	CEBU	22.0	367
59	NEGROS ORIENTAL	21.4	174
60	DAVAO SUR	20.6	144



TB DEATHS, 1993
RANKING OF PROVINCES

Rank	Provinces	Rate/100,000	No.
73	BUKIDNON	10.2	98
74	EAST SAMAR	9.8	35
75	BENGUET	9.4	32
76	SULU	8.0	40
77	MOUNTAIN PROV.	7.1	9
78	TAWI-TAWI	4.5	11
79	LANAO DEL SUR	3.4	19

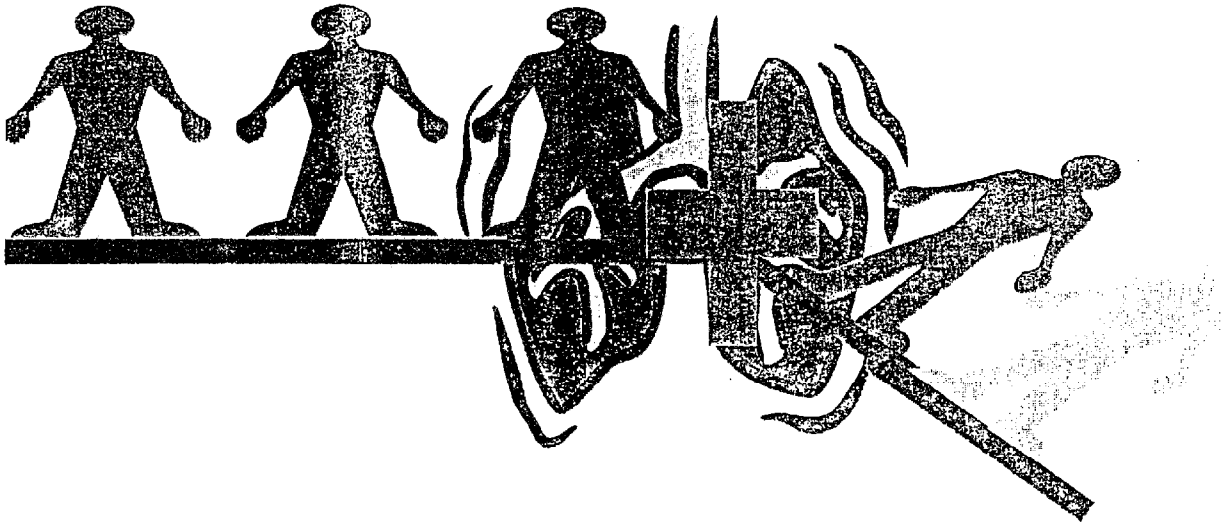
注）Rank25～36 および Rank61～72 についてはオリジナル資料なし



TB DEATHS, 1993

RANKING OF CITIES

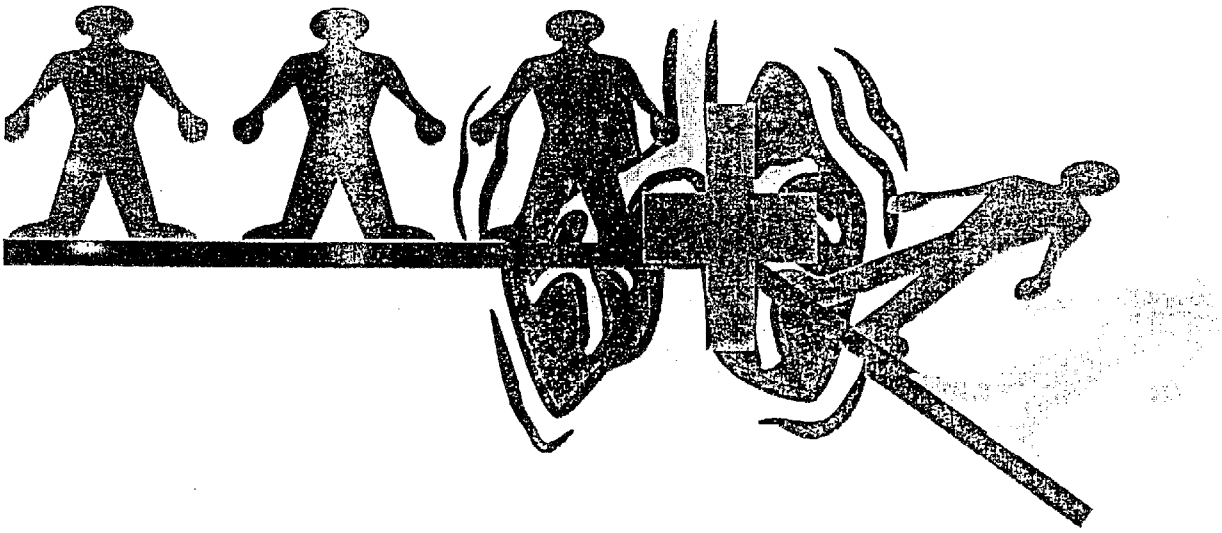
Rank	Cities	Rate/100,000	No.
1	BAGO	82.5	111
2	SILAY	80.4	89
3	NAGA	69.5	89
4	CADIZ	68.9	90
5	BACOLOD	64.2	256
6	SURIGAO	54.6	56
7	CANLAON	54.5	22
8	CALOOCAN	52.9	444
9	CABANATUAN	52.8	100
10	LA CARLOTA	50.1	31
11	IRIGA	49.7	41
12	ROXAS	49.1	55



TB DEATHS, 1993

RANKING OF CITIES

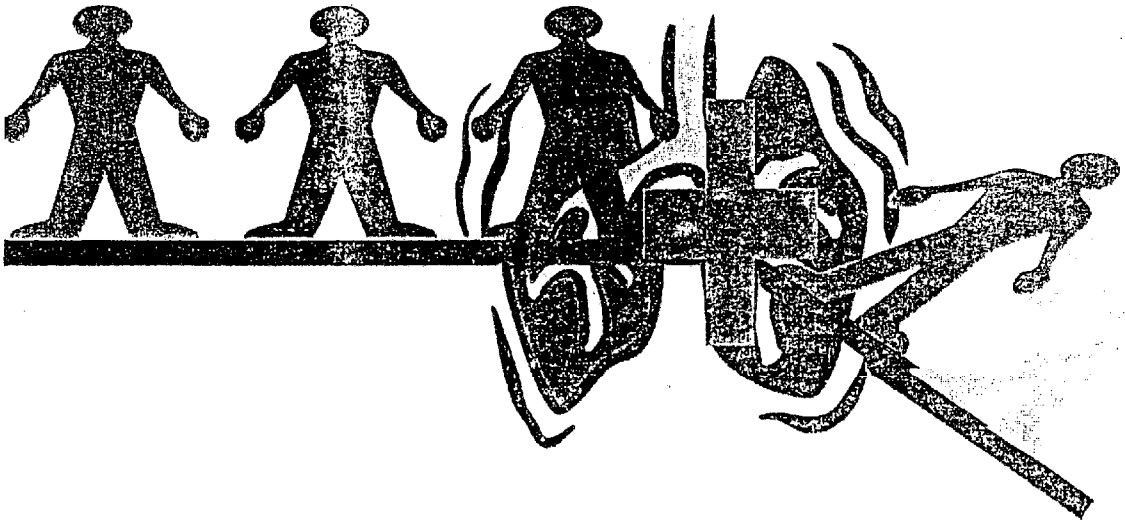
Rank	Cities	Rate/100,000	No.
13	DIPOLOG	48.5	43
14	OZAMIS	47.5	47
15	LRGASPI	46.8	62
16	ILIGAN	44.9	113
17	CALBAYOG	42.9	54
18	CAVITE	41.8	43
19	ILOILO	41.6	152
20	ORMOC	41.2	59
21	OLONGAPO	41.0	87
22	TANGUB	40.9	19
23	COTABATO	40.8	58
24	OROQUIETA	40.5	23



TB DEATHS, 1993

RANKING OF CITIES

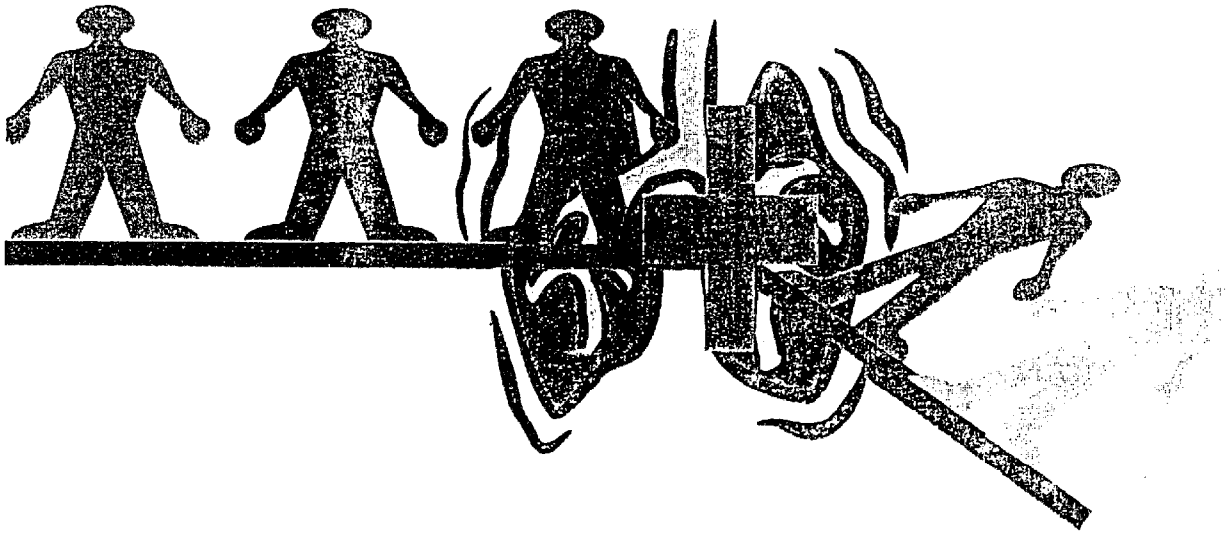
Rank	Cities	Rate/100,000	No.
25	CEBU	40.3	272
26	DUMAGUETE	40.1	35
27	ZAMBOANGA	40.0	198
28	PASAY	39.7	161
29	TACLOBAN	39.0	59
30	SAN CARLOS (N.O.)	38.9	45
31	DAGUPAN	38.1	51
32	SAN PABLO	37.9	69
33	LUCENA	37.4	62
34	ANGELES	36.4	95
35	SAN JOSE	36.4	33
36	DAVAO	36.4	342



TB DEATHS, 1993

RANKING OF CITIES

Rank	Cities	Rate/100,000	No.
37	1ST DIST., MANILA	36.1	955
38	SAN CARLOS(PANG.,	35.9	49
39	TAGBILIRAN	35.6	22
40	GUINGOOG	35.1	32
41	GENRAL SANTOS	35.1	100
42	PUERTO PRINCESA	31.8	33
43	BUTUAN	30.4	76
44	DAPITAN	30.3	20
45	QUEZON	27.7	510
46	LAPU-LAPU	27.3	44
47	LIPA	22.3	39
48	LAOAG	22.0	20



TB DEATHS, 1993

RANKING OF CITIES

Rank	Cities	Rate/100,000	No.
49	BATANGAS	20.4	41
50	MANDAWE	18.6	37
51	TOLEDO	18.2	24
52	CAGAYAN DE ORO	17.7	66
53	DANAO	17.2	14
54	TRECE MARTIREZ	17.0	3
55	PAGADIAN	16.8	20
56	TAGAYTAY	14.9	4
57	PALAYAN	13.4	3
58	MARAWI	12.8	13
59	BAGUIO	9.8	20
60	BAIS	4.6	3

RANKING OF PROVINCES AND CITIES
1997

PROVINCE	PROPORTION OF OLD SP. TO TOTAL SP(+)	PROVINCE	RATE OF NEW SP/100,000	PROVINCE	% OF SP(+) TO TOTAL CASES
ABRA	65.3	SULU	343.0	QUEZON	100.0
PALAWAN	62.8	OCC. MINDORO	231.2	BUKIDNON	86.6
LAGUNA	59.2	SORSOGON	218.6	TAWI-TAWI	85.5
PANGASINAN	55.2	LAS PIÑAS	216.9	N. VIZCAYA	84.9
BENGUET	54.0	MASBATE	216.6	BOHOL	84.0
RIZAL	52.9	ALBAY	215.6	QUIRINO	78.1
KALINGA	52.2	CAMARINES S.	212.2	EAST SAMAR	77.9
W. SAMAR	48.9	CAMARINES N.	208.8	ALBAY	76.9
BOHOL	47.7	CATANDUANES	207.8	LANAO NORTE	76.6
N. SAMAR	47.6	BILIRAN	187.4	SULU	73.4
SURIGAO NORTE	43.5	QUIRINO	179.9	SULTAN KUDARAT	73.3
SULTAN KUDARAT	41.0	MANDALUYONG	171.2	CEBU	69.1
BASILAN	39.8	PAMPANGA	166.2	BILIRAN	68.8
MT. PROVINCE	38.6	SULTAN KUDARAT	163.3	PAMPANGA	68.7
PATEROS	38.5	VALENZUELA	162.3	BATAAN	68.6
BATAAN	34.9	APAYAO	158.0	SIQUIJOR	67.4
SIQUIJOR	34.7	EAST SAMAR	152.2	SORSOGON	66.9
N. COTABATO	33.1	MAGUINDANAO	149.8	CAMARINES S.	66.8
ROMBLON	32.4	BULACAN	145.4	MAGUINDANAO	66.2
LANAO SUR	31.5	IFUGAO	143.2	SURIGAO SUR	65.9
EAST SAMAR	31.4	S. LEYTE	141.5	ISABELA	65.3
N. ECIJA	30.5	LANAO NORTE	141.5	CATANDUANES	64.6
APAYAO	29.2	PARAÑAQUE	139.9	AGUSAN SUR	63.2
TAWI-TAWI	29.0	CAMIGUIN	137.4	KALINGA	61.5
ILOCOS SUR	28.9	N. VIZCAYA	135.8	TARLAC	60.4
SURIGAO SUR	28.1	BATAAN	132.2	BENGUET	60.1
PAMPANGA	27.4	ANTIQUE	130.9	PANGASINAN	59.8
BILIRAN	26.7	PANGASINAN	130.5	MASBATE	59.2
SULU	25.1	OR. MINDORO	129.0	BASILAN	59.0
LA UNION	24.1	ZAMBALES	128.9	W. SAMAR	58.5
ZAMBO. SUR	23.5	BUKIDNON	125.2	LAS PIÑAS	58.4
SAN JUAN	23.4	SIQUIJOR	124.0	IFUGAO	58.0
GUIMARAS	23.1	MALABON	121.9	NEGROS OR.	56.9
CAVITE	22.6	TAGUIG	121.0	N. ECIJA	56.6
ILOILO	21.9	LANAO SUR	120.1	PALAWAN	56.1
ILOCOS NORTE	21.8	SURIGAO SUR	118.6	S. LEYTE	54.7
LANAO NORTE	21.8	TARLAC	114.0	BATANES	53.6
IFUGAO	21.5	BOHOL	114.0	N. COTABATO	53.6
ZAMBO. NORTE	21.2	ILOCOS NORTE	110.4	ZAMBALES	53.4
CAMIGUIN	21.1	W. SAMAR	108.9	NEGROS OCC.	52.7
PARAÑAQUE	21.0	ILOCOS SUR	108.4	LEYTE	50.2

RANKING OF PROVINCES AND CITIES
1997

PROVINCE	PROPORTION OF OLD SP. TO TOTAL SP(+)	PROVINCE	RATE OF NEW SP/100,000	PROVINCE	% OF SP(+) TO TOTAL CASES
CAPIZ	20.4	BASILAN	106.4	VALENZUELA	50.2
ISABELA	19.6	CAGAYAN	104.4	OR. MINDORO	49.9
CAGAYAN	19.3	TAWI-TAWI	98.4	CAMIGUIN	49.4
MARINDUQUE	19.0	LEYTE	95.3	SURIGAO NORTE	49.4
NEGROS OR.	19.0	KALINGA	93.4	MISAMIS OR.	49.0
OCC. MINDORO	18.7	NEGROS OR.	93.0	CAMARINES N.	48.9
BUKIDNON	17.8	AGUSAN SUR	91.6	ABRA	48.8
SARANGGANI	17.3	N. COTABATO	91.4	ILOCOS SUR	47.6
NEGROS OCC.	17.2	AURORA	91.2	N. SAMAR	47.0
MISAMIS OCC.	16.1	SURIGAO NORTE	90.5	CAVITE	46.5
AGUSAN SUR	16.1	CAVITE	88.4	APAYAO	45.2
LEYTE	14.7	SAN JUAN	87.9	LAGUNA	44.6
AGUSAN NORTE	13.5	BATANES	87.6	ZAMBO. SUR	44.6
DAVAO NORTE	12.7	ABRA	84.5	MANDALUYONG	44.5
DAVAO ORIENTAL	12.0	MISAMIS OCC.	84.2	ANTIQUE	44.3
BULACAN	11.7	DAVAO NORTE	83.8	PARAÑAQUE	43.1
MISAMIS OR.	11.7	S. COTABATO	80.6	ILOCOS NORTE	41.7
QUIRINO	11.5	SARANGGANI	77.2	CAGAYAN	41.5
BATANGAS	11.5	AGUSAN NORTE	76.5	BULACAN	41.0
AKLAN	11.2	NEGROS OCC.	75.7	S. COTABATO	40.8
OR. MINDORO	10.3	CEBU	75.5	SARANGGANI	40.8
AURORA	8.9	MISAMIS OR.	73.3	MT. PROVINCE	39.3
S. COTABATO	8.0	ISABELA	72.7	ZAMBO. NORTE	39.0
TAGUIG	7.9	PALAWAN	71.2	LA UNION	38.6
TARLAC	7.4	ROMBLON	71.0	LANAO SUR	38.0
CEBU	7.0	AKLAN	68.8	ILOILO	37.8
CATANDUANES	6.8	LA UNION	68.0	MALABON	37.8
MANDALUYONG	6.5	NAVOTAS	67.0	AGUSAN NORTE	36.4
ANTIQUE	6.0	ZAMBO. SUR	62.8	TAGUIG	33.9
VALENZUELA	5.4	ILOILO	61.1	DAVAO NORTE.	33.5
DAVAO SUR	5.2	GUIMARAS	59.7	ROMBLON	33.4
LAS PIÑAS	3.5	BATANGAS	58.7	MISAMIS OCC.	33.2
MAGUINDANAO	3.1	BENGUET	58.7	BATANGAS	32.7
S. LEYTE	2.8	N. ECIJA	57.5	NAVOTAS	32.5
NAVOTAS	2.4	DAVAO ORIENTAL	53.6	DAVAO ORIENTAL	28.5
MALABON	1.5	MARINDUQUE	49.3	DAVAO SUR	28.0
CAMARINES S.	0.7	MT. PROVINCE	48.3	MARINDUQUE	27.9
CAMARINES N.	0.3	N. SAMAR	42.0	AURORA	26.6
ALBAY	0.1	DAVAO SUR	40.7	SAN JUAN	22.0
BATANES	0.0	QUEZON	40.3	RIZAL	20.8
N. VIZCAYA	0.0	LAGUNA	39.1	GUIMARAS	20.7
ZAMBALES	0.0	ZAMBO. NORTE	30.2	CAPIZ	15.6
QUEZON	0.0	CAPIZ	26.0	AKLAN	15.0
MASBATE	0.0	RIZAL	21.8	PATEROS	8.0
SORSOGON	0.0	PATEROS	14.1	OCC. MINDORO	0.0

RANKG XLS [illegible] SEPT 15,1998

P ANKING OF PROVINCES AND CITIES
1997

PROVINCE	PROPORTION OF OLD SP. TO TOTAL SP(+)	PROVINCE	RATE OF NEW SP/100,000	PROVINCE	% OF SP(+) TO TOTAL CASES
GUINGOOG	68.0	CEBU CITY	1405.2	CANLAON	100.0
CANLAON	57.0	MARAWI	1005.0	NAGA	99.6
BATANGAS	50.8	IRIGA	366.8	CADIZ	99.0
MUNTINLUPA	48.2	DUMAGUETE	235.7	BAIS	92.9
SAN JOSE	44.4	NAGA	209.7	TANGUB	90.3
CABANATUAN	40.5	MANDAUE	206.8	TOLEDO	70.5
MARAWI	40.1	OZAMIS	199.4	DANAO	69.3
ANGELES	37.5	QUEZON CITY	197.6	MARAWI	67.6
OROQUIETA	36.2	PASAY	191.5	IRIGA	66.7
COTABATO	34.1	MANILA	189.8	OROQUIETA	66.0
KALOOKAN	32.0	TANGUB	184.2	LA CARLOTA	63.2
TAGBILARAN	26.1	LA CARLOTA	165.9	QUEZON CITY	63.0
MAKATI	25.0	CALBAYOG	159.9	KALOOKAN	57.2
OZAMIS	24.0	TOLEDO	138.0	SANTIAGO	56.8
DAPITAN	23.4	DAGUPAN CITY	135.9	GUINGOOG	56.7
BAIS	23.1	ZAMBOANGA	133.3	CAGAYAN DE ORO	55.1
TAGAYTAY	20.0	KALOOKAN	130.2	LUCENA	54.6
TOLEDO	18.8	LAOAG CITY	126.9	PASAY	53.5
CAVITE	17.5	LEGASPI	123.0	MANILA	51.7
LUCENA	17.2	MAKATI	120.6	OZAMIS	51.4
GEN. SANTOS	15.7	OLONGAPO	119.9	CEBU CITY	49.8
SANTIAGO	14.7	COTABATO	117.6	MUNTINLUPA	49.2
DUMAGUETE	14.4	SN PABLO	117.3	DUMAGUETE	48.8
MANILA	12.9	SAN JOSE	117.2	LAOAG CITY	48.3
CADIZ	11.2	OROQUIETA	117.1	CALBAYOG	46.6
OLONGAPO	10.5	PASIG	116.7	BUTUAN	45.0
ILOILO CITY	10.0	GUINGOOG	114.7	PAGADIAN	44.6
LA CARLOTA	8.0	SN CARLOS	112.7	SAN JOSE	44.4
BAGO	7.1	LUCENA	109.0	BAGO	43.4
DAVAO	7.1	ILOILO CITY	107.3	ILOILO CITY	43.2
DIPOLOG	6.5	SANTIAGO	106.4	MANDAUE	42.7
MANDAUE	6.3	BUTUAN	106.2	MAKATI	41.2
SN PABLO	5.9	SN CARLOS	104.9	DAGUPAN CITY	40.8
SURIGAO CITY	5.6	CAGAYAN DE ORO	102.8	CABANATUAN	40.5
CEBU CITY	5.5	ORMOC	95.2	SN PABLO	40.2
BAGUIO	5.3	MUNTINLUPA	84.5	COTABATO	39.9
BACOLOD	5.0	GEN. SANTOS	83.5	ROXAS	38.5
ZAMBOANGA	4.8	DAVAO	82.1	BAGUIO	38.0
LAOAG CITY	3.9	DAPITAN	77.5	ANGELES	37.5
CALBAYOG	3.9	CAVITE	77.4	GEN. SANTOS	36.7
BUTUAN	3.9	CADIZ	74.9	PASIG	35.9
DAGUPAN CITY	3.5	TAGBILARAN	74.9	LEGASPI	35.0
SN CARLOS	3.5	SURIGAO CITY	71.1	ILIGAN	34.5
LEGASPI	3.4	TACLOBAN	71.0	BATANGAS	34.2
LAPU-LAPU	3.2	CANLAON	70.3	LAPU-LAPU	33.8
ROXAS	3.1	ILIGAN	68.5	DAPITAN	32.8
PASIG	2.7	MARIKINA	67.9	CAVITE	27.6
MARIKINA	1.9	BACOLOD	63.2	BACOLOD	27.5
PASAY	1.7	PAGADIAN	57.8	SN CARLOS	27.3
SN CARLOS	0.8	ROXAS	52.0	TACLOBAN	26.3
QUEZON CITY	0.8	CABANATUAN	49.7	TAGAYTAY	25.4
ILIGAN	0.5	ANGELES	40.7	TAGBILARAN	25.4
PALAYAN	0.0	TAGAYTAY	39.2	DAVAO	25.4
LIPA	0.0	BAGO	36.7	SURIGAO CITY	23.0
P. PRINCESA	0.0	PALAYAN	31.8	ZAMBOANGA	22.2
T. MARTIREZ	0.0	DIPOLOG	30.5	MARIKINA	20.6
IRIGA	0.0	SILAY	29.9	LIPA	18.8
NAGA	0.0	DANAO	27.6	SN CARLOS	18.8
SILAY	0.0	BATANGAS	26.1	ORMOC	18.0
DANAO	0.0	P. PRINCESA	23.2	DIPOLOG	17.0
ORMOC	0.0	LIPA	21.5	OLONGAPO	10.5
TACLOBAN	0.0	LAPU-LAPU	21.4	P. PRINCESA	5.7
PAGADIAN	0.0	BAIS	12.2	PALAYAN	0.0
CAGAYAN DE ORO	0.0	BAGUIO	7.4	T. MARTIREZ	0.0
TANGUB	0.0	T. MARTIREZ	4.3	SILAY	0.0