フィリピン共和国
結核対策向上プロジェクト
終了時評価調査報告書

平成19年３月
（2007年）

独立行政法人国際協力機構
人間開発部

人 間
ＪＲ
07-068

フィリピン共和国
結核対策向上プロジェクト
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人間開発部

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序　　文

国際協力機構（JICA）のフィリピン共和国（以下、「フィリピン」と記す）における結核対策は、1992 年から５年間セブ州において WHO が推進している DOTS（直接監視下短期化学療法）を実施した「公衆衛生プロジェクト」と、同プロジェクトの成果を活かし、DOTS 戦略を第７地方区のすべての州、ルソン島の４州、さらに東サマール州にまで拡大した「結核対策プロジェクト （1997 年から 2002 年)」を実施しました。そして 2002 年度時点で世界的目標とされている治癒率 85%以上をほぼ達成しました。

一方、プロジェクト対象外の地域では、結核対策および喀痰検査の質において問題のある保健所がいまだに多く、このためフィリピン政府は 2010 年までに結核の罹患率と死亡率を半減するために、これまで対策の質・喀痰検査の質に大きな成果を上げている JICA に対して技術協力を求めてきました。2002 年６月 19 日から７月６日まで事前調査団が要請について調査・検討した結果、要請内容、実施体制ともに妥当と判断され、2002 年９月１日より５年間の計画でプロジェクトが開始されました。

今般、本プロジェクトの協力期間が 2007 年８月 31 日をもって終了するのに先立ち、これまでの協力内容・成果の評価をフィリピン側と共同で行うために、2007 年２月 11 日から２月 27 日の日程で終了時評価調査団を派遣しました。本報告書はその調査結果を取りまとめたものであり、今後のプロジェクトのフィリピン政府による成果の継続とともに、更には類似のプロジェクトに活用されることを願うものです。

ここに、本調査にご協力をいただいた内外関係者の方々に深い謝意を表するとともに、引き続き一層のご支援をお願いする次第です。

平成 19 年３月

独立行政法人国際協力機構

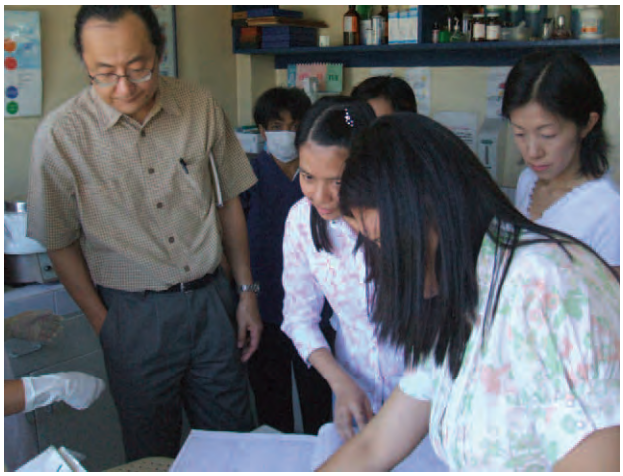
人間開発部長　菊地　文夫


台湾
南シナ海
ルソン島
フィリピン海
イラガン
バギオ
マニラ
バタンガス
ナガ
レガスピ
ミンドロ島
サマール島
カルバヨグ
パナイ島
カディス
イロイロ
レイテ島
セブ
バコロド
パラワン島
プエルト・プリンセサ
ネグロス島
セブ島
ブトゥアン
カガヤン・デ・オロ
イリガン
スールー海
ミンダナオ島
ダバオ
サンボアンガ
マレーシア
セレベス海
カリマンタン(ボルネオ)島
インドネシア

１．保健省（DOH)、国家結核対策プログラム（NTP）建物

２．活動進捗状況等を総括し、課題を洗い出すために実施したワークショップ発表の様子（１）

３．活動進捗状況等を総括し、課題を洗い出すために実施したワークショップ発表の様子（２）



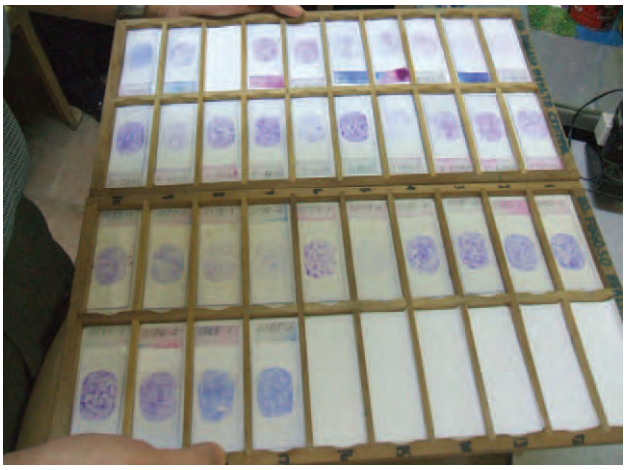
４．専門家による結核菌検査指導風景
マニラ首都圏におけるヘルスセンター（１）

５．記録カルテ
マニラ首都圏におけるヘルスセンター（２）

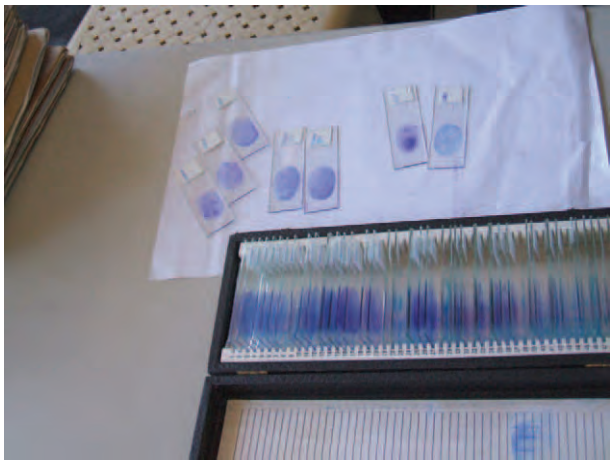
６．マニラ首都圏におけるヘルスセンター（３）

７．スラム街を管轄しているヘルスセンター
マニラ首都圏におけるヘルスセンター（２）

８．写真７のヘルスセンターの検査室風景
研修徹底により清潔が保たれている。
マニラ首都圏におけるヘルスセンター（３）



９．喀痰塗抹検査用スライド（１）



10．喀痰塗抹検査用スライド（２）

略　語　表

CCM	Coutry Coordination Mechanism	（世界エイズ・結核・マラリア対策基金の）国別調整メカニズム
CDR	Case Detection Rate	患者発見率
CHD	Center for Health Development	地域保健局
CHOs	City Health Offices	市保健局
CTRL	Cebu Tuberculosis Reference Laboratory	セブ結核研究所
DOH	Department of Health	保健省
DOTS	Directly Observed Treatment, Short-Course	直接監視下短期化学療法
DRS	Drug Resistance Survey	薬剤耐性結核調査
DSAs	Directly Supported Areas	（プロジェクトでの）重点支援地域
EQA	External Quality Assurance	外部精度管理
IDO	Infectious Disease Office	感染症対策課
JICA	Japan International Cooperation Agency	独立行政法人国際協力機構
LGUs	Local Government Units	地方自治体
M/M	Minutes of Meetings	協議議事録
NCDPC	National Center for Disease Prevention and Control	国立疾病予防対策センター
NEC	National Epidemiology Center	国立疫学センター
NTP	National Tuberculosis Control Program	国家結核対策プログラム
NTRL	National Tuberculosis Reference Laboratory	国家結核検査センター
ODA	Official Development Assistance	政府開発援助
OR	Operational Research	オペレーショナルリサーチ
PACT	Project Assistance to Control Tuberculosis	（国際支援国間の）調整機構
PCM	Project Cycle Management	プロジェクト・サイクル・マネジメント
PDM	Project Design Matrix	プロジェクト・デザイン・マトリックス
PPMD	Public-Private Mix DOTS	官民連携 DOTS
QA	Quality Assurance	精度管理
QTBCP	Quality Tuberculosis Control Program	結核対策向上計画
R/D	Record of Discussion	討議議事録
RHUs	Rural Health Units	市町村保健所

RIT/JATA	Research Institute of Tuberculosis / Japan Anti-Tuberculosis Association	（財）結核予防会結核研究所
RITM	Research Institute of Tropical Medicine	熱帯医学研究所
TB	Tuberculosis	結核
TSR	Treatment Success Rate	治療成功率
USAID	United States Agency for International Development	米国国際開発庁
WHO/WPRO	World Health Organization / Western Pacific Regional Office	世界保健機関西太平洋地域事務局

評価調査結果要約表

１．案件の概要		
国名：フィリピン共和国		案件名：結核対策向上プロジェクト
分野：保健医療		援助形態：技術協力プロジェクト
所轄部署：人間開発部第四グループ感染症対策チーム		協力金額（評価時点）：552,086 千円
協力期間	（R/D）2002 年９月１日～2007 年８月 31 日	先方関係機関：保健省感染症対策課、熱帯医学研究所付属国家結核レファレンスラボラトリー、地方区保健推進部
		日本側協力機関：厚生労働省、㈶結核予防会結核研究所
他の関連協力：公衆衛生プロジェクト（1992 年９月～1997 年８月）、結核対策プロジェクト（1997 年９月～2002 年８月）、無償資金協力による国家結核検査センター（NTRL）建設（2002 年３月）		

１－１　協力の背景と概要

フィリピン共和国（以下、「フィリピン」と記す）は、推定患者発生数が世界第９位の結核高負担国である。同国保健省（DOH）は 1968 年に初めての結核対策政策を策定したが、その実施においては十分な成果が得られない状況にあり、JICA は 1992 年９月から５年間で公衆衛生プロジェクト、1997 年９月から５年間は結核対策プロジェクトを通じて、同国の結核対策推進に協力してきた。

公衆衛生プロジェクトでは、セブ州において WHO が推進している直接監視下短期化学療法（Directly Observed Treatment Short-Course：DOTS）を実施した。結核対策プロジェクトにおいては公衆衛生プロジェクトで得られた成果を活かし、結核対策を第７地方区（リージョン）のすべての州、ルソン島の４州、さらに東サマール州にまで拡大し、対象地域において世界的目標とされている治癒率 85%以上をほぼ達成した。また、2002 年３月には無償資金協力による国家結核検査センター（National Tuberculosis Reference Laboratory：NTRL）が建設され、検査部門の強化が行われた。

一方、プロジェクト対象外の地域では、結核対策の質において課題があり、フィリピン政府は 2010 年までに結核有病率および死亡率の半減をめざし、公衆衛生プロジェクトおよび結核対策プロジェクトの対象外の地域においても、これまで対策の質、特に喀痰塗抹検査の質の向上に大きな成果を上げている JICA に対して技術協力を求めてきた。同要請に基づき、2002 年９月に本プロジェクトが開始された。

１－２　協力内容

（１）上位目標

2010 年までに、結核問題の各指標が半減する。

（２）プロジェクト目標

質の高い国家結核対策プログラム（NTP）が持続的に運営されるようになる。

（３）成果

１）質の高い DOTS の実施が能力向上活動および巡回活動の強化を通じて保証される。
２）喀痰検査ネットワークの強化を通し、質の高い検査が全国で実現する。
３）結核対策を監視するためのオペレーショナルリサーチ（Operational Research：OR）を企画・実施する能力が向上する。

（４）投入（2007 年１月時点）

＜日本側＞

・長期専門家派遣※　　５名
・短期専門家派遣※　　50 名
・研修員受入れ　　13 名
・機材供与　　87,528 千円
・現地業務費　　74,710 千円

※2004 年 12 月以降に派遣された専門家はすべて短期専門家として扱われている。これは JICA の実施体制の変更（2004 年 11 月より業務委託となった）に伴うものである。

＜相手国側＞

・カウンターパート（C/P）配置： 18 名
（DOH、熱帯医学研究所、NTRL)、その他に地域保健局長、州／市保健担当官、リージョン・州／市の医療調整官、看護師調整官、検査技師等
・予算措置：29,503 thousand peso（60,973 千円相当）
・オフィス、施設、資機材の提供

２．評価調査団の概要

調査者	結核対策　磯野　光夫	JICA 人間開発部第３グループ保健行政チーム	
	評価計画　遊佐　敢	JICA 人間開発部第４グループ感染症対策チーム	
	評価分析　平井　奈美	パシフィックコンサルタンツインターナショナル	
調査期間	2007 年２月 11 日～２月 27 日	評価種類	終了時評価

３．調査結果の概要

３－１　評価の目的

（１）プロジェクト・デザイン・マトリックス（PDM）および活動計画に基づき、プロジェクトの投入実績、活動実績、計画達成度を調査・確認し、問題点を整理する。

（２）評価５項目（妥当性、有効性、効率性、インパクト、自立発展性）の観点から、日本側・フィリピン側関係者とともにプロジェクトの終了時評価を実施する。

（３）上記評価結果に基づき、今後の活動内容について協議し、日本側・フィリピン側関係機関の双方に対し必要な提言を行い、今後の活動計画について協議する。

（４）本協議結果を双方の合意事項として M/M に取りまとめる。

３－２　実績の確認

（１）プロジェクト目標の達成度

「患者発見率（CDR）が 70%以上になる」は 2004 年に達成され、2005 年も引き続き維持されている。「治癒率が 85%以上になる」はほぼ達成された。

（２）成果の達成度

「成果１:質の高い DOTS の実施が能力向上活動および巡回指導の強化を通じて確保される」については、おおむね達成された。達成目標の一つであった巡回指導マニュアル“Handbook for Quality DOTS”を開発し、その主要部分が巡回指導のガイドラインとして新結核対策国家指針“Manual of procedures 2005, 4th edition”に盛り込まれ、全国展開へと向かっている。プロジェクトの重点支援地域（DSAs）すべての市町村保健所（Rural Health Unit : RHU）で DOTS が実施され、ハンドブックを使用しての DOTS の巡回指導および報告書提出がなされ、その報告書に基づき必要に応じて上位機関より指導が行われるようになった。

プロジェクトが巡回指導を直接支援する県／特別市の達成指標については、ネグロスオクシデンタル州においては地方政府からの予算不足のために十分な活動が行えない場合もあるが、それ以外のほとんどの重点支援地域において、巡回指導マニュアルの利用、上部機関への報告書の提出等の指標を満たしつつある。マニラ首都圏においては、都市ならではの貧困問題などが絡んで目標達成に至っていないものの、新規登録結核患者における塗抹陽性患者の割合（目標 60%以上）が 41.2%（2002 年）から 45.4%（2006 年）、治療成功率（WHO 目標 85%以上）が 82.4%（2002 年）から 83.7%（2005 年）など、指標は確実な伸びを見せており、またマニラ首都圏を含む全地域で３回の喀痰収集率 90%以上を達成（フィリピン全体で 2002 年 87.9%→2006 年 91.1%）するなど、大幅な改善が行われたことは確実である。

「成果２：喀痰検査ネットワークの強化を通し、質の高い検査が全国で実現する」については、おおむね達成された。指標であった NTRL における喀痰塗抹検査の重大なエラー（2004 年時点で 1.67%）ならびに外部精度管理センターおよび RHU における重大なエラーがなくなった。外部精度管理センターについては、少なくとも重点支援地域内の県／特別市では機能していることがわかっているが、今後それ以外の地域でも機能するよう継続的な働きかけが必要である。

「成果３：結核対策を監視するための OR を企画・実施する能力が向上する」については、ある程度は達成されるものと考えられる。３種類の OR のプロトコルが作られ、実施され、現在報告書を作成中である。これら一連の作業を通じて C/P は OR の重要性を認識し、自ら別のテーマを設定するようになった。

（３）実施プロセス

プロジェクトの実施プロセスはおおむね適切であったと判断される。DOH 感染症対策課とプロジェクト事務所は離れているものの、C/P および専門家の間の意思疎通が良好で、プロジェクトの進捗状況は国際機関や他ドナーを含む関係者が集まる結核対策向上計画（Quality Tuberculosis Control Program：QTBCP）会議を通してよく把握されている。C/P のイニシアティブは大変高く、適切なスタッフと予算が配備された。

技術移転方法として“Handbook for Quality DOTS”は有効なツールであると評価が高く、プロジェクトで実施した研修参加者の技術は向上している。研修の計画・実施はフィリピン側が管理した。

３－３　評価結果の要約

（１）妥当性

日本のフィリピンへの開発援助方針において保健セクター、なかでも結核は重点分野の一つにあげられていること、フィリピン政府の中期計画（2004～2010）において対策を講じるべき重要疾患の一つとして結核があげられており、また JICA 国別事業実施計画（平成 16 年度）においても重点課題「格差の是正」のうち「基礎的生活条件の改善」として「結核をはじめとした感染症対策の推進」をあげていることから、本プロジェクトの妥当性は高い。フィリピン側の結核対策の目標として、新規結核患者における喀痰塗抹陽性患者発見率 70%以上、治癒率 85%以上の達成が掲げられており、フィリピン政府によるこれら指標と達成目標年は本プロジェクト PDM２で示されたプロジェクト目標の指標と一致している。本プロジェクトの重点は、質の高い DOTS 療法の全国展開であり、フィリピン側の課題への対処方法として適切な戦略であった。

（２）有効性

プロジェクト目標の達成度が高いこと、成果がプロジェクト目標の達成に貢献していることから、本プロジェクトの有効性は高いと判断される。NTP は過去５年間で躍進を遂げ、国家目標である患者発見率 70%を達成した。治癒率については、過去５年間の DOTS の実施によって改善しつづけ、2005 年度で 83%を示し、国家目標の 85%まであとわずかである。特に、以下の具体的成果がプロジェクト目標達成に貢献している。

・成果１：DOTS の質的向上における“Handbook for Quality DOTS”を開発および全国への配布は、巡回指導の質の向上をもたらし、DOTS 実施体制の強化につながった。
・成果１におけるフィリピン全国人口の８分の１を占めるマニラ首都圏全域を重点支援地域対象とし、巡回指導力強化のための研修を実施し、治療脱落者を減少させ、マニラ首都圏の治療成績を向上させた。
・成果２：検査の精度管理における喀痰塗抹検査を実施する検査技師への研修を通じ、検査精度が高まり、確実に結核患者を発見できるようになってきた。
・成果２における質の高い喀痰塗抹検査のための外部精度管理（External Quality Assurance：EQA）マニュアルの開発、EQA システムの導入および確立を通じて、検査精度が担保されるシステム作りに貢献した。

（３）効率性

ほとんどの投入について、その投入の量・種類・質・タイミングは適切であり、成果達成のために利用されたことから、総じて効率性は関係者の満足がいくレベルであった。特に、日本人専門家の専門的知識・技術については高く評価されている。

効率性を制限した要因として、プロジェクトの全体統括を行う業務主任およびプロジェクトの主要な分野である結核対策を担う専門家の２名が共にプロジェクト実施の４年目にやむを得ない事情により変更されたことがあげられる。２名が同年に代わり、後継者へ業務の引き継ぎがなされたものの、プロジェクト内日本人関係者間で中間評価結果が万全に共有されず一時的に問題が生じた。

（４）インパクト

プロジェクトの上位目標達成への貢献度は高いと判断される。プロジェクト重点支援地域は最終的にはマニラ首都圏全体に拡大され、治療成績の向上を促したが、首都圏には国全体の人口の約８分の１が居住していることから、この地域の治療成績向上は国全体の結核状況の底上げを図るものである。大都市における治療脱落者の多さは都市における結核対策の大きな問題であるが、マニラ市においては治療脱落率の低下により治癒率が向上した。また、本プロジェクトでは、巡回指導および精度管理システムの標準化を行い、治療成績の向上に寄与した。治療成績の改善は結核有病率および死亡率の改善にもつながり、これら指標の改善をめざす上位目標の達成に大きく貢献している。

また、波及効果として JICA の第三国研修「結核塗抹検査精度管理」において、プロジェクトで研修を受けた NTRL 検査技師が研修講師となって本第三国研修を運営していることがあげられる。プロジェクト期間内に研修対象国である ASEAN 諸国の検査技師に対して、喀痰塗抹検査に関する基礎研修が３バッチ、精度管理研修が１バッチ実施され、本プロジェクトの波及的効果として周辺諸国への裨益も確認された。

（５）自立発展性

各実施機関がプロジェクトにより導入された活動と成果を維持・継続するために必要な組

織体制と技術力を備えるに至ったと判断できることから、プロジェクトの総合的な自立発展性は良好なレベルであると判断される。さらに自立発展性を高めるには、現在の技術レベルや資金確保を今後も維持継続していくこと、精度管理システムの普及、そして新たに浮上した問題（小児結核、TB/HIV 重複感染、多剤耐性結核など）への対応能力を育成することが課題といえる。

１）組織・制度・財政面

フィリピンの NTP 側のコミットメントは大変強く、“Manual of Procedures 2005, 4th edition”に沿って結核対策を継続することが可能である。保健省は協議会の開催を通じて定期的に全国の情報を把握しようとしている。各種研修および結核対策従事者間の情報共有を目的として行う結核ワークショップの費用はこれまでNTPが確保してきているため、プロジェクト終了後も NTP が確保していけるものと考えられる。ただし、PDM２においては外部条件であるものの、地方政府はその管轄地域における疾病状況や政府の方針などにより、必ずしも結核対策への意識が高いわけではなく、予算確保状況も異なっている。

２）技術面

DOTS は既に全国展開されており、NTP は十分な技術的知識を得ている。NTP は引き続き全国的に質の高い DOTS 実施の拡大のために巡回指導の強化を継続する必要があるが、NTP はプロジェクトでの活動を通じて、巡回指導の強化方法、データに基づいた研修計画とその実施能力を会得している。

また、EQA システムの実施計画策定能力がついていること、NTRL におけるメジャーエラーレートは、内部精度管理を通じて 2004 年の 1.67％から 2005 年および 2006 年は０％と効果を上げていることなどから、技術面における持続発展性は高く評価される。

さらに、NTP は薬剤耐性調査の実施において中心的な役割を果たし、結核対策プログラム実施のツールとしての OR の重要性を認識するようになった。NTP は OR のテーマを自ら提案できるようになり、実際にいくつかの OR を計画している。したがって、OR に関しても自立発展性は高いと考えられる。

３－４　効果発現に貢献した要因

（１）計画内容に関すること

３－３（１）妥当性に記載のとおり、プロジェクト目標の指標および目標年がフィリピン政府の掲げる国家結核対策と合致していたことが適切な目標達成につながったと判断される。

（２）実施プロセスに関すること

５項目すべてに共通するプロジェクトのパフォーマンスを高めた主な要因には、フィリピン中央政府の高いコミットメントとイニシアティブ、円滑な他ドナーとのコミュニケーションがあげられる。

３－５　問題点および問題を惹起した要因

（１）計画内容に関すること

計画内容に関する特段の問題点は見受けられない。

（２）実施プロセスに関すること

本プロジェクトの更なる効果発現を限定した主な要因としては、フィリピンの地方分権化の流れがある。中央政府のコミットメントは非常に高いものの、中央政府の地方政府に対す

る強制力がないことから、一部の県・市レベルにおける結核対策に対する強いコミットメントや十分な予算措置を確保することが困難であり、徹底することができなかった。

３－６　結　論

フィリピンの NTP 全体は着実に進歩している。治癒率に関しては 2005 年で 83%であるが着実に上昇しており、最終的には 85%に到達可能と判断される。一般的には、治療成功例も含めて 85%が目標とされており、この数字に関しては 2005 年時点で 89%と十分クリアしている。この結果を受けて、プロジェクトは計画通り 2007 年８月末をもって終了とする。

結核対策の成績向上は関係機関の適切な支援があったものの、フィリピン側の多大なる自助努力の成果である。フィリピン側の多大なる努力、熱心な活動、強いコミットメント、オーナーシップなどは高く評価されるべきものと思われる。さらに、NTP のすべてのレベルにおけるスタッフの能力の高さも特筆されるべきものであった。

特に、以下の点で JICA プロジェクトの活動がこの成績向上に寄与していると判断された。

・DOTS 全体のモニタリングのためのハンドブックの作成
・上記ハンドブックに基づき結核対策担当官が実施する巡回指導への技術指導
・検査技師の喀痰塗抹検査技術の向上
・同検査に関する精度管理システムの構築およびマニュアル作成

これらの活動はプロジェクト開始当初にフィリピン側が抱えていた重要な課題である「質の高い DOTS の拡大」にとっていずれも重要な役割を果たしており、フィリピン側の問題意識に応える適切な活動であったと判断される。

（１）成果１に対して

プロジェクトの行った現場指導を含むモニタリング・巡回指導強化方法の有用性は、成果に明確に表れている。中間評価において、これらの成果を全国展開すべく報告書等にまとめることが提言されていた。現時点までこのような活動はなされていないが、以下の点においてプロジェクトの行った方法は NTP に高く評価されているものと解釈される。

・プロジェクトで作成した巡回指導のハンドブックが、今後全国で配布される予定であり、この内容が最新の国家結核対策ガイドラインにも盛り込まれている。
・上記ハンドブックの活用に係る結核対策担当官への導入研修を NTP は自ら計画し、実施した。
・NTP は今後プロジェクト作成のハンドブックに沿ったモニタリング・巡回指導にかかわる全国での研修を計画している。

このように NTP 側が積極的にプロジェクト活動から学ぼうとする姿勢が随所にみられ、プロジェクト終了後の自立発展性は十分期待できる。

（２）成果２について

EQA 実施のための州・市・地域保健局（Center for Health Development：CHD）での研修は終了し、目標を達成している。地方政府からの予算割当および人材不足等の点で懸念も残るものの、NTP が特に強いコミットメントを有する EQA システムにおいて、メジャーエラー発生率が極めて低いことから、プロジェクト終了後の自立発展性は期待できる。なお、プロジェクト活動を通して NTP が基礎的な検査技師の研修を独力で行う能力を備えた点は高く評価すべきと思われる。

（3）成果3について

3つのORは、現時点でリポートの作成中である。これらの活動を通して、NTPは結核対策を向上させる有用な手段としてのリサーチの重要性を認識するに至っている。リサーチを企画・実施する能力は向上し、実際に自らいくつかのリサーチを開始するに至っている。

3－7　提　言

（1）NTP は、全国においてモニタリング・巡回指導を強化することにより、質の高い DOTS を維持していくことが必要である。このためには、プロジェクトによるハンドブックに関するオリエンテーション・研修が必要である。

（2）限られた財源を有効利用するために、NTP が今後も関係機関間の協調を調整していくことが重要である。

（3）保健省および地方政府は、結核対策関連の十分な人材と予算の確保のために、唱導活動（Advocacy）を継続して行う必要がある。

（4）NTPは、結核対策向上のためにEQAシステムも含めた情報収集システムを強化するように努力するべきである。

（5）プロジェクトで設定した重点支援地域で結核対策に携わるスタッフのうち、研修を受講していない者に対しては研修を実施しなければならない。その際、プロジェクトは技術支援を行うべきと思われる。

（6）プロジェクトは残りの活動期間内も可能な限り、EQA システムの実施体制の強化に向けNTRLを支援すべきと思われる。

（7）「全国薬剤耐性調査」「ケソン市における検査助手への喀痰塗抹検査研修の評価」および「ケソン市における地区ヘルスチームへのモニタリング・巡回指導研修の評価」の3つのリサーチに関して、プロジェクト期間内に終了させ、結果を NTP へフィードバックする必要がある。

3－8　教　訓

（1）EQA 体制のモデルを特定地域で構築し、それを全国へ展開するうえでは人員配置、予算措置の確保を担当する地方行政のコミットメントが前提条件になる。そのためには、全国展開する段階で地方行政に対して啓発を行うのではなく、日ごろからの働きかけが重要となる。また、全国展開を確固たるものにするためには規定等を制定するような国レベルから地方レベルまで通して啓発することも一案として考えられる。

（2）プロジェクト運営上の課題を解決するにあたり、主要なプロジェクト専門家の交替は最低限に抑える必要がある。また、交替が回避不可能な場合においては情報・認識の共有を図り、専門家が蓄積した経験やC/Pとの信頼を最大限に引き継ぐ必要がある。

Summary of Final Evaluation

<table>
<tr><td colspan="3">I　Summary of Project</td></tr>
<tr><td colspan="2">Country：The Republic of Philippines</td><td>Project Name：Tuberculosis Control Project</td></tr>
<tr><td colspan="2">Issue/Sector：Health</td><td>Type of Assistance：Technical Cooperation Project</td></tr>
<tr><td colspan="2">Division in charge：Infectious Disease Control Team. Group IV (Health II), Human Development Department</td><td>Total cost：552,086,000Yen</td></tr>
<tr><td rowspan="2">Duration of Project</td><td rowspan="2">(R/D) September 1st 2002～ August 31st 2007</td><td>Partner Country’s Implementing Organization：
Infectious Disease Office (IDO), Department of Health(DOH),
National Center for Disease Prevention and Control (NCDPC),
Research Institute of Tropical Medicine (RITM),
National Tuberculosis Reference Laboratory(NTRL).</td></tr>
<tr><td>Supporting Organization in Japan：Ministry of Health and Labor、Research Institute of Tuberculosis, JATA</td></tr>
</table>

1.　Background of the Project

The Philippines has been listed as one of the 22 Tuberculosis (TB) high burden countries ranking 9th in terms of its incidence in the world and 3rd in the Western Pacific Region of World Health Organization (WHO). The TB statistics in the Philippines show TB as the 6th leading cause of morbidity and mortality. National Tuberculosis Control Program (NTP) is one of the topmost prioritized programs of the Department of Health (DOH) in the Philippines.

JICA started its technical cooperation project to promote DOTS (Directly Observed Treatment, Short-course) with the objective to improve the public health in Cebu Province. A model was developed to test the feasibility and effectiveness of the new NTP policies and revised guidelines which followed the new “DOTS strategy” developed by WHO.

The TB Control Project was formulated in 1997 as the second phase of the JICA project. The project was expected to expand Cebu’s experience to the rest of the provinces and cities in Region 7, Laguna Province in Region 4a, Bulacan and Nueva Ecija in Region3, Rizal in Region4A and Eastern Samar in Region 8. In these project areas, the NTP target of 85% cure rate was accomplished within two years of the project implementation.

The current Project started on September 1st 2002, with cooperation period of five years. The Project Purpose is set as “Quality National Tuberculosis Program (NTP) is sustainably managed”. As the current Project is in the third phase of JICA’s technical cooperation for TB control in the Philippines, the focus is on the sustainability of NTP compared to the previous projects.

This time, a final evaluation was carried out from February 11th to February 27th 2007 by Japan International Cooperation Agency to acknowledge and analyze the accomplishments of the Project.

2.　Project Overview

(1) Overall Goal

Tuberculosis in the Republic of the Philippines is controlled.

(2) Project Purpose

Quality National Tuberculosis Control Program (NTP) is sustainably managed.

(3) Outputs

1) Quality DOTS implementation is ensured, through capacity building activities and strengthening monitoring and supervision system.
2) Quality laboratory services become available nationwide by the formation of the network.
3) Capacity to plan and conduct operational researches, such as Nationwide drug Resistance Survey (DRS), to monitor the program is strengthened.

(4) Inputs (As of January 2006)

Japanese Side:

- Long term Expert※ 5
- Provision of Equipment 87,528,000 JPY
- Short term Expert※ 50
- Local cost support including the In-country Training 74,710,000 JPY
- Training for Counterparts in Japan 13

*: The experts provided after November 2004 are categorized into “short-term experts” following the change of implementation system of JICA.

Filipino Side:

- Identification of counterparts personnel 18
- Allocation of budget 60,973,000 JPY
- Office space for experts
- Drugs and Other supplies and consumables

II Evaluation Mission

Members of Evaluation Team	Tuberculosis control	Dr. Mitsuo ISONO	Special Advisor, Group III (Health I), Human Development Department, JICA
	Evaluation Planning	Mr. Tsuyoshi YUSA	Staff, Infectious Disease Control Team, Group IV, Human Development Department, JICA
	Evaluation Analysis	Ms. Nami HIRAI	Consultant, Pacific Consultants International

Period of Evaluation	11th of February 2007～27th of February 2007.	Type of Evaluation	Final Evaluation

Results of Evaluation

1. Summary of Evaluation Result

(1) Relevance

The Project is considered to have high relevance.

In the Japanese ODA policy described in the country-specific plan for the Philippines, the assistance for health sector is defined as a priority area. Within the health sector, TB control is one of the prioritized areas in the health sector.

In the Medium-Term Development Plan 2004-2010 of the Government of the Philippines, TB control has been given highest priority requiring nationwide intervention.

To achieve the target, the main focus of the past five years of NTP in the Philippines has been on the expansion of Quality DOTS nationwide. The design and focus of the Project has also been suitable for

this purpose.

(2) Effectiveness

The effectiveness of the Project is considered to be high.

NTP has achieved the Case Detection Rate (CDR) of 70%. The cure rate has shown continuous improvement through the last 5 years of DOTS implementation, approaching the national target of 85%. The Treatment Success Rate (TSR) has already reached 89% which is higher than the global target of 85%. Thus, it can be concluded that NTP has successfully achieved the global target of TB control. The below outputs especially contributed to achieving the Project Purpose.

- Output 1: Development of the supervision manual "Handbook for Quality DOTS" distributed to all districts.
- Output 1: Selecting the National Capital Region (NCR) as one of the DSAs. This has made a significant contribution to the improvement of overall TB situation in the Philippines for close to one eighth of the entire population of the Philippines reside in the NCR.
- Output 2: Conducting training of laboratory technicians for sputum smear examinations leading to the improvement of case detection.
- Output 2: Introducing and establishing the EQA system including the development of EQA manual to enhance the quality of sputum smear examinations.

(3) Efficiency

Judging from the achievements of the outputs, the input was provided efficiently.

Especially, the quality of the Japanese experts dispatched was adequate for the project implementation.

Reappointment of Chief Advisor and Team Leader of the Project in the fourth year of the Project can be mentioned as a factor that impeded further efficiency of the Project. Although briefing was conducted to each successor, the findings of the mid-term evaluation was not sufficiently transferred which caused a part time confusion amongst the Japanese experts.

(4) Impact

The overall goal of the Project is expected to be achieved by the year 2010.

Improvement of TB situation shown by the TB program indicators (CDR, TSR, etc) in the NCR implies significant contribution to the overall improvement of TB situation in the Philippines. NCR consists of close to one eight of the total population of the country, thus progress made in NCR directly influences the overall TB situation in the country.

As a ripple effect, the NTRL staffs trained in the Project contributed to JICA's "third country training (a regional technical assistance in human resource development based on the success made through a bi-lateral cooperation by JICA)". Medical and laboratory technologists from the ASEAN countries have participated in the training. So far, three (3) batches on the basic sputum smear examinations training and one (1) batch on the TB laboratory Quality Assurance training have been conducted.

(5) Sustainability

Judging from the technical achievements made by each health service implementing institutions and its organizational strengthening, the sustainability will be possible to a certain level. For further sustainability, continuous funding as well as sustaining the technical level of NTP is necessary. It is

also important for NTP to expand the EQA system as well as to acquire technical expertise in the field of infant Tuberculosis, TB/HIV, MDR-TB and so on.

1) Government Commitment

Based on the newly revised and published "Manual of Procedures 2005, 4th edition" in which the Project has contributed, the effort to control TB is expected to continue. NTP has made continuous effort to gather nationwide report on DOTS services. NTP has also shown effort in securing sufficient budgeting for related workshops and meetings. However, it should also be noted that the commitment of the local government, especially for securing budget, is not necessarily high.

2) Technical capability will become sustainable

In the Philippines, DOTS has been implemented nationwide, and NTP has made significant progress so far. Recognizing the effectiveness of monitoring and supervision to achieve high cure rate, NTP is expected to further expand and sustain quality DOTS implementation by strengthening monitoring and supervision nationwide. NTP has acquired the ability to make concrete plans to implement EQA system nationwide. The achievement of low major error rate shows the technical sustainability of the Program.

Furthermore, NTP played a major role in the Drug Resistance Survey and has recognized the importance of Operational Researches. NTP has organized number of Operational Researches on their own showing high ownership of Program management.

2. Factors that promoted realization of effects

The realization of effects was in large due to the high commitment of the Philippine side to pursue TB control activities and smooth communication amongst donors in tackling the agenda.

3. Factors that impeded realization of effects

The one barrier for further efficiency was the decentralization movement in the Philippines. Although the commitment of the Central government was high, central government did not have authority over the local government units. Therefore, it was difficult for the Project to constantly secure commitment and sufficient budget from the local governments.

4. Conclusion

NTP has achieved great success during the past 5 years. It has reached the CDR of 70% which is set as the national target as well as the global target which is shown in Global Plan to STOP TB 2006-2010 and Stop TB Initiative.

As for the current cure rate of 83%, this has continuously progressed in the last 5 years of DOTS implementation and is nearly approaching the national target of 85%. The TSR has already reached 89% which is higher than the global target of 85%. Thus, it can be concluded that NTP has successfully achieved the global target of TB control. Although there has been adequate assistance by related organizations, this success is for the most part dependent on the tremendous effort by the Philippine Government (DOH and Local Governments).

The Project has contributed to this success especially by;

- eveloping "Handbook for Quality DOTS"
- Conducting trainings of TB coordinator to strengthen their abilities for monitoring and supervision in the DSAs, where improvement is still needed
- Conducting training of laboratory technicians for sputum smear examinations which plays an important role in TB control program
- Introducing and establishing EQA system including the development of EQA manual to enhance the quality of sputum smear examinations

<Output1>

The project activities clearly indicated high efficiency and effectiveness of strengthening supervision and monitoring system in enhancing the NTP. Following facts indicate that the method used by the project which included on job training for supervisors has been highly rated by DOH and partners.

- Although the handbook for quality DOTS made by the project will be distributed nationwide in near future, NTP included the contents of this handbook in the newly revised and published national guideline "Manual of Procedures 2005, 4th edition".
- NTP conducted one training course outside of the DSAs to determine the operational feasibility of the handbook as well as the training method used, e.g. on-the-job training.
- NTP is planning for the trainings of NTP supervisors nationwide using this handbook.

<Output 2>

NTP has successfully achieved the target by establishing the EQA system in all provinces. Although their still remains a challenge in implementing the EQA system nation wide as there is limited funding and human resources in the local settings, NTP has acquired the ability to make concrete plans for EQA implementation. The achievement of low major error rate shows the technical sustainability of the Program. It should be also be highly evaluated that NTP attained the ability to plan and conduct in-country trainings for sputum smear examinations by themselves as a result of activities conducted by NTP with assistance of the Project.

<Output 3>

All operational researches are still in finalization of the report at this stage. Through the project activities NTP came to recognize the importance of operational research as a tool to improve the TB control program. NTP has improved its ability to identify research agenda, and carried out several operational researches.

In conclusion, relevance, effectiveness and efficiency of the Project can be highly rated. The achievement of the NTP indicates strong impact of the Project. Although several challenges still remain, with current performance of the NTP and partners supporting it, it is confirmed by both side that sustainability after the completion of the Project could be highly expected.

5. Recommendations

- NTP should continue to sustain quality DOTS implementation by strengthening monitoring and supervision nationwide. There should also be technical support by the Project to the NTP workers on orientation/trainings for the handbook.
- NTP should continue to maintain its coordination mechanisms among related organizations in order to maximize utilization of limited resources.
- DOH and Local Government Units (LGUs) should continue their advocacy activities to secure sufficient human and financial resources for TB control.
- NTP should try to strengthen its information system including those related to EQA activities to better analyze the implementation of the TB control programme.
- The Project should continue to provide technical assistance through training for the remaining untrained NTP staff in the DSAs.
- The Project should assist NTRL to strengthen EQA implementation within the cooperation period.
- The Project should finalize all three operational researches ("National Drug Resistance Surveillance on

Tuberculosis in the Philippines", "Evaluation of Training on Sputum Smearing and Staining for Laboratory Aides in Quezon City" and "Evaluation of Monitoring and Supervisory Training for District Health Team in Quezon City") and provide proper feedback to NTP.

6. Lessons Learnt

・In order to build a model of EQA system and to expand it throughout the country, sufficient staffing, allocation of funding, and ensuring local government commitment are preconditions. Therefore, conducting awareness raising activities on a regular basis to local governments is essential. Also, it is important to enact laws and regulations to make the plan concrete.

・In order to reduce the risk of trouble in Project management, switching of principal experts should be limited as much as possible. When switching is necessary, it is important that the information and experience accumulated by the expert be briefed thoroughly to the successor.

第１章　終了時評価調査の概要

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」と記す）は、罹患率が世界第７位という結核高蔓延国である。同国保健省（Department of Health：DOH）は 1968 年に結核対策を初めて策定したが、十分な成果が得られない状況にあった。このため、JICA は 1992 年９月から公衆衛生プロジェクト、1997 年９月からは結核対策プロジェクトを実施してきた。

公衆衛生プロジェクトでは、セブ州において WHO が推進している直接監視下短期化学療法（Directly Observed Treatment, Short-Course：DOTS）を実施した。結核対策プロジェクトにおいては、同成果を活かし、結核対策を第７地方区のすべての州、ルソン島の４州、さらに東サマール州にまで拡大し、対象地域において世界的目標とされている治癒率 85%以上をほぼ達成した。また、2002 年３月には無償資金協力により国家結核検査センター（National Tuberculosis Reference Laboratory：NTRL）を建設し、特に検査部門の強化を行っている。

一方、プロジェクト対象外の地域では、結核対策および喀痰検査の質において問題のある保健所がいまだに多く、フィリピン政府はこのため 2010 年までに結核の罹患率と死亡率を半減するためにこれまで対策の質・喀痰検査の質に大きな成果を上げている JICA に対して技術協力を求めてきた。

同要請に基づき 2002 年９月にプロジェクトが開始され、2004 年 11 月からは財団法人結核予防会（Japan Anti-Tuberculosis Association：JATA）との業務委託契約によって実施された。協力終了を 2007 年８月 31 日に控え、評価５項目の観点からプロジェクトを評価するとともに、今後の結核対策に係る先方政府の方針や我が国の協力方針についてフィリピン側関係機関と協議することを目的に本調査が実施された。

１－２　調査団の構成

氏　名	担　当	所　属	派遣期間
磯野　光夫	結核対策	国際協力機構人間開発部第３グループ保健行政チーム 特別嘱託	2.20～3.6
遊佐　敢	評価計画	国際協力機構人間開発部第４グループ感染症対策チーム 職員	2.20～3.6
平井　奈美	評価分析	パシフィックコンサルタンツインターナショナル	2.11～3.6

１－３　調査日程

	日　時	曜　日	業務内容	備　考
1	２月 11 日	日	評価分析団員移動 成田発（JL741） マニラ着 13:00 着	東京⇒ マニラ
2	２月 12 日	月	JICA フィリピン事務所打ち合わせ プロジェクトとの打ち合わせ	マニラ
3	２月 13 日	火	保健省感染症対策課（IDO／DOH）インタビュー	マニラ

			資料取りまとめ	
4	2月14日	水	熱帯医学研究所（RITM）／国立結核研究所（NTRL） インタビュー 資料取りまとめ	マニラ
5	2月15日	木	その他関係機関との打ち合わせ	マニラ
6	2月16日	金	ワークショップ開催準備	マニラ
7	2月17日	土	結核対策団員・評価計画団員移動　マニラ到着 ワークショップ開催準備	マニラ
8	2月18日	日	資料取りまとめ M/M 案（PDM）作成	マニラ
9	2月19日	月	JICA フィリピン事務所打ち合わせ プロジェクトとの打ち合わせ 在フィリピン日本大使館表敬 DOH 表敬	マニラ
10	2月20日	火	IDO／DOH 協議 世界保健機関西太平洋地域事務局（WHO/WPRO）と会合	マニラ
11	2月21日	水	PDM ワークショップ	マニラ
12	2月22日	木	マニラ市　現場視察	マニラ
13	2月23日	金	ケソン市　現場視察	ケソン
14	2月24日	土	合同調整委員会（JCC）会合準備+M/M 案作成	マニラ
15	2月25日	日	JCC 会合準備および M/M 案作成	マニラ
16	2月26日	月	JCC 会合 M/M 署名 JICA フィリピン事務所報告 在フィリピン日本大使館報告	マニラ
17	2月27日	火	帰国　JAL 746　結核対策団員 帰国　JAL 742　評価分析・評価計画団員	マニラ⇒ 東京

１－４　主要面談者

（１）フィリピン側

１）保健省（Department of Health：DOH）

Dr. Ethelyn Nieto	DOH	Under Secretary for Health Operations
Dr. Yolanda Oliveros	NCDPC, DOH	Director
Dr. Jaime Lagahid	IDO	Medical Officer VIII
Dr. Rosalind Vianson	IDO	NTP Manager, Medical Specialist IV
Dr. Ernesto Bontuyan	IDO	Medical Specialist II

２）国立結核研究所（National Tuberculosis Reference Laboratory：NTRL）

Dr. Noel Macalalad	NTRL	Technical Head
Dr. Nora S. Cruz	NTRL	Laboratory Supervisor
Mr. Cristino Narciso	NTRL	Med. Tec.
Ms. Paz Rostrata	NTRL	Med. Tec.
Ms. Marienela A. Pisuena	NTRL	Med. Tec.
Ms. Alma Gonzales	NTRL	Med. Tec.

（２）日本側

１）在フィリピン日本大使館

杉山　明	公　使
荒木　規仁	二等書記官

２）JICA フィリピン事務所

松浦　正三	所　長
鹿目　武	事業実施管理班（防災・保健医療・ガバナンス・教育）

３）結核対策向上プロジェクト専門家

大菅　克知	チーフアドバイザー
簗瀬　由美子	結核対策
遠藤　昌一	結核対策
笠松　美恵	結核対策
小林　繁郎	業務調整
Niwla J. Alvarepz	Medical Advisor, QTBCP project
Maricel L. Trono	Medical Technologist, QTBCP projct

４）関係機関（国際機関、外国援助機関）

Dr. Michael N. Voniatis	Medical Officer, Stop TB for the Philippines, WHO
Dr. Arthur B. Lagos	Laboratory Specialist, USAID (ex-medical advisor of JICA project)

第２章　プロジェクトの概要

２－１　プロジェクトの基本計画

（１）上位目標

2010 年までに、結核問題の各指標が半減する。

（２）プロジェクト目標

質の高い NTP が持続的に運営されるようになる。

（３）成果

１）質の高い DOTS の実施が能力向上活動および巡回指導の強化を通じて確保される。

２）喀痰検査ネットワークの強化を通し、質の高い検査が全国で実現する。

３）結核対策を監視するためのオペレーショナルリサーチ（Operational Research：OR）を企画実施する能力が向上する。

（４）主な活動

1-1 巡回指導マニュアルを開発する。

1-2 巡回指導マニュアルをすべての地方区に配布し、説明を行う。

1-3 全国の県／特別市における結核対策の業績を国立疾病予防対策センター（National Center for Disease Prevention and Control：NCDPC）および地域保健局（Center for Health Development：CHD）と見直し、結核対策の業績が不十分なところを重点支援地域（Directly Supported Areas：DSAs）とする。

1-4 定めた DSAs について結核対策活動およびその周辺環境について、CHD、NCDPC とともに現況分析を行う。

1-5 上記の分析結果に基づいて、県／特別市の国家結核対策プログラム（National Tuberculosis Control Program：NTP）調整官および保健センターのスタッフに対してリフレッシャー研修を実施する。

1-6 DSAs の県／特別市の NTP 調整官が NTP 巡回指導を強化する。

1-7 NCDPC、NTRL、および CHD が合同巡回指導および地方区でのワークショップを実施することで NTP 巡回指導を強化する。

1-8 調整機構（Project Assistance to Control Tuberculosis：PACT）会議において、NTP の国際ドナー調整能力を強化する。

2-1 NTRL、セブ結核研究所（Cebu Tuberculosis Reference Laboratory：CTRL）およびいくつかの地方区ラボにおける研修計画能力を強化する。

2-2 すべての CHD、地方区の結核対策調整官、地方区の検査技師に対して、外部精度管理（External Quality Assurance：EQA）研修を実施する。

2-3 EQA システムを県レベルに導入するために、パイロットエリア（１地方区につき１県／特別市）を設置する。

2-4 パイロットエリアの県／特別市の結核対策調整官および結核対策官〔精度管理センター（QA センター）の検査技師〕に対して、NTRL および CTRL と協調して研修を行う。

2-5 モニタリング活動および国家協議会ワークショップを通じて、EQA 活動をモニターするための CHD を強化する。

2-6 拡大のためのクライテリアに基づいて、毎年、各地方区において２～４県／特別市へ、EQA システムを拡大する。

２－２　活動計画

プロジェクトの活動計画を、付属資料１のプロジェクト・デザイン・マトリックス（Project Design Matrix：PDM２）に示す。

２－３　実施体制

付属資料３に DOH の組織図、付属資料４に NTRL 組織図、付属資料５に DOTS 実施組織図を示す。

第３章　終了時評価の方法

本調査は『JICA 事業評価ガイドライン（2004 年２月版)』に基づき、ログフレーム（PDM）手法の考え方を用いた評価手法にのっとって実施した。『JICA 事業評価ガイドライン』による評価は、まず①ログフレーム（PDM）を事業計画の枠組みと捉え、②プロジェクトの現状を実績・実施プロセス・因果関係から把握・検証し、さらに③「妥当性」「有効性」「効率性」「インパクト」「自立発展性」の５つの評価観点（評価５項目）から評価する。また、①～③の作業を通して、プロジェクトの成否に影響を及ぼした要因の特定を試み、本プロジェクトの実施機関、同分野もしくは性質を同じくするプロジェクトに対する提言や教訓を導き出す。

＜PDM の概要＞

上位目標	達成されたプロジェクト目標の貢献が期待される長期の開発目標
プロジェクト目標	プロジェクト終了時までに達成されることが期待される中期的な目標であり、「ターゲット・グループ」への具体的な便益やインパクト
成果	プロジェクト目標を達成するために投入を効果的に用いて行う具体的な行為
活動	成果の目標を達成するために投入を効果的に用いて行う具体的な行為
指標	プロジェクトの成果、目標および上位目標の達成度を測るもので、客観的に検証できる基準
指標データ入手手段	指標を検証するためのデータ・ソース
外部条件	各レベルの目標を達成するために必要な条件であるが、プロジェクトではコントロールできない条件
前提条件	プロジェクトを開始するために必要な条件
投入	プロジェクトの活動を行うのに必要な人員・機材・資金など

３－１　評価計画と調査

これまでの既存資料を参照したうえで評価グリッド（案）を作成し、評価調査団およびプロジェクト関係者で内容を検討した。評価調査はこの評価グリッドに沿って行われた。

評価調査団は、DOH、NTRL ならびに DSAs のうちケソン市・マニラ市、USAID、WHO/WPRO を訪れ、カウンターパート（Counterpart：C/P)、結核対策官、WHO、USAID、患者、本プロジェクトに携わる日本人専門家へのインタビュー調査、また定性的および定量的データの収集・分析を行った。

データ収集手法を以下に示す。

・既存資料のレビュー討議議事録（Record of Descussion：R/D)、PDM２（2005 年12 月改訂版)、プロジェクト関連資料等)
・質問票〔C/P（中央および地方の NTP 従事者)、日本人専門家、その他関連機関〕
・インタビュー〔C/P（中央および地方の NTP 従事者)、日本人専門家、その他関係機関〕
・PDM ワークショップ
・直接観察（サイト訪問を含む）

・収集資料をもとに『JICA 事業評価ガイドライン（2004 年２月版)』に基づきログフレームの考え方に沿った評価項目の視点から、評価グリッドを用いて当該プロジェクトの分析・評価が行われ、提言がなされた。

３－２　評価５項目

フィリピン側および日本側は、プロジェクトのすべての活動結果および成果達成度を見直し、以下の５つの視点に基づいてプロジェクトの評価を実施した。

＜評価５項目＞

（１）妥当性	評価時点においても、プロジェクト目標、上位目標が妥当であるかどうかを、フィリピン政府の政策、裨益者のニーズ、日本の援助政策との整合性の観点から検討する。
（２）有効性	プロジェクトの成果の達成度合い、およびそれがプロジェクトの達成度にどの程度結びついているかを検討する。
（３）効率性	プロジェクトの投入から生みだされる成果の程度は、タイミング、質、量の観点から妥当であったかどうかを分析する。
（４）インパクト	プロジェクトが実施されたことにより生じる波及効果の正・負の効果を、当初予期しなかった効果も含め検討する。
（５）自立発展性	協力終了後、プロジェクトによってもたらされた成果や開発効果が持続されるか､あるいは拡大されていく可能性があるかどうかを予測するために、制度的側面、財政的側面、技術的側面からプロジェクトの自立発展性の見込みを考察する。

第４章　調査結果

４－１　プロジェクトの投入

各項目の詳細内容については、本報告書の付属資料１．M/M・合同評価報告書の Annex を参照のこと。

４－１－１　日本側の投入

（１）専門家

１）長期専門家：延べ５人の長期専門家が派遣された。専門家の担当業務は、チーフアドバイザー、業務調整、結核対策であった。

２）短期専門家：延べ 50 人の短期専門家が派遣された。専門家の担当業務は、結核対策、チーフアドバイザー、業務調整、結核菌検査、OR、機材据付であった。

＊本業務は 2004 年 11 月より JATA に委託されたことから、2004 年 12 月以降に派遣された専門家はすべて「短期専門家」として扱われている。

（２）機材供与

2006 年 12 月までにおよそ 8,750 万円相当の機材が供与された。

（３）日本における C/P 研修

これまでに 13 人の C/P が RIT/JATA において結核対策と結核菌検査の分野の研修に参加した。

（４）ローカルコスト支援（国内研修のサポートを含む）

効果的でスムースにプロジェクトを実施するために、2006 年 12 月までにおよそ 7,470 万円相当が投入された。フィリピンでの国内研修に対する部分的支援もこの中に含まれる。

４－１－２　フィリピン側投入

（１）C/P

フィリピン側は、DOH の NCDPC 感染症対策課（Infectious Disease Office：IDO）、熱帯医学研究所（Research Institute of Tropical Medicine：RITM）、NTRL に 18 人の C/P を配置した。さらに、全国の CHD、NTP 調整官、州／市の保健担当官、医療調整官、看護師調整官、検査技師らが C/P として関与している。

（２）日本人専門家プロジェクト事務所

プロジェクト事務所は NTRL の１階に提供されている。

（３）予算措置

プロジェクトの活動費用は、DOH が配分する RITM の予算により支援されている。また、巡回指導、ワークショップ開催、喀痰塗抹検査のための費用は NTP から拠出されている。

４－２　プロジェクトの活動実績

PDM２に示されている活動については、2005 年８月の中間評価の結果を受けて、フィリピン側および日本側双方による見直し、および協議を経て 2005 年 12 月に改訂されたものである。それぞれの活動の実績を下表に示す。

＜活動の実績＞

活　動	実　績
1-1 巡回指導マニュアルを開発する。	“Handbook of Quality DOTS”が開発された。このハンドブックには巡回指導のガイドライン（マニュアルに相当する内容）が含まれていることから、この活動は実施されたといえる。
1-2 巡回指導マニュアルをすべての地方区に配布し、説明を行う。	上記のハンドブックは、すべての地方区の NTP 調整官に配布されたが、財源不足のためそれ以上の末端のレベル（県、市）にまでは配布されなかった。ハンドブックの説明会については、ネグロスオクシデンタル州を除く DSAs で実施された。
1-3 全国の県／特別市における結核対策の業績を NCDPC および CHD と見直し、結核対策の業績が不十分なところを DSAs とする。	プロジェクトは DOH の情報に基づいて結核対策に関する業績を見直し、IDO／DOH と協議のうえ、成績の悪い地域を選んで DSAs を設定した。
1-4 定めた DSAs について結核対策活動およびその周辺環境について、CHD と NCDPC とともに現況分析を行う。	プロジェクトは選ばれた DSAs に対してベースライン調査を実施した。そして DSAs における結核に関する実際の状況および結核対策を取り巻く周辺環境を分析し、その結果を関係者と共有した。
1-5 上記の分析結果に基づいて、県／特別市の NTP 調整官および保健センターのスタッフに対してリフレッシャー研修を実施する。	NTP および県からのリクエストに基づく状況分析結果に基づいて、リフレッシャー研修が実施された。
1-6 DSAs の県／特別市の NTP 調整官が NTP 巡回指導を強化する。	状況分析、フィードバック会議、ハンドブックに沿った研修などを含むプロジェクトの活動はプロジェクトおよび OJT によって実施された。これらの活動は、DSAs において適切なモニタリングおよび報告、ならびに NTP の指標の向上といった形で結果が出ている。
1-7 NCDPC、NTRL、および CHD が合同巡回指導および地方区でのワークショップを実施することで NTP 巡回指導を強化する。	DSAs においては、NTP 調整官に対する巡回指導研修の後に、合同モニタリングの実施および地方区ワークショップが開催された。
1-8 PACT 会議において、NTP の国際ドナー調整能力を強化する。	PACT 会議は 2005 年まで行われていた。いくつかのドナーのプロジェクト終了および撤退後、IDO/DOH は、１、２か月に一度定期的に Quality Tuberculosis Control Program（QTBCP）会議*を開催し、結核対策に関するドナー調整を行っている。会議の内容については議事録を作成し、次回会議にて参加者で内容を確認している。

* QTBCP 会議は、NTP をモニターすることを目的に１、２か月に一度 DOH によって開催されている。

活　動	実　績
2-1 NTRL、CTRL およびいくつかの地方区ラボにおける研修計画能力を強化する。	プロジェクトでは質の高い QA システムのためのマニュアルとして“Quality Assurance for Sputum Smear Microscopy”が開発された。NTRL はプロジェクトにおける活動を通して研修計画を立てる能力を得た。NTRL は、県からの要請および各県における検査技師の能力を把握し、それらに基づいて自ら研修計画を立てるようになった。
2-2 すべての CHD、地方区の結核対策調整官、地方区の検査技師に対して、EQA 研修を実施する。	当初計画されていた EQA 研修は、2005 年に計画されていたが実施にいたらなかった９県の分も含めて、2006 年７月までにすべて完了した。
2-3 EQA システムを県レベルに導入するために、パイロットエリア（１地方区につき１県／特別市）を設置する。	地方区ごとに１県パイロットエリアが設定され、EQA システムが導入された。
2-4 パイロットエリアの県／特別市の NTP 調整官および結核対策官（QA センターの検査技師）に対して、NTRL および CTRL と協調して研修を行う。	QA のための国内研修は、プロジェクトにて開発された“Quality Assurance for Sputum Smear Microscopy”を使って行われた。地方区レベルでの精度管理コースはプロジェクトの下で実施された。パイロットエリアの市町村保健所（Rural Health Units : RHUs）における QA に関する研修は、2004 年に NTRL と CTRL と協力して、プロジェクトが行った。さらに、パイロットエリアの県レベル QA センターに対する、QA 研修については WHO によって実施された。
2-5 モニタリング活動および国家協議会ワークショップを通じて、EQA 活動をモニターするための CHD を強化する。	いくつかの地域において、精度管理センターが EQA マニュアルにのっとって行った報告に基づいて、CHD は EQA 活動のモニタリングを行った。 NTRL は、CHD のモニタリング能力強化のために、地方区のラボのスタッフに対して、年３回の協議会を開催している。
2-6 拡大のためのクライテリアに基いて、毎年各地方区において２～４県／特別市へ、EQA システムを拡大する。	EQA システムは、１地方区に対して毎年２～４県／特別市へと拡大された。対象となった県／特別市は、プロジェクトからの助言を参考に、合意された選定クライテリアに基づいて決定された。

活　動	実　績
3-1 WHO などの他機関と協力して薬剤耐性調査のプロトコルを作る。	薬剤耐性調査のためのプロトコルは、WHO および JICA 専門家からの協力を得ながら、IDO が 2005 年に策定した。
3-2 プロトコルに基づいて薬剤体制調査を実施し、運営委員会と収集データの分析を行う。	薬剤耐性調査は IDO によるプロトコルに基づいて実施された。収集データは国立疫学センター（National Epidemiology Center : NEC）によって分析されることになった。現在まだ報告書は作成されていない段階である。
3-3 ワークショップや国際会議を通じて、薬剤耐性調査の結果を国内外の結核対策実施機関にフィードバックする。	薬剤耐性調査はまだ終了していないことから、フィードバックは行われていない。調査の結果はレポートの完成後、NTP に適切に反映されると考えられる。
3-4 OR の調査成果を結核対策政策に反映する。	全３種類の OR（「全国薬剤耐性結核調査」「ケソン市における検査助手に対する喀痰塗抹染色トレーニングの有効性評価」「ケソン市 District Health Team に対する巡回指導トレーニングの有効性評価」）はいずれも未完であり、現在報告書が準備されている段階である。

3-5 結核対策政策の改善を目的としてORの必要性を確認し、ワークショップやセミナーを実施してプロトコルを作成し、3-1～3-4 と同様にORを実施する。	現在実施中のORの題材は、IDO、マニラ市、ケソン市、マニラ首都圏、プロジェクトが議論し、NTPの要望や重複のないこと、JICAプロジェクトとして実施するべきテーマかどうかを勘案して決定された。
3-6 ワークショップの開催や教本／参考資料など技術的指導をしながら実際のORを実施することで、ニーズアセスメント、計画および実施過程について、結核対策従事者の能力を強化する。	NTPのスタッフはORの重要性を認識し、自らORのプロトコルを策定するようになった。 NTPは現在３つのORを計画しており、グローバルファンドへその資金を申請中である。

４－３　成果の達成状況

プロジェクトの成果の達成状況は以下のようにまとめられる。

（１）成果１:質の高いDOTSの実施が能力向上活動および巡回指導の強化を通じて確保される。

（DOTSの質的向上）

指　標	結　果
1-1 巡回指導マニュアルが開発され、全地方区に配布される。	質の高いDOTSの実施をめざし、巡回指導マニュアルとして“Handbook of Quality DOTS”が開発された。 このハンドブックは、実際に現場で問題に対処できるように、問題発見、その理由の分析、解決方法の発見方法、フィードバックの方法といったように、実際の巡回指導の手順に沿って詳細に示されている。ハンドブックを使って実施された研修への参加者は、教科書として、また指導者マニュアルとしてハンドブックが重要であると認めている。このハンドブックはすべての地方区に配布されたが、それより下位組織への配布は予算の制限上DSAsにのみに限られた。NTPは今後そのほかの地域へも配布を促進し、巡回指導を広めていく方針である。 さらに、ハンドブックに記載された重要な点はNTPが全国の結核対策のために作成した“Manual of Procedures 2005, 4th edition”に盛り込まれ、全国に対して配布中である（2007年１月に配布が開始された）。
1-2 プロジェクトが巡回指導を直接支援するすべての県／特別市が2007年に以下の目標を達成し、維持する。	以下参照
①巡回指導マニュアルがすべてのRHUsに配布され、利用される。	ハンドブックはDSAs内のすべてのRHUsに配布された。 ネグロスオクシデンタル州を除くすべてのDSAsにて、ハンドブックの使用方法の説明会が実施された。 ハンドブックは、地方区およびディストリクトのレベルでは既によく使用されており、RHUsレベルでは徐々に使用頻度が高まってきている。
②100％のRHUs、県、CHDが報告書を上のレベルの機関に、締め切り後１か月以内に提出する。	ほとんどの県およびCHDは、締め切り後１か月以内に報告書を上位機関に提出している。RHUsでの提出状況については、明らかな情報は得られていない。
③DSAsにおいて、ディストリクト調整官／監査官を含む100％の結核調整	ディストリクト調整官は四半期ごとの巡回指導を結核のみに限って行っているわけではない。マニラ市およびケソン市の市保健調整官は、ディストリクトの巡回指導結果報告に基づいて必要に応じて直接RHUへ

<table>
<tr><td>官が、それぞれの RHU に対して、少なくとも四半期に 1 回は定期的に巡回指導を行う。</td><td>の巡回指導を実施している。
予算に関する問題を抱えるネグロスオクシデンタル州を除いて、ほとんどの DSAs において結核調整官（調整官／supervisors を含む）はそれぞれの RHU に四半期ごとに定期訪問し指導を行っている。ただし、ネグロスオクシデンタル州の NTP 調整官はたとえ別目的であっても RHUs を訪問する機会さえあれば、積極的に結核についてもモニタリングして指導をしている。</td></tr>
<tr><td>④県は CHD および DOH によって、定期的に監査および指導を受ける。</td><td>地方区は県向けの協議会を年に２回行っている。（DOH は年に３回地方区向けの協議会を、NTRL は年に３回地方区のラボ向けの協議会を開催している）</td></tr>
<tr><td>⑤新規登録の全結核患者における喀痰塗抹陽性患者の割合が 60%以上である。</td><td>DSAs における新規登録の全結核患者における喀痰塗抹陽性患者の割合は、ネグロスオクシデンタル州を除いてまだ目標値には達していない。とはいうものの、DSAs 以外の地域と比較すると成績は上昇している。
<table>
<tr><td></td><td>2002</td><td>2003</td><td>2004</td><td>2005</td><td>2006*</td></tr>
<tr><td>フィリピン全体</td><td>55.9%</td><td>55.1%</td><td>59.7%</td><td>59.5%</td><td>58.7%</td></tr>
<tr><td>マニラ首都圏</td><td>41.2%</td><td>38.6%</td><td>46.9%</td><td>44.6%</td><td>45.4%</td></tr>
<tr><td>マニラ市</td><td>26.2%</td><td>31.5%</td><td>42.6%</td><td>33.5%</td><td>54.9%</td></tr>
<tr><td>ケソン市</td><td>36.1%</td><td>22.6%</td><td>66.0%</td><td>36.8%</td><td>50.3%</td></tr>
<tr><td>ネグロスオクシデンタル州</td><td>60.1%</td><td>78.4%</td><td>79.5%</td><td>55.8%</td><td>61.4%</td></tr>
</table>
*2006 National report 1-3Q'06</td></tr>
<tr><td>⑥３回の喀痰収集率が 90%以上</td><td>３回の喀痰収集率はすべての DSAs において目標値に達成している。
<table>
<tr><td></td><td>2002</td><td>2003</td><td>2004</td><td>2005</td><td>2006*</td></tr>
<tr><td>フィリピン全体</td><td>87.9%</td><td>90.7%</td><td>90.4%</td><td>94.0%</td><td>91.1%</td></tr>
<tr><td>マニラ首都圏</td><td>96.0%</td><td>96.1%</td><td>96.7%</td><td>96.4%</td><td>97.0%</td></tr>
<tr><td>マニラ市</td><td>92.1%</td><td>90.9%</td><td>93.2%</td><td>95.3%</td><td>95.9%</td></tr>
<tr><td>ケソン市</td><td>97.9%</td><td>98.9%</td><td>98.1%</td><td>95.4%</td><td>96.4%</td></tr>
<tr><td>ネグロスオクシデンタル州</td><td>94.2%</td><td>94.8%</td><td>92.8%</td><td>90.5%</td><td>95.4%</td></tr>
</table>
*2006 National report 1-3Q'06</td></tr>
<tr><td>⑦治癒率*が 85%以上

*WHO/WPR は指標として治療成功率（TSR）を採用している。治癒率は治療成功率よりも厳しく、より高い治療成績を示す指標である。</td><td>DSAs における治癒率はネグロスオクシデンタル州を除いてまだ目標値には達成していないが国の目標値に近づきつつある。とはいうものの、治療成功率（TSR）は、世界目標の 85%を上回って既に 89%を達成している。
<table>
<tr><td>No.</td><td colspan="2">2002</td><td colspan="2">2003</td><td colspan="2">2004</td><td colspan="2">2005</td></tr>
<tr><td></td><td>CR</td><td>TSR</td><td>CR</td><td>TSR</td><td>CR</td><td>TSR</td><td>CR</td><td>TSR</td></tr>
<tr><td colspan="9">１．フィリピン全体</td></tr>
<tr><td></td><td>77.2%</td><td>88%</td><td>75.4%</td><td>88%</td><td>81.0%</td><td>89%</td><td>83.1%</td><td>90%***</td></tr>
<tr><td colspan="9">２．マニラ首都圏</td></tr>
<tr><td></td><td>73.3%</td><td>82.4%</td><td>70.3%</td><td>82.7%</td><td>75.8%</td><td>82.8%</td><td>76.8%</td><td>83.7%***</td></tr>
<tr><td colspan="9">３．マニラ市</td></tr>
<tr><td></td><td>74.8%</td><td>79.3%</td><td>75.2%</td><td>79.7%</td><td>77.0%</td><td>81.2%</td><td>78.3%</td><td>81.8%</td></tr>
<tr><td colspan="9">４．ケソン市**</td></tr>
<tr><td></td><td>70.5%</td><td>89.4%</td><td>77.8%</td><td>86.7%</td><td>77.4%</td><td>86.7%</td><td>74.8%</td><td>85.9%</td></tr>
<tr><td colspan="9">５．ネグロスオクシデンタル州</td></tr>
<tr><td></td><td>77.7%</td><td>89.3%</td><td>83.4%</td><td>88.3%</td><td>83.6%</td><td>87.9%</td><td>87.6%</td><td>91.2%</td></tr>
</table>
*2005 National report 1-3Q'05
** ケソン市に関しては、協力開始後 1 年未満であることから、プロジェクトの成果はまだ反映されていない。
*** Partial data 2005</td></tr>
<tr><td>⑧ DOTS の実施率が</td><td>DSAs のすべての RHUs にて DOTS を実施している。これは 2002 年に達</td></tr>
</table>

100%になる。	成されている。
1-3 すべての DSAs における結果と教訓を NTP に定期的にフィードバックする。	NTP は上記ハンドブックで紹介されている内容を、このたび改訂された国家結核対策ガイドライン“Manual of Procedures 2005, 4th edition”に盛り込んだ。 NTP は、ハンドブックの提唱する実地訓練を含む研修手法の有用性を見極めることを目的として、DSAs 以外の地域において研修コースを１回実施した。 NTP は、当該ハンドブックを使って NTP 管理者研修の全国展開を計画している。

（２）成果２：喀痰検査ネットワークの強化を通し、質の高い検査が全国で実現する。（検査の精度管理）

検査技術に関しては、EQA 技術研修（システム運営）ならびに基本技術研修（質の高い喀痰塗抹検査）の二種類がある。後者については、研修によって技術者の検査技術は大きく向上したことが明らかに示され、喀痰塗抹検査の質およびその結果の信頼性は向上した。EQA 研修については、NTRL 主催で地方区／市へ、そして地方区／市主催で RHUs レベルへと研修が行われている。研修完了結果として、NTP は EQA システムを開始した。

指　標	結　果
2-1 NTRL における喀痰塗抹検査に関する内部 QA によって、2006～2007 年における重大なエラーの数がゼロになる。	NTRL における重大なエラーの数は、内部 QA の実施によってゼロになった。 NTRL 内部精度管理結果より

	2004	2005	2006
重大なエラー	1.67%	０%	０%

指　標	結　果
2-2 県／特別市におけるすべての外部精度管理センターが 2007 年に機能する。	県／特別市におけるすべての外部精度管理センターが機能しているわけではない。それらのうちいくつかは機能していることは報告されているが、マニラ市・ケソン市を除く地域における EQA 活動の状況に関する情報は IDO/NTRL からは得られていない。 マニラ市およびケソン市については、EQA システムが適切に機能していることが調査団による直接観察にて確認されている。
2-3 外部精度管理センターおよび RHUs における重大なエラーの数が 2007 年にゼロになる。	全国の重大なエラーに関するデータは得られていないが、いくつかの提出されたデータによると、重大なエラーは全体の１%以下であり、それらのほとんどは、データの入力ミスによるものである。

（３）成果３：結核対策を監視するための OR 能力が向上する。（OR）

指　標	結　果
3-1 実施された OR の数	３種類の OR が実施された。
3-2 それぞれの OR に関して。	以下参照
①OR のプロトコルが作られる。	OR のためのプロトコルが作られた。

②報告書が完成し、国および地方区レベルに公開される。	すべての OR に関して、報告書は現在準備中である。
③プロジェクト終了時までに、OR の結果が NTP へと反映される。	現時点では特筆すべきものはないが、プロジェクト終了時までには、それぞれの OR の結果が提言を示す予定

４－４　プロジェクトの実施プロセス

以下の理由により、プロジェクトの実施プロセスはおおむね適切であったと考えられる。

マニラ市に位置する IDO と、モンテンルパ市にあるプロジェクト事務所の間に距離はあるものの、C/P および専門家の間のコミュニケーションは日常的な電話連絡や、また IDO が１か月から２か月に一度開催する結核対策向上計画（Quality Tuberculosis Control Program：QTBCP）会議によってよく意思疎通がなされている。毎回の QTBCP 会議において、前回会議の結果が全参加者で見直されており、プロジェクトの進捗状況は、WHO/WPRO や USAID を含む関係者によってよく把握されているといえる。QTBCP 会議は実質モニタリングシステムとして機能している。

プロジェクト実施における C/P のイニシアティブは大変高く、保健省は適切なスタッフと予算を配備した。全 18 人の C/P が IDO、NTRL など責任ある立場に配備され、さらに 74 人のスタッフが地方区や県レベルで結核対策にかかわる職に配置されている。質問票およびインタビューの結果によると、C/P の質・量は適切であった。

プロジェクトの実施を通して C/P の意識の向上が見られた。検査技師はより高度な検査技術に興味をもち、精度管理およびデータ管理の重要性を認識するようになった。結核対策調整官は DOTS の実施のみならず巡回指導の重要性を認識した。

技術移転の方法は、おおよそ適切だった。“Handbook for Quality DOTS”は有効なツールであり、DSA 全体に配布された。研修は指標の向上に寄与し、研修の実施はフィリピン側によってよく管理された。フィリピン側は巡回指導の重要性を認識し、JICA の協力なしに独力でこの指導を開始した。

EQA システムについての技術移転は、適切な研修とプロジェクトと NTP 間の協議をしながら行われた。

４－５　プロジェクト目標の達成

＜プロジェクト目標＞

質の高い NTP が持続的に運営されるようになる。

「患者発見率（CDR）が 70%以上になる」は 2004 年に達成され、2005 年も引き続き維持されている。2006 年については 70%に満たないが、これは部分的なデータであることから、今後数値が延びていくものと考えられる。

「治癒率が 85%以上になる」は、おおむね達成されている。厳密には 2005 年で 83.1%を示しており 85%には満たないが、治療成功率が 89%を示していることから、実際の治癒率は 85%を超えていると考えられる。

プロジェクト実施期間中の治癒率および患者発見率の推移を以下に示す。

	2001	2002	2003	2004	2005	2006
治癒率	73%	75%	77%	81%	83.1%*	---
治療性効率	88%	88%	88%	88%	89%*	---
患者発見率	53%	57%	61%	71%	72%	66%*

注*：2006 年部分データ
出典：NTP

第５章　評価結果

５－１　評価５項目による評価結果

５－１－１　妥当性

以下の理由によりプロジェクトの妥当性は高いと考えられる。

日本の政府開発援助において、フィリピンに対する国別援助計画では、保健セクターへの援助は重点分野とされており、なかでも結核は、家族計画、母子保健、HIV/AIDS 対策とともに、保健セクターにおける重点分野の一つにあげられている。したがって結核対策を支援する本プロジェクトは、日本の対フィリピン ODA 政策に照らして妥当だといえる。

2004 年から 2010 年における中期計画（Medium-Term Development Plan 2004-2010）において、フィリピン政府は対策を講じるべき特に重要な感染症の一つとして結核をあげており、全国規模に対応する重要分野として取り上げられている。フィリピン政府は、その対策における目標として、新規結核患者における喀痰塗抹陽性患者発見率 70％以上、治癒率 85％以上の達成を掲げている。評価調査においてこれらの目標に変更がないことが確認された。これらの指標と達成目標年は、本プロジェクト PDM２で示されたプロジェクト目標の指標と一致している。

これらの目標を達成するために、フィリピンにおける過去５年間の NTP の重点は、質の高い DOTS 療法の全国展開であった。本プロジェクトの計画は、この課題に取り組むために適切であった。

５－１－２　有効性

以下により、プロジェクトの有効性は高いと考えられる。

（１）プロジェクト目標の達成度は高いと判断される。

NTP は過去５年間ですばらしい躍進を遂げた。フィリピンでは国家目標である患者発見率 70％を達成した。この目標は“Global Plan to STOP TB 2006-2010”ならびに“Stop TB Initiative”に示される地球規模の目標と同じである。現在の治癒率 83％については、過去５年間の DOTS の実施によって伸び続けてきており、国家目標の 85％までもうすぐ手が届くところまできている。治療成功率は既に 89％に達しており、これは既に地球規模目標の 85％を超えている。したがって、NTP は地球規模の目標である結核対策目標に達している。

（２）成果はプロジェクト目標の達成に貢献している。

プロジェクトは以下の点によりプロジェクト目標達成に貢献した。

１）“Handbook for Quality DOTS”の開発および全国への配布は、巡回指導の質の向上をもたらし、DOTS 実施体制の強化につながった。

２）喀痰塗抹検査を実施する検査技師への研修を通じ、検査精度が高まり、確実に結核患者を発見できるようになってきた。

３）質の高い喀痰塗抹検査のための EQA マニュアルの開発、EQA システムの導入および確立を通じて、検査精度が担保されるシステム作りに貢献した。

４）フィリピン全国人口の８分の１を占めるマニラ首都圏全域を DSAs とし、巡回指導力強化のための研修を実施し、治療脱落者を減少させ、NCR の治療成績を向上させた。

５－１－３　効率性

成果の達成により投入は効率的に行われたと考えられる。

（１）日本側の投入

１）専門家派遣

専門家派遣は適切だった。延べ５人の長期専門家ならびに延べ 50 人の短期専門家が活動規格に沿って投入された。質問票ならびにインタビューの結果より、専門家の分野、時期、量、技量、能力はプロジェクト実施のために適切であった。

質問票およびインタビューの結果によると日本人専門家の活躍は高く評価されている。とはいうものの、プロジェクトの全体統括を行う業務主任およびプロジェクトの主要な分野である結核対策を担う専門家の２人が共にプロジェクト実施の４年目にやむを得ない事情により変更されたことがあげられる。同年に２人が代わり、後継者へ業務の引き継ぎがなされたものの、プロジェクト内日本人関係者間で中間評価結果が万全に共有されず一時的に問題が生じた。

２）機材供与

機材はプロジェクトの活動およびラボの能力をかんがみて供与された。ほとんどの機材がよく利用されており、QA ならびに顕微鏡センターの成績向上に寄与している。

検査技師は培養の技術を日本における C/P 研修で習得しているが、これらの機材の利用度を上げるためには、地方政府における試薬などのための予算が確保される必要がある。

３）日本における C/P 研修

C/P 研修は大変よく管理され、フィリピンの NTP に寄与している。これまでに関係者の協議によって選ばれた 13 人の C/P が研修を受け、ほぼ全員の研修員が結核対策関連の職業を続けて結核対策に貢献している。13 人のうち１人のみが研修終了後に退職し、海外労働者となった。

インタビューによると、研修内容は技術向上に有効であり、他国からの参加者との議論はそれぞれの結核対策の状況を見直すことで新たな考え方をもつにいたる良い経験になったとのことであった。

４）運営コスト負担

国内研修は基本的には DOH の予算で実施された。プロジェクトからの補助としては、研修教材の印刷費など DOH 予算が不足している分を補ったにすぎない。これらの補助費用は小さいが、そのコストパフォーマンスは高く、研修にもたらした正の効果は大きかった。

技術ある人材の海外流出は、フィリピンにおけるどのセクターでも深刻な問題であり、本件に関してもまた一部の研修員が国内研修修了後に海外労働者になるために離職してしまうことは残念なことである。NTP では離職者が出てもその数を上回るだけの研修を実施してきている。

（２）フィリピン側の投入

１）C/P の配置

全員で 18 人の責任ある立場の C/P が IDO ならびに NTRL に配置されている。また、加えて地方区および県のレベルで 74 人の結核対策官が配置されている。質問票およびインタビュー結果から C/P の質および量は適当であると判断される。

２）運営費

DOH は NTRL に対して日常業務に十分な予算措置を行っている。研修などいくつかの場合において、プロジェクトは教材の印刷費などをサポートしている。

３）プロジェクトオフィスおよびオフィス機材の提供

プロジェクト事務所は NTRL の１階に位置し、その施設および環境は適切である。

（３）ドナー調整

プロジェクトは、PACT 会議、QTBCP 会議および Global Fund for HIV, TB and Malaria の分科会である CCM（Country Coordination Mechanism :（世界エイズ・結核・マラリア対策基金の）国別調整メカニズム）会議などにおけるドナー調整を通じてプロジェクト効果を高めた。

WHO/WPRO、USAID、Medicos del Mundo、そして JICA が結核対策に取り組んでおり、協力内容の重複を防ぎ、協調を計るためのドナー調整は DOH が定期的な PACT 会議、QTBCP 会議および CCM 会議で行った。

５－１－４　インパクト

プロジェクトの実施によって以下のようなインパクトが認められ、2010 年の上位目標達成の可能性は高い。

（１）上位目標達成への貢献

以下の２点により、プロジェクトの上位目標達成への貢献度は高いと判断される。

第一に、プロジェクト DSAs は最終的にはマニラ首都圏全体に拡大され、マニラ首都圏全体の治療成績の向上を促した。マニラ首都圏にはフィリピンの全人口の約８分の１が居住していることから、首都圏全体の治療成績の向上は国全体の結核状況の底上げを図るものと位置づけられる。大都市では複雑な社会経済的要因により治療脱落者が多いことが結核蔓延につながる脆弱な点であるが、本プロジェクトではその治療脱落者の低下により治癒率を向上させたことは評価できる。

第二に、結核ラボの検査結果への信頼度を向上させ、本プロジェクトを通して巡回指導および QA システムの標準化を図ったことが、治療成績の向上に大きく寄与した。

（２）波及効果

プロジェクトで研修を受けた NTRL スタッフが、JICA の第三国研修（JICA 二国間協力の成功に基づく人的資源開発に関する地域的技術協力）の実施に貢献した。第三国研修には ASEAN 諸国から結核対策に携わるスタッフが参加した。喀痰塗抹検査に関する基礎研修が３バッチ、QA 研修が１バッチ実施された。

研修員にとって第三国研修の効果は高く、ベトナムからの研修生は研修終了後に、独自で研修を企画し、自国のグローバルファンドから予算を確保して何人かの検査技師を研修

生としてマニラに派遣したとのことであった。

５－１－５　自立発展性

プロジェクトの自立発展性は、以下の理由によってある程度確保されると考えられる。

（１）中央政府のコミットメントが強い

プロジェクト成果の自立発展のために中央政府のコミットメントが不可欠であることはいうまでもない。フィリピンの NTP へのコミットメントは大変強く、NTP の改訂版であり、本プロジェクトでの実施方法のエッセンスの含まれる“Manual of Procedures 2005, 4th edition”に沿って結核対策を引き続き継続していくと考えられる。

近年、Global Fund, Gates Foundation、その他の二国間協力など、結核対策のための予算の確保が容易な時代になり、NTP への他国の金銭的サポートは継続されると考えられる。プロジェクトは、持続発展性をにらんで上記のドナーや国際機関と協調し、世界的な標準化戦略に基いて計画され、実施された。

DOH は、三種類の協議会の開催を通じ、定期的な全国の情報の把握に努めている。具体的には、DOH 開催の地方区向けの協議会（年に２回)、地方区開催の県向けの協議会（年に３回)、NTRL 開催の地方区ラボ向けの協議会（年３回）が開催されている。

各種研修および結核対策従事者間の情報共有を目的として行う結核ワークショップの費用はこれまで NTP が確保してきたことから、プロジェクト終了後も NTP が確保していけると考えられる。他方、地方政府はその疾病状況や地方政府の方針などにより、必ずしも結核対策への意識が高いわけではない。地方政府のコミットメントは PDM２においては外部条件ではあるものの、保健セクターリフォームおよび地方分権化を受けて、結核対策に関して重要な要素となった。実際にある地域では予算がないゆえに人材を確保できず、ワークショップや研修を開催できず、巡回指導もできない状況がみられた。今後の改善を期待したい。

（２）技術的には自立発展が十分可能である

フィリピンでは DOTS は全国展開され、NTP は大きく改善された。NTP は、巡回指導強化が治癒率の向上に効果をあげることを認識していることから、引き続き巡回指導の強化を通じて質の高い DOTS 実施の全国展開を継続する予定である。質の高い DOTS の実施に係る自立発展性は、プロジェクトの実施を通して現状分析方法、問題解決手法、活動の評価方法などについて NTP は十分な知識および経験が得られていることから高く期待される。

また、EQA に関しては EQA を実施するための州・市・CHD での研修は終了している。地方政府からの予算割当および人材不足等の点で懸念も残るものの、NTP が特に強いコミットメントを有する EQA システムは機能しており、また NTRL におけるメジャーエラーレートも内部 QA を通じて 2004 年の 1.67％から 2005 年および 2006 年は０％と大変うまく進んでいることなどから自立発展性は十分期待できる。なお、プロジェクト活動を通して NTP が基礎的な検査技師の研修を独力で行う能力を備えた点は、高く評価すべきと思われる。

OR の実施に関しては、現時点にて全３種類について最終化の段階であり、現在報告書がまとめられている。プロジェクトの活動を通じ NTP は薬剤耐性結核調査の実施における中心的な役割を果たし、また NTP 実施のツールとしての OR の重要性を認識するようになった。NTP は OR のテーマを自ら提案できるようになり、実際にいくつかの OR を計画している。したがって、OR に関してもまた自立発展性は高いと考えられる。

５－２　貢献・阻害要因の総合的検証

貢献・阻害要因については、５項目の各項について記述したため、ここではすべての項目に共通して見られた主要なものについてまとめる。

本プロジェクトのパフォーマンスを高めた主な要因には、フィリピン中央政府の高いコミットメントとイニシアティブおよび円滑な他ドナーとのコミュニケーションがあげられる。

他方、同プロジェクトのパフォーマンスを限定した主な要因には、フィリピンの地方分権化の流れがある。中央政府のコミットメントは非常に高いものの、中央政府の地方政府に対する強制力がないことから、県・市レベルにおける結核対策に対する高いコミットメントや十分な予算措置を確保すること困難であり、徹底できなかった。

５－３　結　論

フィリピンの NTP 全体は着実に進歩しており、治癒率に関しては現時点で 2005 年 83%という数字であるが、最終的には 85%にほぼ到達可能と判断される。WHO が定める国際基準では治療成功例も含めて 85%が目標とされており、この数字に関しては現時点で 89%と十分クリアしている。この結核対策の成績向上は、関係機関の適切な支援があったもののフィリピン側の多大なる自助努力の成果である。今回の調査を通してフィリピン側の多大なる努力・熱心な活動・強いコミットメント・オーナーシップなどは高く評価されるべきものと思われた。さらに、NTP のすべてのレベルにおけるスタッフの能力の高さも特筆されるべきと思われた。

その中で特に以下の活動が JICA プロジェクトの活動がこの成績向上に寄与していると判断された。

・DOTS 全体のモニタリングのためのハンドブックの作成
・上記ハンドブックに基づき結核対策担当官が実施する巡回指導への技術指導
・検査技師の喀痰塗抹検査技術の向上
・同検査に関する QA システムの構築およびマニュアル作成

これらの活動は、プロジェクト開始当初にフィリピン側が抱えていた重要な課題である「質の高い DOTS の拡大」にいずれも重要な役割を果たしており、フィリピン側の問題意識に答えるべく適切な活動であったと判断される。これらの活動は、プロジェクト開始当初にフィリピン側が抱えていた重要な課題である「質の高い DOTS の拡大」にいずれも重要な役割を果たしており、フィリピン側の問題意識に答えるべく適切な活動であったと判断される。

（１）成果１について

プロジェクトの行った現場指導を含むモニタリング・巡回指導強化方法の有用性は、成果に明確に表れている。中間評価において、これらの成果を全国展開すべく報告書等にまとめることが提言されていた。現時点までこのような活動はなされていないが、以下の点におい

てプロジェクトの行った方法はNTPに高く評価されていることがわかる。

1)プロジェクトで作成した巡回指導のハンドブックが、今後全国で配布される予定であり、この内容が最新の国家結核対策ガイドラインにも盛り込まれている。

2）上記ハンドブックの活用に係る結核対策担当官への導入研修をNTPは自ら計画し、実施した。

3）NTPは今後プロジェクト作成のハンドブックに沿ったモニタリング・巡回指導にかかわる全国での研修を計画している。このようなNTP側の積極的にプロジェクト活動から学ぼうとする姿勢は随所に見られており、DOTS展開におけるプロジェクト終了時の自立発展性は十分期待できる。

（2）成果2について

EQA実施のための州・市・CHDでの研修は終了し、目標を達成している。地方政府からの予算割当および人材不足等の点で懸念も残るものの、NTPが特に強いコミットメントを有するEQAシステムにおいて、メジャーエラー発生率が極めて低いことから、プロジェクト終了後の自立発展性は期待できる。なお、プロジェクト活動を通してNTPが基礎的な検査技師の研修を独力で行う能力を備えた点は、高く評価すべきと思われる。

（3）成果3について

3つのORは終了し、現時点でリポートの作成中の状態である。これらの活動を通してNTPは結核対策を向上させる有用な手段としてのリサーチの重要性を認識するにいたっている。リサーチを立案・計画する能力は向上し、実際に自らいくつかのリサーチを開始するにいたっている。

第６章　提言と教訓

６－１　提　言

（１）NTP は、全国においてモニタリング・巡回指導を強化することにより、質の高い DOTS を維持していくことが必要である。このためには、プロジェクトによるハンドブックに関するオリエンテーション・研修が必要である。

（２）限られた財源を有効利用するために、NTP が今後も関係機関間の協調を調整していくことが重要である。

（３）DOH および地方政府は、結核対策関連の十分な人材と予算の確保のために、唱導活動（Advocacy）を継続して行う必要がある。

（４）NTP は、結核対策向上のために EQA システムも含めた情報収集システムを強化するように努力するべきである。

（５）プロジェクトで設定した重点支援地域で結核対策に携わるスタッフのうち、研修を受講していない者に対しては研修を実施しなければならない。その際、プロジェクトは技術支援を行うべきと思われる。

（６）プロジェクトは残りの活動期間内も可能な限り EQA システムの実施体制の強化に向け NTRL を支援すべきと思われる。

（７）「全国薬剤耐性調査」「ケソン市における検査助手への喀痰塗抹検査研修の評価」および「ケソン市における地区ヘルスチームへのモニタリング・巡回指導研修の評価」の３つのリサーチに関して、プロジェクト期間内に終了させ、結果を NTP へフィードバックする必要がある。

６－２　教　訓

（１）EQA 体制のモデルを特定地域で構築し、それを全国へ展開するうえでは人員配置、予算措置の確保を担当する地方行政のコミットメントが前提条件になる。そのためには全国展開する段階で地方行政に対して啓発を行うのではなく、日ごろからの働きかけが重要となる。また、全国展開を確固たるものにするためには規定等を制定するよう国レベルから地方レベルまで通して啓発することも一案として考えられる。

（２）プロジェクト運営上の課題を解決するにあたり、主要なプロジェクト専門家の交替は最低限に抑える必要がある。また、交替が回避不可能な場合においては、情報・認識の共有を図り専門家が蓄積した経験や C/P との信頼を最大限に引き継ぐ必要がある。

付　属　資　料

１．M/M・合同評価報告書
　　〔PDM２（Annex-1）含む〕

２．DOH 組織図

３．NTRL 組織図

４．DOTS 実施組織図

５．評価グリッド

MINUTES OF MEETINGS
BETWEEN THE JAPANESE FINAL EVALUATION TEAM
AND
THE AUTHORITIES CONCERNED OF THE GOVERNMENT OF THE REPUBLIC OF THE PHILIPPINES ON
JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR QUALITY TUBERCULOSIS CONTROL PROGRAMME

The Final Evaluation Team (hereinafter referred to as "the Team"), organized by Japan International Cooperation Agency (hereinafter referred to as "JICA") visited the Republic of the Philippines (hereinafter referred to as "the Philippines") from 11 to 26 February 2007. The purpose of the visit was to evaluate the activities in line with the achievements made so far by the Project for Quality Tuberculosis Control Programme (hereinafter to as "the Project")

During its stay in the Philippines, both the Team and Authorities concerned of the Philippines (hereinafter referred to as "both sides") had a series of discussions and exchanged views on the Project. Both sides jointly assessed the activities and evaluated the achievement based on the Project Design Matrix (hereinafter referred to as "PDM")

As a result of the discussions, both sides agreed upon the matters in the document attached hereto and the results of evaluation were complied in the Joint Evaluation Report attached hereto with mutual understanding

Manila, February 26, 2007

Mr. Kenzo Iwakami
Deputy Resident Representative
Japan International Cooperation Agency,
Philippine Office

Dr. Ethelyn Nieto
Undersecretary
Department ofHealth
The Republic of the Philippines

(witnessed by)

Dr. Katsunori Osuga
Chief Advisor
Project for Quality Tuberculosis Control Programme

Dr. Jaime Lagahid
Director
Infectious Disease Office
National Center for Disease Prevention and Control
Department of Health
The Republic of Philippines

ATTACHED DOCUMENT

1. Introduction

Both sides and the Project have reviewed the Final Evaluation Report, initially prepared by the Team, based on the interviews and data analysis, the presentation by the Project and the discussions with the related authorities.

2. Summary of the Evaluation

National Tuberculosis Programme (NTP) has achieved great success during the past 5 years. It has reached the Case Detection Rate of 70% which is set as the national target as well as the global target which is shown in Global Plan to STOP TB 2006-2010 and Stop TB Initiative

As for the current cure rate of 83%, this has continuously progressed in the last 5 years of DOTS implementation and is nearly the approaching national target of 85%. The treatment success rate has already reached 89% which is higher than the global target of 85%. Thus, it can be concluded that NTP has successfully achieved the global target of TB control. Although there has been adequate assistance by related organizations, this success is for the most part dependent on the tremendous effort by the Philippine Government (Department of Health and Local Governments).

The Project has contributed to this success especially by

- Establishing strong coordination among partners concerned through the leadership of NTP
- Developing "Handbook for Quality DOTS"
- Conducting trainings of TB coordinator to strengthen their abilities for monitoring and supervision in the directly supported areas, where improvement is still needed
- Improving cure rate in Manila city especially as a result of decreased defaulter rate through above mentioned activities
- Conducting training of laboratory technicians for sputum smear examinations which plays an important role in TB control program
- Introducing and establishing EQA system including the development of EQA manual to enhance the quality of sputum smear examinations

The main focus of the past five years of TB control program in The Philippines was to expand quality DOTS nationwide. The design of the Project was suitable to address this agenda.

For output 1: Quality DOTS implementation is ensured through capacity building activities and strengthening monitoring and supervision system.

The project activities clearly indicated high efficiency and effectiveness of strengthening supervision and monitoring system in enhancing the NTP. Following facts indicate that the method used by the project which included on job training for supervisors has been highly rated by DOH and partners.

- Although the handbook for quality DOTS made by the project has been limitedly distributed, NTP included the contents of this handbook in the newly revised and published national guideline "Manual of Procedures 2005, 4th edition".
- NTP conducted one training course outside of the DSAs to determine the operational feasibility of the handbook as well as the training method used, eg. on-the-job training.
- NTP is planning for the trainings of NTP supervisors nationwide using this handbook.

For output 2: Quality laboratory services become available nationwide by the formation of the network

For establishing the EQA system, the EQA trainings were completed in all provinces, cities and CHDs as planned. Preparation stage of EQA system has been completed, but implementation stage of EQA still remains a challenge. The existing problems are as follows.

- Shortage of human resources
- Limited budget allocation from local government units to conduct monitoring and supervision
- Weak data management and analysis

It is confirmed that NTP has the capacity to address these problems and make the Project more sustainable.

It should be highly evaluated that NTP attained ability to plan and conduct in-country trainings for sputum smear examinations by themselves as a result of activities conducted by NTP with assistance of the Project.

For Output 3: Capacity to plan and conduct operational researches, such as Nationwide Drug Resistance Survey (DRS), to monitor the program is strengthened

All operational researches are still for finalization of the report at this stage. Through the project activities NTP came to recognize the importance of operational research as a tool to improve the TB control program. NTP has improved its ability to identify research agenda, and planned several operational researches.

In conclusion, relevance, effectiveness and efficiency of the Project can be highly rated. The achievement of the NTP indicates strong impact of the Project. Although several challenges still remain,

with current performance of the NTP and partners supporting it, it is confirmed by both side that sustainability after the completion of the Project could be highly expected.

Starting in 1992 with the introduction of the DOTS strategy in Cebu, technical assistance in TB control by JICA has expanded to the entire nation of the Philippines for the past 15 years. Among the significant achievements, standardization of the TB control program (eg. Development of guidelines and methods) is listed as one of the most important result the Japanese technical collaboration has achieved.

3. Recommendations

The team was deeply impressed by the tremendous efforts, enthusiastic activities and strong commitment and ownership by NTP in all aspects of the TB control program. Also, excellent abilities of personnel at each level deserve special mention. The Team would be very grateful if recommendations described below will eventually bring certain additional development in TB control program in The Philippines.

- NTP should continue to sustain quality DOTS implementation by strengthening monitoring and supervision nationwide. There should also be technical support by the Project to the NTP workers on orientation/trainings for the handbook.
- NTP should continue to maintain its coordination mechanisms among related organizations in order to maximize utilization of limited resources
- DOH and LGUs should continue their advocacy activities to secure sufficient human and financial resources for TB control.
- NTP should explore support from other external organizations to enhance TB control activities.
- NTP should try to strengthen its information system including those related to EQA activities to better analyze the implementation of the TB control programme.
- The Project should undertake the joint monitoring and supervision of the DSAs together with other partners such as WHO, USAID and Global Fund partners.
- The Project should continue to provide technical assistance through training for the remaining untrained NTP staff in the DSAs.
- The Project should assist NTRL to strengthen EQA implementation.
- The Project should finalize all three operational researches (*"National Drug Resistance Surveillance on Tuberculosis in the Philippines", "Evaluation of Training on Sputum Smearing and Staining for Laboratory Aides in Quezon City" and "Evaluation of Monitoring and Supervisory Training for District Health Team in Quezon City"*) and provide proper feedback to NTP.

Attached: Joint Evaluation Report

JOINT EVALUATION REPORT
ON JAPANESE TECHNICAL COOPERATION
FOR
THE PROJECT FOR THE QUALITY TUBERCULOSIS CONTROL PROGRAMME

26 February 2007

JAPAN INTERNATIONAL COOPERATION AGENCY JAPAN

AND

DEPARTMENT OF HEALTH (DOH), REPUBLIC OF THE PHILIPPINES

Abbreviation

CDR	Case detection Rate
CHD	Center for Health Development
CHOs	City Health Officers
CTRL	Cebu Tuberculosis Reference Laboratory
DOH	Department of Health
DOTS	Directly Observed Treatment, Short-Course (The internationally recommended strategy for TB control)
DRS	Drug Resistance Surveillance
DSAs	Directly Supported Areas
EQA	External Quality Assurance
IDO	Infectious Disease Office
JICA	Japan International Cooperation Agency
LGUs	Local Government Units
NCDPC	National Center for Disease Prevention and Control
NEC	National Epidemiology Center
NTP	National Tuberculosis Control Program
NTRL	National Tuberculosis Reference Laboratory
ODA	Official Developmental Assistance
OR	Operational Research
PACT	Project Assistance to Control Tuberculosis
PCM	Project Cycle Management
PDM	Project Design Matrix
PPMD	Public Private Mixed DOTS
QTBCP	Quality Tuberculosis Control Program
RHUs	Rural Health Units
RIT/JATA	Research Institute of Tuberculosis/Japan Anti-Tuberculosis Association
RITM	Research Institute of Tropical Medicine
TB	Tuberculosis
TSR	Treatment Success Rate
USAID	United States Agency of International Development
WHO/WPRO	World Health Organization/Western Pacific Regional Office

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1. Introduction

1.1. Evaluation Team

The Final Evaluation was carried out from February 11 through 27, 2007 by Japan International Cooperation Agency (JICA) for the Project for Quality Tuberculosis Control Programme (hereinafter referred as "the Project"). The following evaluation team (hereinafter referred as "the team") assessed the progress made in the past four and a half years and developed this Evaluation Report in collaboration with the Project implementers.

The members of the Japanese Evaluation Team were as follows:

Table 1-1 Member of the Japanese Evaluation Team

	Name	Designation	Affiliation	Duration of Stay
1	Dr. Mitsuo Isono	Tuberculosis control	Special Advisor, Group III (Health I), Human Development Department, JICA	Feb. 18-27, 2007
2	Mr. Tsuyoshi YUSA	Evaluation Planning	Staff, Infectious Disease Control Team, Group IV, Human Development Department, JICA	Feb. 18-27, 2007
3	Ms. Nami HIRAI	Evaluation Analysis	Consultant, Pacific Consultants International	Feb. 11-27, 2007

1.2. Background and Summary of the Project

1.2.1. TB situation

The Philippines has been listed as one of the 22 Tuberculosis (TB) high burden countries ranking 9th in terms of its incidence in the world and 3rd in the Western Pacific Region of World Health Organization (WHO). The TB statistics in the Philippines show TB as the 6th leading cause of morbidity and mortality. National Tuberculosis Control Program (NTP) is one of the topmost prioritized programs of the Department of Health (DOH) in the Philippines. Through the Program, the Philippines have achieved full coverage of Directly Observed Treatment, Short-course (DOTS), which is the internationally recommended strategy for TB control.

1.2.2. JICA's assistance for TB control in the Philippines

Public Health Development Project (September 1992-August 1997)

JICA started its technical cooperation project with the objective to improve the public health in Cebu Province. A model was developed to test the feasibility and effectiveness of the new NTP policies and revised guidelines which followed the new "DOTS strategy" developed by WHO.

Major activities conducted in the project include formulation of new guidelines for TB control in collaboration with DOH, and construction of the Cebu Tuberculosis Reference Laboratory to play a central role in the TB laboratory network.

The project detected nearly 3,000 smear positive TB cases a year (100/100.000population) of which 82.4% was cured, reaching close to 85% target cure rate set by NTP. The joint evaluation conducted by DOH, JICA and WHO in 1997 confirmed that the project showed an effective model of TB control and suggested that its activities be expanded to the rest of the country.

Tuberculosis Control Project (September 1997-August 2002)

The TB Control Project was formulated in 1997 as the second phase of the JICA project. The project was expected to expand Cebu's experience to the rest of the provinces and cities in Region 7, Laguna Province in Region 4a, Bulacan and Nueva Ecija in Region3, Rizal in Region4A and Eastern Samar in Region 8.

In these project areas, the NTP target of 85% cure rate was accomplished within two years of the project implementation. Other achievements of the project include development of the quality control system of the sputum smear microscopy, establishment of the National Tuberculosis Reference Laboratory (NTRL) constructed with the Grant Aid of the Japanese Government.

Quality Tuberculosis Control Program (September 2002-August 2007)

The current Project started on September 1 2002, with cooperation period of five years. The Project Purpose is set as "Quality National Tuberculosis Program (NTP) is sustainably managed". As the current Project is in the third phase of JICA's technical cooperation for TB control in the Philippines, the focus is on the sustainability of NTP compared to the previous projects. To achieve this Project Purpose, three Outputs are set; "quality DOTS implementation", "nationwide laboratory network" and "operational research".

2. Evaluation Process

2.1. Methodology of Evaluation

The Evaluation Team conducted surveys at the project sites at DOH, NTRL, and two of the directly supported areas (DSAs) (namely, Quezon City and Manila City) and interviewed those involved in TB control, such as NTP Manager, TB coordinators, medical technologists, laboratory assistant, public health nurses, and TB patients. Information was also obtained from WHO, United States Agency of International Development (USAID) as well as the Japanese experts from the Japan Anti-Tuberculosis Association, who have been involved in the Project implementation. Based on "JICA Evaluation Guideline for Project Evaluation (revised: February 2004)", the team assessed and evaluated the Project with the Evaluation Grid developed from the viewpoints of evaluation criteria based on the Project Cycle Management (PCM) method. In the end, the Team made a set of recommendations.

Accomplishment of the Project in terms of inputs, activities, and outputs were assessed in accordance with the Project Design Matrix 2 (PDM2) as shown in Annex-1.

2.2. Five Criteria of Evaluation

Both sides reviewed all activities and achievements, and evaluated the Project based on the following five aspects:

1) Relevance

Relevance of the Project is reviewed as the validity of the Project purpose and the overall goal in connection with the development policy and needs of the Philippines and participating countries as well as Japan's overseas development assistance (ODA) policy.

2) Effectiveness

Effectiveness is assessed by evaluating the extent to which the Project has achieved and contributed to the beneficiaries.

3) Efficiency

Efficiency of the Project implementation is analysed focusing on the relationship between outputs and inputs in terms of timing, quality and quantity.

4) Impacts

The question on what changes, whether positive/negative or anticipated/unanticipated, have been produced as a result of the implementation of the Project.

5) Sustainability

Sustainability of the Project was forecasted in organizational, financial and technical aspects by examining the extent to which the achievement of the Project would be sustained or expanded after the Project is completed.

2.3. Data Collection Method

Both quantitative and qualitative data were collected for analysis. Data collection methods used by the Team were as follows:

- Review of documents (R/D, PDM2 revised in December 2005, project documents etc.)
- Questionnaires (NTP staff at local and central levels, Japanese experts, other donors)
- Interviews (NTP staff at local and central levels, Japanese experts, other donors)
- PDM workshop
- Direct observation including field visits

3. Achievement and Implementation Process

3.1. Inputs

3.1.1. Japanese Contribution

(1) Experts

- Long-term experts*: A total of five (5) long-term experts have been provided. They include the Chief advisor, Project Coordinator, and expert on Tuberculosis Control.
- Short-term experts*: A total of fifty (50) short-term experts have been provided. The fields of short-term experts are as follows: Chief Advisor, TB Control, Project Coordinator, TB Control Laboratory, Operational research (OR), TB Control, and Equipment Maintenance.

*: The experts provided after November 2004 are categorized into "short-term experts" following the change of implementation system of JICA.

The list of experts is shown in Annex-2.

(2) Provision of Equipment

Equipment worth approximately 41.7 million Philippines pesos in total has been provided as of December 2006. The list of provided equipment is shown in Annex-3.

(3) Training for Counterparts in Japan

A total of thirteen (13) Philippine health staffs as project counterparts have been trained under the counterpart training scheme in Japan at the Research Institute of Tuberculosis, Japan Anti-Tuberculosis Association (RIT/JATA) in the fields of TB control, program management and TB laboratory.

The list of these trainings is shown in Annex-4.

(4) Local cost support including the In-country Training

For the effective and smooth implementation of the Project, a total amount of approximately 35.6 million Philippines pesos has been provided as of December 2006. It included support for health worker trainings in the Philippines. The list of the trainings is shown in Annex-5 and operational expenditures is shown in Annex-6.

3.1.2. Filipino Contribution

(1) Identification of counterparts personnel

A total of eighteen (18) responsible persons have been identified to implement the Project at Infectious Disease Office (IDO), National Center for Disease Prevention and Control (NCDPC), Research Institute of Tropical Medicine (RITM), and NTRL on the Philippine side. In addition, directors at Centres for Health Development (CHD), NTP medical coordinators, NTP nurse coordinators, and NTP medical technologist at CHDs nationwide as well as Provincial/City Health Officers, Provincial/City Medical Coordinators, Provincial/City Nurse Coordinators, and Provincial/City Medical Technologists at selected provincial/city health offices have been identified as counterparts of the Project.

The list of counterpart personnel is shown in Annex-7.

(2) Office space for experts

The Project office for Japanese experts has been provided on the 1st floor of NTRL building.

(3) Allocation of budget

The Project has been supported by the budget of DOH and allocation by RITM. The breakdown of expenses each year is shown in Annex-5.

3.2. Achievement of Activities

Activities consist of the following fields as shown in the PDM2, which was revised in December 2005 after review and discussions between Philippine and Japanese sides.

Activities	Achievement
1-1 Develop Monitoring and Supervision Manual.	This activity was conducted through development of "Handbook of Quality DOTS". The handbook contains guidelines on monitoring and supervision.
1-2 Distribute Monitoring and Supervision Manual to all regions and conduct orientations.	The handbook mentioned above was distributed to all regional NTP coordinators but was not further disseminated to the more peripheral levels such as province and cities due to fund limitation. Orientation of the handbook was conducted in DSAs except for Negros Occidental.

1-3 Review the TB control performance of province/chartered city nationwide and decide the DSA where the performance of TB control is not satisfactory with NCDPC and CHDs.	The project reviewed the TB control performance based on the information from DOH. DSAs were decided through discussions with IDO/DOH using the bottom-up approach.
1-4 Conduct a situational analysis of the DSA on TB control activities and its environment with CHD and NCDPC.	The project conducted situational analysis (baseline survey) for the selected DSAs, then analysed the actual situation of DSAs and environment around TB control. The acquired information was shared amongst the stakeholders.
1-5 Organize refresher trainings to the province/chartered city NTP coordinators and staff of health centers based on the findings of the above analysis.	Refresher training has been carried out based on the situational analysis by NTP and requirement of provincial level.
1-6 Strengthen NTP monitoring and supervision by province/chartered city NTP coordinators in DSA.	The monitoring and supervision of NTP has been strengthened through feedback meetings, trainings with the handbook made by the Project and on-the-job trainings.
1-7 Strengthen NTP monitoring and supervision by NCDPC, NTRL and CHDs through joint monitoring activities and regional workshops.	Consecutive to the M/S training for NTP coordinators, joint monitoring and regional workshops has been conducted in DSAs.
1-8 Strengthen NTP to coordinate activities among international partners at PACT meeting.	Project Assistance to Control Tuberculosis (PACT) meeting was held until 2005. After several donors phased out from TB control activities in the Philippines, IDO/DOH has convened Quality Tuberculosis Control Program (QTBCP) meetings regularly (held every 1 to 2 months) for coordinating TB control programs amongst donors. All minutes of meetings are shared amongst stakeholders in the next meeting.

Activities	Achievement
2-1 Strengthen capacity of the training management in NTRL, CTRL and some regional laboratories.	The Project developed the manual for Quality Assurance System entitled "*Quality Assurance for Sputum Smear Microscopy*". NTRL attained the capacity to plan training program through the project activities. NTRL started to plan training programs based on the requirement of provinces and staff skill information gathered by NTRL.
2-2 Conduct EQA trainings to all CHD Regional NTP Coordinators and Regional medical technologists concerned.	All planned External Quality Assurance (EQA) trainings were conducted by July 2006 including the trainings in 9 provinces which had been planned to be implemented in 2005.
2-3 Set up a pilot area (one province/chartered city per region) to introduce EQA system at provincial level.	One province per Region were selected to set up as a pilot area for the implementation of the EQA system.

2-4 Train the province/chartered city NTP Coordinators and controllers (medical technologists at Quality Assurance center) in pilot areas in collaboration with NTRL and CTRL.	In-country QA courses were conducted using the manual of *"Quality Assurance for Sputum Smear Microscopy"* mentioned above. QA training course for Regional level was conducted by the Project. Rural Health Unit (RHU) level QA in the Pilot provinces was conducted by the Project in 2004 in collaboration with NTRL and CTRL. In addition, training for QA centers, province level, for pilot area was conducted by WHO.
2-5 Strengthen CHD to monitor EQA activities at QA Centers through monitoring activities and national consultative workshop.	In some areas, CHD monitored EQA activities based on the report of QA centers along with the EQA manual mentioned above. NTRL convenes consultative meetings for regional laboratory staffs 3 times a year in order to strengthen monitoring capabilities of CHDs.
2-6 Expand EQA system in two to four provinces/chartered cities per region annually in accordance with the developed criteria for expansion.	EQA system was expanded in two to four provinces/chartered cities per region annually. Expansion provinces were selected based on the agreed criteria and with the Project's advice.

Activities	Achievement
3-1 Develop the protocol for DRS in collaboration with other partners such as WHO.	The protocol for Drug Resistance Surveillance (DRS) was developed by IDO and NTRL of the DOH with assistance of WHO and JICA experts in 2005.
3-2 Conduct DRS based on the protocol and analyze the collected data with the steering committee.	DRS was conducted based on the Protocol established by IDO/DOH, NTRL, National Epidemiology Center (NEC), WHO and JICA. Collected data is under analysis by NEC and are still for finalization of the report.
3-3 Feedback the results of the DRS to national/international partners through workshops and/or international conference.	Feedback has not been made yet, since DRS is on the finalization stage. The results will be fed back accurately to NTP after finishing the report.
3-4 Reflect the findings of OR to improve the NTP policy.	All three ORs *("National Drug Resistance Surveillance on Tuberculosis in the Philippines", "Evaluation of Training on Sputum Smearing and Staining for Laboratory Aides in Quezon City" and "Evaluation of Monitoring and Supervisory Training for District Health Team in Quezon City")* are still for finalization at this stage.
3-5 Assess needs of OR to improve the NTP policy and develop the protocol with holding workshops/seminars, and implement OR as same as 3-1 to 3-4.	The ORs implemented were decided through discussions among IDO/DOH, Manila City, Quezon City, NCR and the Project by considering the needs of NTP, avoiding duplication with other ORs and its relevance to JICA's Project.
3-6 Strengthen capacity of NTP staff in the assessment of needs, planning and procedures through conducting actual operational research with technical guidance such as holding workshops and providing textbook / reference materials.	NTP staff recognised the necessity and importance of OR and started to plan the protocol. NTP planned 3 themes for OR which are expected to be covered by the Global Fund.

3.3. Outputs

The results of outputs are summarized below.

Output 1: Quality DOTS implementation is ensured, through capacity building activities and strengthening monitoring and supervision system.

Indicator	Results
1-1 Monitoring and supervision manual is developed and distributed to at all regions.	"Handbook of Quality DOTS" as monitoring and supervision manual was developed aiming at quality improvement of DOTS. This handbook describes detailed methods along with actual procedure of monitoring and supervision in order to cope with problems on site; ie to find problems, to analyze reasons, to find solution, to feed back. Significance of handbook as textbook and instructors manual has been revealed by trainees who underwent the training course using this handbook. Although limitedly disseminated to DSAs. NTP continues to disseminate in non-Project sites and provide M/S to the areas. In addition, the essence of the handbook was introduced to "Manual of Procedures 2005, 4th edition", and DOH has started already to distribute and introduce it nationwide since January 2007.
1-2. all the provinces /chartered cities where the Project has directly strengthened monitoring and supervision (Directly Supported Areas, DSAs) attain and maintain all the target listed below in 2007.	See followings;
(1) Monitoring and Supervision manual is distributed to all the RHUs and utilized in the region	Orientations of how-to-use the handbook was conducted in DSAs except Negros Occidental. The Handbook is a useful and understandable tool and it is utilized well at the region and district level. However, it is still under promotion at the RHU level.
(2) 100% of RHUs, and provinces and CHDs submit the reports to the above levels within one month after deadline.	Almost all provinces and CHDs submit the reports to the above levels. Concerning RHUs' submission situation, information was not obtained. Almost a ｜｜ of the reports are submitted within one month after deadline.
(3) In 100% of DSAs TB Coordinators, including District Coordinators/Supervisors, make regular supervisory visits to each RHU at least quarterly.	District coordinators implement quarterly monitoring not only TB. City health coordinators conduct direct M/S based on the result of the district monitoring report, in Manila city and Quezon city. As for Negros Occidental, the Project has not followed up the information concerning this matter. Almost all TB coordinators at the DSAs including coordinators/supervisors conduct regular supervisory visits to each RHU quarterly except for Negros Occidental which has financial difficulties. NTP coordinators in Negros Occidental, however, use every opportunity for supervision even when the visits are made for other purposes.

<table>
<tr><td>(4) Provinces receive regular supervision and advisory support from CHD and DOH</td><td>Regions convene Consultative Meeting for Provinces twice per year. (DOH convenes Consultative Meeting for Regions 3 times per year, NTRL convene Consultative Meeting for Regional laboratories 3 times per year)</td></tr>
<tr><td>(5) Smear positive proportion among the newly registered pulmonary TB cases is 60% or more.</td><td>The target set for smear positive proportions have not been achieved in DSAs except for Negros Occidental. However, there has been certain progress.

<table>
<tr><td></td><td>2002</td><td>2003</td><td>2004</td><td>2005</td><td>2006*</td></tr>
<tr><td>National</td><td>55.9%</td><td>55.1%</td><td>59.7%</td><td>59.5%</td><td>58.7%</td></tr>
<tr><td>NCR</td><td>41.2%</td><td>38.6%</td><td>46.9%</td><td>44.6%</td><td>45.4%</td></tr>
<tr><td>Manila city</td><td>26.2%</td><td>31.5%</td><td>42.6%</td><td>33.5%</td><td>54.9%</td></tr>
<tr><td>Quezon city</td><td>36.1%</td><td>22.6%</td><td>66.0%</td><td>36.8%</td><td>50.3%</td></tr>
<tr><td>Negros O.</td><td>60.1%</td><td>78.4%</td><td>79.5%</td><td>55.8%</td><td>61.4%</td></tr>
</table>
*2006 National report 1-3Q'06</td></tr>
<tr><td>(6) Three sputum collection rate is 90% or more.</td><td>The target of three sputum collection rate has been achieved in all DSAs.

<table>
<tr><td></td><td>2002</td><td>2003</td><td>2004</td><td>2005</td><td>2006*</td></tr>
<tr><td>National</td><td>87.9%</td><td>90.7%</td><td>90.4%</td><td>94.0%</td><td>91.1%</td></tr>
<tr><td>NCR</td><td>96.0%</td><td>96.1%</td><td>96.7%</td><td>96.4%</td><td>97.0%</td></tr>
<tr><td>Manila city</td><td>92.1%</td><td>90.9%</td><td>93.2%</td><td>95.3%</td><td>95.9%</td></tr>
<tr><td>Quezon city</td><td>97.9%</td><td>98.9%</td><td>98.1%</td><td>95.4%</td><td>96.4%</td></tr>
<tr><td>Negros O.</td><td>94.2%</td><td>94.8%</td><td>92.8%</td><td>90.5%</td><td>95.4%</td></tr>
</table>
*2006 National report 1-3Q'06</td></tr>
<tr><td>(7) Cure Rate* is 85% or more.

*WHO/WPRO is handling treatment success rate (TSR) as indicator. Cure rate is an indicator that measures better treatment outcomes.</td><td>Cure rates in DSAs have not yet reached the national target except for Negros Occidental. Other areas are nearly approaching the national target. However, the TSR has already reached 89% which is higher than the global target of 85%.

<table>
<tr><td></td><td colspan="2">2002</td><td colspan="2">2003</td><td colspan="2">2004</td><td colspan="2">2005</td></tr>
<tr><td></td><td>CR</td><td>TSR</td><td>CR</td><td>TSR</td><td>CR</td><td>TSR</td><td>CR</td><td>TSR</td></tr>
<tr><td>National</td><td>77.2%</td><td>88%</td><td>75.4%</td><td>88%</td><td>81.0%</td><td>89%</td><td>83.1%</td><td>90%***</td></tr>
<tr><td>NCR</td><td>73.3%</td><td>82.4%</td><td>70.3%</td><td>82.7%</td><td>75.8%</td><td>82.8%</td><td>76.8%</td><td>83.7%***</td></tr>
<tr><td>Manila city</td><td>74.8%</td><td>79.3%</td><td>75.2%</td><td>79.7%</td><td>77.0%</td><td>81.2%</td><td>78.3%</td><td>81.8%</td></tr>
<tr><td>Quezon city**</td><td>70.5%</td><td>89.4%</td><td>77.8%</td><td>86.7%</td><td>77.4%</td><td>86.7%</td><td>74.8%</td><td>85.9%</td></tr>
<tr><td>Negros O.</td><td>77.7%</td><td>89.3%</td><td>83.4%</td><td>88.3%</td><td>83.6%</td><td>87.9%</td><td>87.6%</td><td>91.2%</td></tr>
</table>
*2005 National report 1-3Q'05
** Concerning Quezon City, the Project achievement is not reflected to the latest rate since the cooperation period is within latest one year.
*** Partial data 2005</td></tr>
<tr><td>(8) DOTS enrolment rate is 100%</td><td>DOTS enrolment rate of 100%in all RHU level in DSAs was achieved in the year 2002.</td></tr>
<tr><td>1-3 Feed back of results and lessons in all DSAs to NTP regularly.</td><td>NTP included the contents of the handbook mentioned above in the newly revised and published national guideline "Manual of Procedures 2005, 4th edition".
NTP conducted one training course outside of the DSAs to determine the operational feasibility of the handbook as well as the training method used, e.g. on-the-job training.
NTP is planning for the trainings of NTP supervisors nationwide using this handbook.</td></tr>
</table>

Output 2: Quality laboratory services become available nationwide by the formation of the network.

For Laboratory technique, there are 2 lines of trainings; EQA training (system management) and Basic training (Laboratory technique for quality Sputum Smear Test). EQA training has been completed to laboratories at the Regional/City level (conducted by NTRL), Provincial/City level (conducted by Regional level), and RHU level (conducted by Province/City level) and NTP has started the implementation of the EQA system. For the latter, the training records show tremendous improvement in the skill of medical technologists.

Indicator	Results
2-1 Number of Major Error by the internal quality control for sputum smear microscopy at NTRL is decreased to zero in 2006-2007.	Number of major error at NTRL decreased to zero through conducting quarterly Internal Quality Control. 2004 / 2005 / 2006 Major error: 1.67% / 0% / 0% Result of IQC NTRL
2-2 All the EQA centers at provincial/chartered city function in 2007.	Not all EQA centers at provincial/chartered city are currently functional. It is reported that EQA centers located other than Manila City and Quezon City have not been providing information on EQA activities to IDO/DOH or NTRL. Concerning Manila city and Quezon city, it is confirmed that EQA system is implemented adequately by direct observation.
2-3 Number of Major Error at EQA Centers and RHUs is decreased to be zero in 2007?	Data of major errors nationwide have not been obtained, however, submitted data from some areas shows the number of Major Errors below 1%. (Most of the Major Errors are caused by incorrect data entry.)

Output 3: Capacity to plan and conduct operational researches, such as Nationwide drug Resistance Survey (DRS), to monitor the program is strengthened.

Indicator	Results
3-1 Is number of Operational Research implemented?	Three ORs have been implemented.
3-2 For each Operational Research	As follows;
(1) A protocol operational research implemented	Developed
(2) Report is compiled and presented to national and regional level	Report is under preparation for all researches.
(3) Number of points of operational research result utilized for the strategy development for NTP by the end of the Project.	No result is utilized for the strategy development at the moment. Three are expected by the end of the Project.

3.4. Implementation Process of the Project

For the following reasons, implementation process of the project is considered to be almost adequate.

Routine communication between the TB control health staff of the Philippine side and the Japanese project staff has been regular and smooth through telephone, and QTBCP meeting has been convened by IDO/DOH every 1 to 2 months, despite, the geographical distance between IDO/DOH in Manila City and the Project office in Muntinlupa City. Through circulating the latest minutes of the QTBCP meetings, information on the implementation status of the project has been well shared amongst TB partners including WHO/WPRO and USAID.

Initiative and commitment by the counterpart have been extremely high throughout the Project which can be recognized by the adequate staff and budget allocated by DOH. The total number of 18 counterparts was assigned to the responsible positions, and additional 74 staffs were provided at each level of the NTP, such as in Regions and Provinces/Cities. Information obtained through the questionnaire and series of interviews showed that the quantity and quality of the human resource allocation for the Project implementation have been adequate.

Awareness of the counterpart has improved through the Project implementation. Laboratory workers have shown increased interest in advanced techniques and have come to realize the importance of the quality assurance and data management of TB laboratory. NTP coordinators recognised the importance of monitoring and supervision as well as DOTS implementation.

Methodology of technical transfer has been almost adequately implemented. The "Handbook for Quality DOTS" is a good facilitating tool. It has been distributed to all the DSAs. Trainings contributed to the improvement of the basic indicators of DOTS as well as the training management by the Philippine side. The Philippine side recognised the importance of monitoring/supervision and have shown commitment to conduct it without JICA's assistance.

As for the EQA system, methodology of technical transfer has been also implemented through adequate trainings and discussion between the Project and NTP.

3.5. Achievement of Project Purpose

Project Purpose: Quality National Tuberculosis Control Program (NTP) is sustainably managed.

Cure rate and Case Detection rate (CDR) during the project implementation are as follows;

	2001	2002	2003	2004	2005	2006
Cure Rate	73%	75%	77%	81.0%	83.1%*	---
(Treatment Success Rate)	88%	88%	88%	88%	89%*	---
Case Detection Rate	53%	57%	61%	71%	72%	66%*

Note*: partial data 2006
Source: NTP

4. Evaluation by five criteria

4.1. Relevance

For the following reasons, the Project is considered to have high relevance.

In the Japanese ODA policy described in the country-specific plan for the Philippines, by the Ministry of Foreign Affairs of Japan, the assistance for health sector is defined as a priority area. Within the health sector, TB control is one of the prioritized areas in the health sector as well as family planning, maternal and child health, and HIV/AIDS control.

In the Medium-Term Development Plan 2004-2010 of the Government of the Philippines, TB control has been given highest priority requiring nationwide intervention. The government has set the target as keeping the new sputum smear positive TB CDR of 70% or greater, and Cure Rate of 85% or greater. During this evaluation, it was confirmed that these targets of the CDR and the Cure Rate by 2010 have not changed. These indicators and timeframe are the same with the indicators defined for Project Purpose in the PDM2 of the Project.

To achieve the target, the main focus of the past five years of NTP in the Philippines has been on the expansion of Quality DOTS nationwide. The design and focus of the Project has also been suitable for this purpose.

4.2. Effectiveness

For the following reasons, the effectiveness of the Project is considered to be high.

(1) The achievement level of the project purpose is considered to be high

NTP has achieved great success during the past 5 years. It has reached the CDR of 70%, the national target as well as the global target shown in the Global Plan to STOP TB 2006-2010 and Stop TB Initiative

As for the current cure rate of 83%, it has shown continuous improvement in the last 5 years of DOTS implementation, approaching the national target of 85%. The TSR has already reached 89% which is higher than the global target of 85%. Thus, it can be concluded that NTP has successfully achieved the global target of TB control.

(2) Outputs contribute to achievement of the Project Purpose

The Project has contributed to this success especially through;

- Development of the "Handbook for Quality DOTS", which has been used in the activities in DSAs
- Conducting training of laboratory technicians for sputum smear examinations which play an important role in the TB control program
- Introducing and establishing the EQA system including the development of EQA manual to enhance the quality of sputum smear examinations
- Selecting the National Capital Region (NCR) as the DSAs, resulting in the improvement of the TB status in the NCR. This has made a significant contribution to the improvement of overall TB situation in the Philippines for close to one eighth of the entire population of the Philippines reside in the NCR.
    - Conducting trainings of TB coordinators to strengthen their capabilities for monitoring and supervision in DSAs, where improvement is still needed
    - Improving the cure rate in Manila city especially as a result of decreased defaulter rate through above mentioned activities

4.3. Efficiency

Judging from the achievements of the outputs, the input was provided efficiently.

(1) Adequate Input by Japanese side

a. Provision of Japanese Experts

Japanese experts have been provided appropriately. Five (5) long-term experts and fifty (50) short-term experts along with the activities have been provided. The result of questionnaires and interviews showed that the experts' field of specialities, skill and capability, timing and quantity of its provision were adequate for the project implementation.

Japanese experts' performance is highly evaluated, according to questionnaire and interviewing.

However, there were abrupt changes in the position of chief advisor and team leader (TB control) in the 4th fiscal year of the Project. Two consecutive advisors resigned in the same year and the project was taken over by the successors.

b. Procurement of equipment

Equipment provided were in respect to the project activities and well suitable considering the capability of the laboratories. Almost all equipment has been well utilised and contributed to the improvement of the microscopy center's performance as well as QA function.

Some equipment for the sputum culture installed at Regional laboratories of Region III and XI are well managed but not well utilised. The equipment for sputum culture was mainly provided to support conducting DRS nationwide. With the completion of this survey, there is already minimal utilization of the equipment in the regional laboratories in region III and XI. In order to optimize the equipment, proper budget allocation for regents etc. is necessary as well as the skills of the trained staff through counterpart training in Japan.

Although the provided vehicles for the supervision and monitoring in Negross Occidental and Quezon City have been effectively utilized, the one provided to City Health Officers (CHO) in Manila city is not well utilized due to insufficient budget allocation for fuel and maintenance.

c. Counterpart training in Japan

Counterpart training has been well managed and has contributed to the human resource development for the TB control programs in the Philippines. Thirteen trainees were selected through discussion among stakeholders, and almost all trainees have been continuing their job contributing to the TB program. Only one trainee resigned the job after the training to become an overseas worker.

According to the interviews, training components proved to be useful for capacity building. Discussions with other participants from other countries also provide good opportunities to assess their status of TB control and to come up with new ideas of interventions.

d. Local cost support

Most of the in-country trainings has been conducted with the DOH budget. Financial assistance has been provided by the Project when the governmental budget allocation was insufficient to produce training materials. Since the expense to support such training was minimal compared to the positive result of the training, the training is considered to be cost-efficient.

It is regrettable that some trainees left the country to work overseas after the in-country trainings. However, this drainage of a skilled workforce has been a major

constraint in all sectors of the Philippines. Training has been conducted to more than enough trainees to cover this offset.

(2) Adequate Input by the Philippines side

a. Allocation of counterparts

In total, 18 staffs in IDO/DOH and NTRL, and 74 staffs at Regional and Provincial levels have been directly involved in the implementation of the Project. Judging from the results of the questionnaire and the interviews, the quantity and the quality of the Philippine staff involved in the Project have been adequate.

b. Operational budget

The budgetary allocation from DOH to NTRL has been sufficient for carrying out daily activities. The project has occasionally provided financial support to supplement the planned activities, such as printing fee of training materials.

c. Provision of the office and equipment for the Project

The project office has been provided within the NTRL building. The office is spacious and well-equipped for the implementation of the Project.

(3) Communication on operation and management has been adequate

Despite the geographical distance between the IDO/DOH and the NTRL, regular communication between the NTP headquarters (IDO/DOH) and the Project has been well maintained.

(4) Donor coordination

The Project utilized donor coordination process to maximize the efficiency of the Project, such as PACT meetings, QTBCP meetings and Country Coordination Mechanism (CCM) meetings for the Global Fund for HIV, TB and Malaria.

There are some donors aiming at TB control in the Philippines, such as WHO/WPRO, USAID, Medicos del Mundo and JICA. Donor coordination has been facilitated by DOH through the PACT Meetings, QTBCP and CCM meetings regularly to avoid unnecessary duplication of activities and to enhance collaboration amongst the partners.

4.4. Impact

The following impact is recognized from the implementation of the project.

(1) Contribution to Overall Goal

Taking the following two aspects into account, the overall goal of the Project is expected to be achieved by the year2010:

First of all, improvement of TB situation shown by the TB program indicators (CDR, TSR, etc) in the NCR implies significant contribution to the overall improvement of TB situation in the Philippines. Since NCR consists of close to one eight of the total population of the country, progress made in NCR directly influences the overall TB situation in the country. This has been achieved mainly through decreasing the defaulter rate, which is perceived rather difficult in urban settings like the NCR due to the complicated socio-economic factors associated with the population vulnerable to TB infection.

Secondly, standardization of monitoring/supervision of the TB program and the QA system for the reliable TB laboratory made a significant contribution to the improvement of the TB situation.

(2) Ripple effect

The NTRL staffs trained in the Project contributed to JICA's "third country training (a regional technical assistance in human resource development based on the success made through a bi-lateral cooperation by JICA)". Medical and laboratory technologists from the ASEAN countries have participated in the training. So far, three (3) batches on the basic sputum smear examinations training and one (1) batch on the TB laboratory Quality Assurance training have been conducted.

The training has been effective for the participants with adequate command of English. The effectiveness of the training, however, is considered to be questionable because of the low command of English observed in some of the participants. Since preparation of Action Plan through discussion in workshops is an essential part of the training program, adequate command of English is required. Although it is quite difficult to find laboratory technologists with good command of English in Asia, efforts should be made to improve screening of candidate participants.

4.5. Sustainability

The prospects of the Project's sustainability will be possible to a certain level if financial resources are managed properly.

(1) Strong commitment of central government

Government commitment is essential for the sustainability of the Project outcome. Based on the newly revised and published "Manual of Procedures 2005, 4th edition" in which the Project has contributed, the effort to put TB under control is expected to continue.

In the era of increasing availability of funds for TB control such as Global Fund, the Gates Foundation, and bi-lateral donors (USAID, etc.), the financial support to NTP Philippines from external sources is expected to continue. Since the Project was designed based on the internationally standardized strategy, achievement made through the Project is expected to be sustained by the Philippines NTP.

DOH endeavours to grasp nationwide information regularly through three kinds of consultative meetings, which are: for Regional level by DOH (twice per year), for Provincial level by Region (3 times/year), and for Regional laboratories by NTRL (3 time/year).

The cost for training and TB workshop has been secured by NTP to date, therefore the budget shall be secured by NTP after completion of the Project.

Not all local governments have high awareness for TB Control. Although local government commitment is indicated as an external factor in the PDM2, it is an important factor considering the health sector reform and decentralization taking placce. In certain areas, shortage of budget happened resulting in the incapability of the local government to secure personnel, hold workshops, trainings or implement monitoring and supervision.

(2) Technical capability will become sustainable

In the Philippines, DOTS has been implemented nationwide, and NTP has made significant progress so far. Recognizing the effectiveness of monitoring and supervision to achieve high cure rate, NTP is expected to further expand and sustain quality DOTS implementation by strengthening monitoring and supervision nationwide. Through the Project activities, how to strengthen monitoring and supervision has been learned by NTP. Although further technical support for the

orientation/trainings on the handbook is still required, quality DOTS is likely to sustain for the following reasons:

- Initiation of defaulter tracing in certain areas
- Sufficient knowledge and experience gained through implementation of the Project on how to make situational analysis, how to come up with a solution, and how to assess the actions taken

For implementing the EQA system, sustainability is also highly expected, judging from the following findings.

- Strong commitment shown by the NTP on implementing the EQA system
- Ability to plan the implementation of the EQA system
- Enough technical knowledge of NTP obtained through Project activities
- Extremely low incidence of major errors in currently running EQA system
- Excellent progress in internal quality control

Although there are following problems yet to be solved, most of them appear to be caused by external factors.

- Shortage of human resources at or below provincial level
- Limited budget allocation by the local government units to conduct monitoring and supervision
- Weak TB program data collection system

Concerning implementation of the OR, all operational researches are still for finalization of the report at this stage.

Through the project activities NTP played an initiative role in implementing DRS. Also the importance of ORs as a tool to improve the TB control program has been recognized. NTP is now capable of identifying research agenda, and have actually planned several ORs themselves.

5. Conclusions

NTP has achieved great success during the past 5 years. It has reached the CDR of 70% which is set as the national target as well as the global target which is shown in Global Plan to STOP TB 2006-2010 and Stop TB Initiative

As for the current cure rate of 83%, this has continuously progressed in the last 5 years of DOTS implementation and is nearly approaching the national target of 85%. The TSR has already reached 89% which is higher than the global target of 85%. Thus, it can be concluded that NTP has successfully achieved the global target of TB control. Although there has been adequate assistance by related organizations, this success is for the most part dependent on the tremendous effort by the Philippine Government (DOH and Local Governments).

The Project has contributed to this success especially by

- Establishing strong coordination amongst partners concerned through the leadership of NTP
- Developing "Handbook for Quality DOTS"

- Conducting trainings of TB coordinator to strengthen their abilities for monitoring and supervision in the DSAs, where improvement is still needed
- Improving cure rate in Manila city especially as a result of decreased defaulter rate through above mentioned activities
- Conducting training of laboratory technicians for sputum smear examinations which plays an important role in TB control program
- Introducing and establishing EQA system including the development of EQA manual to enhance the quality of sputum smear examinations

The main focus of the past five years of TB control program in The Philippines was to expand quality DOTS nationwide. The design of the Project was suitable to address this agenda.

For output 1: Quality DOTS implementation is ensured through capacity building activities and strengthening monitoring and supervision system.

The project activities clearly indicated high efficiency and effectiveness of strengthening supervision and monitoring system in enhancing the NTP. Following facts indicate that the method used by the project which included on job training for supervisors has been highly rated by DOH and partners.

- Although the handbook for quality DOTS made by the project has been limitedly distributed, NTP included the contents of this handbook in the newly revised and published national guideline "Manual of Procedures 2005, 4th edition".
- NTP conducted one training course outside of the DSAs to determine the operational feasibility of the handbook as well as the training method used, e.g. on-the-job training.
- NTP is planning for the trainings of NTP supervisors nationwide using this handbook.

For output 2: Quality laboratory services become available nationwide by the formation of the network

For establishing the EQA system, the EQA trainings were completed in all provinces, cities and CHDs as planned. Preparation stage of EQA system has been completed, but implementation stage of EQA still remains a challenge. The existing problems are as follows.

- Shortage of human resources
- Limited budget allocation from local government units to conduct monitoring and supervision
- Weak data management and analysis

It is confirmed that NTP has the capacity to address these problems and make the Project more sustainable.

It should be highly evaluated that NTP attained ability to plan and conduct in-country trainings for sputum smear examinations by themselves as a result of activities conducted by NTP with assistance of the Project.

For Output 3: Capacity to plan and conduct operational researches, such as Nationwide Drug Resistance Survey (DRS), to monitor the program is strengthened

All operational researches are still for finalization of the report at this stage. Through the project activities NTP came to recognize the importance of operational research as a tool to improve the TB control program. NTP has improved its ability to identify research agenda, and planned several operational researches.

In conclusion, relevance, effectiveness and efficiency of the Project can be highly rated. The achievement of the NTP indicates strong impact of the Project. Although several challenges still remain, with current performance of the NTP and partners supporting it, it is confirmed by both side that sustainability after the completion of the Project could be highly expected.

Starting in 1992 with the introduction of the DOTS strategy in Cebu, technical assistance in TB control by JICA has expanded to the entire nation of the Philippines for the past 15 years. Among the significant achievements, standardization of the TB control program (e.g. Development of guidelines and methods) is listed as one of the most important result the Japanese technical collaboration has achieved.

6. Recommendations

The team was deeply impressed by the tremendous efforts, enthusiastic activities and strong commitment and ownership by NTP in all aspects of the TB control program. Also, excellent abilities of personnel at each level deserve special mention. The Team would be very grateful if recommendations described below will eventually bring certain additional development in TB control program in The Philippines.

- NTP should continue to sustain quality DOTS implementation by strengthening monitoring and supervision nationwide. There should also be technical support by the Project to the NTP workers on orientation/trainings for the handbook.
- NTP should continue to maintain its coordination mechanisms among related organizations in order to maximize utilization of limited resources.
- DOH and Local Government Units (LGUs) should continue their advocacy activities to secure sufficient human and financial resources for TB control.
- NTP should explore support from other external organizations to enhance TB control activities.
- NTP should try to strengthen its information system including those related to EQA activities to better analyze the implementation of the TB control programme.
- The Project should undertake the joint monitoring and supervision of the DSAs together with other partners such as WHO, USAID and Global Fund partners.
- The Project should continue to provide technical assistance through training for the remaining untrained NTP staff in the DSAs.
- The Project should assist NTRL to strengthen EQA implementation.
- The Project should finalize all three operational researches (*"National Drug Resistance Surveillance on Tuberculosis in the Philippines", "Evaluation of Training on Sputum Smearing and Staining for Laboratory Aides in Quezon City"* and *"Evaluation of Monitoring and Supervisory Training for District Health Team in Quezon City"*) and provide proper feedback to NTP.

Appendices

Annex-1	Project Design Matrix (Ver.2)
Annex-2	Dispatch of experts
Annex-3	List of provided equipment
Annex-4	Counterpart training in Japan
Annex-5	In-country training in the Philippines
Annex-6	Project operational cost
Annex-7	List of counterpart personnel
Annex-8	Result of baseline survey
Annex-9	Sample of needs analysis for training
Annex-10	Summary of PDM workshop on 21st February 2007
Annex-11	Evaluation Grid
Annex-12	Result of Questionnaire

Annex-1

PDM2 **Project Title: Project for Quality Tuberculosis Control Programme**

Target group: Health workers working for NTP
Target area: Whole country

Ultimate beneficiaries: People in the Philippines

Ver. 2 Date: December 14, 2005
Duration: September 1, 2002 - August 31, 2007

Narrative Summary	Verifiable Indicators	Means of Verification	Important Assumptions
Overall Goal Tuberculosis in the Republic of the Philippines is controlled.	Prevalence and mortality from TB are reduced in half by the year 2010. 1. Prevalence of smear-positive TB cases is less than 1.6 per 1,000 populations from 3.1 per 1,000 populations in 1997. 2. TB mortality rate is less than 19.7 per 100,000 populations from 39.4 per 100,000 populations in 1997.	 National prevalence survey report Philippines Health Statistics	National policy to give priority to TB control is sustained.
Project Purpose Quality National Tuberculosis Control Program (NTP) is sustainably managed.	List below are attained at national level by the end of 2005 and maintained by the end of the Procect 1. Cure Rate is 85% or more. 2. Case Detection Rate is 70% or more.	 NTP reports WHO annual report	International support is sustained.
Outputs 1. Quality DOTS implementation is ensured through capacity building activities and strengthening monitoring and supervision system.	1-1 Monitoring and Supervision Manual is developed and distributed to at all regions 1-2 All the Provinces/chartered cities where the Project has directly strengthened monitoring and supervision (Directly Supported Areas, DSAs) attain and maintain all the target listed below in 2007. (1) Monitoring and supervision manual is distributed to all the RHUs and utilized in the region. (2) 100% of RHUs, and provinces and CHDs submit the reports to the above levels within one month after deadline. (3) In 100% of DSAs, TB Coordinators, including District Coordinators/Supervisors, make regular supervisory visits to each RHU at least quarterly. (4) Provinces receive regular supervision and advisory support from CHD and DOH . (5) Smear positive proportion among the newly registered pulmonary TB cases is 60% or more. (6) Three sputum collection rate is 90% or more. (7) Cure Rate is 85 % or more. (8) DOTS enrollment rate is 100 %. 1-3 Feed back of results and lessons in all DSAs to NTP regularly.	Inventory list of the manual NTP reports Provincial NTP reports interviews Project reports Workshop reports PACT meeting reports	DOH and LGUs commitment of TB control is sustained. Epidemic conditions of HIV/AIDS is not worsened.
2. Quality laboratory services become available nationwide by the formation of the network.	2-1 Number of Major Error by the internal quality control for sputum smear microscopy at NTRL is decreased to zero in 2006-2007. 2-2 All the EQA Centers at provincial/chartered cities function in 2007. 2-3 Number of Major Error at EQA Centers and RHUs is decreased to be zero in 2007	NTRL reports Project reports NTRL reports Provincial EQA reports	
3.Capability to plan and conduct operational researches, such as Nationwide Drug Resistance Survey (DRS), to monitor the program is strengthened.	3-1 Number of operational research implemented. 3-2 For each operational research, (1) A protocol of operational research is developed. (2) Report is compiled and presented to national and regional level (3) Number of points of operational research result utilized for the strategy development for NTP by the end of the Project.	Project reports Project reports Protocol documents OR reports Manuals/guidelines related to NTP	

Annex-1

Activities	**Input**	Political and social security will not be seriously unstable.
1-1 Develop Monitoring and Supervision Manual. 1-2 Distribute Monitoring and Supervision Manual to all regions and conduct orientations. 1-3 Review the TB control performance of province/chartered city nationwide and decide the DSA where the performance of TB control is not satisfactory with NCDPC and CHDs. 1-4 Conduct a situational analysis of the DSA on TB control activities and its environment with CHD and NCDPC. 1-5 Organize refresher trainings to the province/chartered city NTP coordinators and staff of health centers based on the findings of the above analysis. 1-6 Strengthen NTP monitoring and supervision by province/chartered city NTP coordinators in DSA. 1-7 Strengthen NTP monitoring and supervision by NCDPC, NTRL and CHDs through joint monitoring activities and regional workshops. 1-8 Strengthen NTP to coordinate activities among international partners at PACT meeting. 2-1 Strengthen capacity of the training management in NTRL, CTRL and some regional laboratories. 2-2 Conduct EQA trainings to all CHD Regional NTP Coordinators and Regional medical technologists concerned. 2-3 Set up a pilot area (one province/chartered city per region) to introduce EQA system at provincial level. 2-4 Train the province/chartered city NTP Coordinators and controllers (medical technologists at Quality Assurance center) in pilot areas in collaboration with NTRL and CTRL. 2-5 Strengthen CHD to monitor EQA activities at QA Centers through monitoring activities and national consultative workshop. 2-6 Expand EQA system in two to four provinces/chartered cities per region annually in accordance with the developed criteria for expansion. 3-1 Develop the protocol for DRS in collaboration with other partners such as WHO. 3-2 Conduct DRS based on the protocol and analyze the collected data with the steering committee. 3-3 Feedback the results of the DRS to national/international partners through workshops and/or international conference. 3-4 Reflect the findings of OR to improve the NTP policy. 3-5 Assess needs of OR to improve the NTP policy and develop the protocol with holding workshops/seminars, and implement OR as same as 3-1 3-4. 3-6 Strengthen capacity of NTP staff in the assessment of needs, planning and procedures through conducting actual operational research with technical guidance such as holding workshops and providing textbook / reference materials.	**Inputs by the Japanese side** **1. Dispatch of Japanese experts** **2. Training of Philippine counterpart personnel in Japan** **3. Training of health workers in the Republic of the Philippines** **4. Provision of equipment** **Inputs by the Philippine side** **1. DOH and LGU counterpart personnel** **2. Provision of offices, buildings and facilities** **3. Counterpart budget for the implementation of the Procect** **4. Drugs and other supplies and consumables**	Preconditions LGUs accept this Procect

Annex-2 Dispatch of Japanese Experts

	Subject	Name	Period
Long Term expert	Coordinator	Katsumi OHARA	Sep.1 2002- Sep.30 2002
	Chief Adviser	Seiya KATO	Sep.1 2002- Oct.2004
	TB Control	Tomohiro SHIRAHAMA	Sep.1 2002- Oct.31 2004
	Coordinator	Mitsuhiko IWASHITA	Sep. 23 2002- Oct. 31 2004
	Chief Adviser	Shinji SHISHIDO	Aug. 19 2003 - Aug. 28 2004
Short Term expert	TB Control Laboratory	Akiko FUJIKI	Sep. 23 2002 - Sep. 27 2002
	Operational Research	Hirohito MIYAGI	Oct. 14 2002 - Oct. 20 2002
	TB Control Laboratory	Akiko FUJIKI	Oct. 14 2002 - Oct. 25 2002
	Operational Research	Masashi SUCHI	Mar. 24 2003 - Mar. 29 2003
	Operational Research	Shoichi ENDO	Jun.13 2003 - Jun. 26 2003
	TB Control	Seiya KATO	Oct.19 2003 - Oct. 31 2003
	TB Control Laboratory	Akiko FUJIKI	Jan.16 2004 - Jan. 31 2004
	Operational Research	Shoichi ENDO	Jan.16 2004 - Feb. 5 2004
	TB Control	Seiya KATO	Jan.22 2004 - Feb. 3 2004
	TB Control	Akihiro OKADO	Mar. 6 2004 - Mar. 18 2004
	TB Control	Seiya KATO	Jun. 24 2004 - Jul. 10 2004
	TB Control Laboratory	Shoichi ENDO	Jul. 19 2004 - Aug. 28 2004
	Chief Adviser	Masashi SUCHI	Nov. 4 2004 - Mar. 12 2005
	TB Control	Tomohiro SHIRAHAMA	Nov. 4 2004 - Mar. 23 2005
	Coordinator	Shigeo KOBAYASHI	Nov. 19 2004 - Mar. 23 2005
	TB Control	Mie KASAMATSU	Feb. 6 2005 - Feb. 19 2005
	Operational Research	Kunihiko ITO	Feb. 14 2005 - Feb. 19 2005
	TB Control Laboratory	Akiko FUJIKI	Feb. 28 2005 - Mar. 11 2005
	Equipment Maintenance	Seiichi MAKI	Feb. 20 2005 - Mar. 7 2005
	Chief Adviser	Masashi SUCHI	Apr. 14 2005 - Mar. 9 2005
	TB Control	Mie KASAMATSU	Apr. 14 2005 - Mar. 18 2006
	Coordinator	Shigeo KOBAYASHI	Apr. 14 2005 - Mar. 18 2006
	TB Control Laboratory	Hiroko MATSUMOTO	May. 16 2005 - Jun. 4 2005
	TB Control Laboratory	Akiko FUJIKI	May. 30 2005 - Jun. 17 2005
	TB Control	Akihiro OKADO	Jun. 13 2005 - Jul. 12 2005
	Chief Adviser	Masashi SUCHI	Jul. 27 2005 - Sep. 21 2005
	TB Control	Seiya KATO	Sep. 25 2005 - Oct. 8 2005
	TB Control	Akihiro OKADO	Oct. 10 2005 - Nov. 5 2005
	Operational Research	Norio YAMADA	Nov. 6 2005 - Nov. 26 2005
	Chief Adviser	Masashi SUCHI	Nov. 25 2005 - Dec. 21 2005
	Operational Research	Norio YAMADA	Dec. 21 2005 - Jan. 27 2006
	TB Control	Akihiro OKADO	Jan. 5 2006 - Jan. 14 2006
	Chief Adviser	Masashi SUCHI	Feb. 1 2006 - Mar. 11 2006
	TB Control Laboratory	Akiko FUJIKI	Feb. 6 2006 - Feb. 17 2006
	Team Leader	Mie KASAMATSU	Apr. 24 2006- Sep. 2 2007
	Coordinator	Shigeo KOBAYASHI	Apr. 24 2006- Sep. 2 2007
	Chief Adviser	Katsunori OSUGA	May. 28 2006- May. 13, 2006
	TB Control Laboratory	Hiroko MATSUMOTO	May. 24 2006- Jun. 2, 2006
	TB Control	Akihiro OKADO	Jun. 12, 2006- Jun. 22, 2006
	TB Control	Shoichi ENDO	Jun. 26, 2006- July 225 2006
	TB Control Laboratory	Akiko FUJIKI	July 11, 2006- July 22 2006
	Chief Adviser	Katsunori OSUGA	July 11, 2006- July 22 2006
	TB Control	Yumiko YANASE	Aug. 21, 2006- Mar 18, 2007
	TB Control Laboratory	Yoshiko KUDO	Sep 4, 2006- Sep. 16, 2006
	Chief Adviser	Katsunori OSUGA	Sep .26, 2006- Oct. 4, 2006
	TB Control	Akihiro OKADO	Oct .30, 2006- Nov. 10, 2006
	TB Control Laboratory	Yoshiko KUDO	Nov .18, 2006- Nov. 25, 2006
	TB Control	Mie KASAMATSU	Nov .26, 2006- Dec. 9, 2006
	Chief Adviser	Katsunori OSUGA	Dec .6, 2006- Dec. 10, 2006
	TB Control Laboratory	Masaki Ota	Dec .6, 2006- Dec. 17, 2006
	Operational Research	Masaki Ota	Jan .29, 2007- Feb. 9, 2007
	TB Control Laboratory	Akiko FUJIKI	Feb. 1, 2007- Feb. 10, 2007
	TB Control	Mie KASAMATSU	Feb. 4, 2007- Feb. 17, 2007
	Chief Adviser	Katsunori OSUGA	Feb. 15, 2007- Mar. 6, 2007
	TB Control	Shoichi ENDO	Feb. 15, 2007- Mar. 13, 2007
Mid Term Evaluation Team	Team leader	Tsuneo MASUI	Aug. 11 2005 - Aug. 21 2005
	Evaluation Planning	Miyuki TAMURA	Aug. 11 2005 - Aug. 23 2005
	Evaluation and analysis	Erika TAMURA	Aug. 8 2005 - Aug. 22 2005
Final Evaluation Team	TB Control	Mitsuo ISONO	Feb. 18 2007- Feb. 27 2007
	Evaluation Planning	Atsushi YUSA	Feb. 18 2007- Feb. 27 2007
	Evaluation and analysis	Nami HIRAI	Feb. 11 2007- Feb. 27 2007

ANNEX-3

Provision Equipment list for JFY 2002

No.	Date of Arrival	Name of Equipment	Maker	QTY.	Unit Price (Yen)	Total Price (Yen)	Place
1	Feb. 2003	Project Vehicle	Mitsubishi Pajero	1	3,334,620	3,334,620	Project Office
2	Feb. 2003	Desktop Comuter sets	IBM NETVISTA A30	4	219,324	877,296	1.Project Office 2.CHD XI (Davao City) 3.CHD VIII (Tacloban City) 4. CHD III(Panpanga Provience)
3	Feb. 2003	Copy Machine	KYOCERA-MITA	3	411,792	1,235,376	1. CHD III (Panpanga Provience) 2. CHD VIII (Tacloban City) 3. CHD XI (Davao City)
4	Mar. 2003	Teaching Microscope(Side By S	Olympus CX31-12L02	3	525,986	1,577,958	1. CHD III (Panpanga Provience) 2. CHD VIII (Tacloban City) 3. CHD XI (Davao City)
5	Mar. 2003	Microscopes	Olympus CH20BIM	10	89,100	891,000	1. CHD III (Panpanga Provience) ③ 2. PHO Negros occidental ③ 3. CHD XI (Davao City) ④
6	Jan. 2003	LCD Projector	PANASONIC, PT-LC55E	1	241,704	241,704	Accompanied Equipment for CHD VII (Cebu City)
7	Jan. 2003	Desktop Computer Sets	COMPAQ, EVO D381	1	104,962	209,924	Accompanied Equipment for Project Office
8	Jan. 2003	LCD Projector	PANASONIC, PT-LC55E	1	241,704	241,704	Accompanied Equipment for CHD VII (Cebu City)
9	Jan. 2003	Desktop Computer Sets	COMPAQ, EVO D381	1	104,962	209,924	Accompanied Equipment for Project Office
			SUB TOTAL			**8,819,506**	

Provision Equipment list for JFY 2003

No	Date of Arrival	Name of Equipment	Maker	QTY.	Unit Price (Yen)	Total Price (YEN)	Place
1	Aug. 2003	Desktop Computer sets	HP, Evo D220	1	190,800	190,800	Accompanied Equipment for Dr. Shishido
2	Jan. 2004	Desktop Computer sets	SAMSUNG	1	239,000	239,000	Accompanied Equipment for Dr. Shishido
3	Jul. 2003	Refrigereted Centrifuge	KUBOTA Model 5930	2	881,000	1,762,000	CHD III (Panpanga Province)
4	Jul. 2003	Deep Freezer	ASAHI LIFE SCIENCE	2	280,000	560,000	1. CHD III (Panpanga Province) 2. CHD XI (Davao City)
5	Jul. 2003	Incubator	ALP ITD-100	4	340,000	1,360,000	1. CHD III (Panpanga Province) ② 2. CHD XI (Davao City) ②
6	Jul. 2003	Bio Safety Cabinet	AirTech BHC-1303IIA/B3	4	1,063,500	4,254,000	1. CHD III (Panpanga Province) ② 2. CHD XI (Davao City) ②
7	Jul. 2003	Medium Coagulator	HIRASAWA C-200-CP	4	795,000	3,180,000	1. CHD III (Panpanga Province) ② 2. CHD XI (Davao City) ②
8	Jul. 2003	Distillation Apparatus	IKEMOTO SCIENCE SB-0	2	125,000	250,000	1. CHD III (Panpanga Province) 2. CHD XI (Davao City)
9	Jul. 2003	Autoclave	ALP, MC-23	4	215,000	860,000	1. CHD III (Panpanga Province) ② 2. CHD XI (Davao City) ②
10	Jul. 2003	Dry Oven	ALP, KDH-60H	4	300,000	1,200,000	1. CHD III (Panpanga Province) ② 2. CHD XI (Davao City) ②
11	Jul. 2003	Ultrasonic Pipette Washer	AIWA AU105-CR	2	140,000	280,000	1. CHD III (Panpanga Province) 2. CHD XI (Davao City)
12	Jul. 2003	Steel Cabinet Set for Glassware	KOKUYO	2	48,000	96,000	1. CHD III (Panpanga Province) 2. CHD XI (Davao City)
13	Jul. 2003	Electronic Balancing	METLLER TOLEDO	2	125,500	251,000	1. CHD III (Panpanga Province) 2. CHD XI (Davao City)
14	Jul. 2003	Direr	AS ONE , SD-50N	2	162,000	324,000	1. CHD III (Panpanga Province) 2. CHD XI (Davao City)
15	Nov..2003	Microscopes	OLYMPUS, CX31-12L02	12	199,999	2,399,988	1. CHD II (Tuguegarao City) ③ 2. CHD VI (Iloilo City) ③ 3. CHD XIII (Butuan City) ③ 4. Project Office ③
16	Mar.2004	Bio Safety Cabinet	JOUAN, MSC12	1	1,795,200	1,795,200	CHD VII (Cebu City)
17	Oct.2003	Copy Machine	KYOCERA-MITA Digital Copier	4	408,000	1,632,000	1. CHD II (Tuguegarao City) 2. CHD CAR (Baguio City) 3. CHD VI (Iloilo City) 4. CHD XIII (Butuan City, Caraga)
18	Oct.2003	Computer Sets	IBM, NETVISTA A30	4	215,280	861,120	1. CHD II (Tuguegarao City) 2. CHD CAR (Baguio City) 3. CHD VI (Iloilo City) 4. CHD XIII (Butuan City, Caraga)
19	Nov.2003	Microscopes	OLYMPUS, CX31-12L02	6	172,900	1,037,400	1. PHO Negros Occidental ③ 2. Manila Public Health Office ③
20	Nov.2003	Teaching Microscope(Side By Side)	OLYMPUS, CX31-12L02	2	564,000	1,128,000	1. PHO Negros Occidental 2. Manila Public Health Office
21	Feb.2004	Computer Sets	IBM, NETVISTA A30	2	197,836	395,672	1. PHO Negros Occidental 2. CHO Manila City
22	Feb. 2004	Copy Machine	KYOCERA-MITA Digital Copier	2	399,000	798,000	1. PHO Negros Occidental 2. CHO Manila City
23	Aug. 2003	Desktop Computer sets	HP, Evo D220	1	190,800	190,800	Accompanied Equipment for Dr. Shishido
24	Jan. 2004	Desktop Computer sets	SAMSUNG	1	239,000	239,000	Accompanied Equipment for Dr. Shishido

			SUB TOTL			**25,283,980**	

Provision Equipment list for JFY 2004

No	Date of Arrival	Name of Equipment	Maker	QTY.	Unit Price (Yen)	Total Price (YEN)	Place
1	Feb. 2005	Objective Lens for Microscope	NIKON, MSB51900	48	8,000	384,000	1.Santa Cruz, Laguna (22) 2.Pasig City Rizal (9) 3. Negros Oriental (17)
2	Feb. 2005	Portable LCD Projector	PANASONIC, 1200	1	120,000	120,000	NTRL
3	Feb. 2005	Desktop Computer sets	IBM, A50 8175PAM	3	161,140	483,420	1. NTRL ① 2. IDO-DOH ②
4	Feb. 2005	Notebook Computersets	ASUS, A4000N	3	212,900	638,700	1. NTRL 2. IDO-DOH 3. Cebu Reference Laboratory
5	Feb. 2005	Facsimile Machines	CANON, B822	3	17,800	53,400	1. CHO Manila 2. PHO-East Samar 3. PHO- Nueva Ecija
6	Feb. 2005	Over Head Projector	EIKI, OHP-3200	1	60,600	60,600	Manila Public Health Laboratory
7	Mar. 2005	Vehicle	Mitsubishi Van, L300 Versa	2	1,496,000	2,992,000	1. IDO-DOH (NCR) 2. PHO- Negros Occidental
8	Jul. 2005	Bio Safety Cabinet	BAKER, Class II-B2	2	1,360,000	2,720,000	Cebu Reference Laboratory
9	Jul. 2005	Multihead Teaching Microscope	OLYMPUS, CX31-12L02 Side by Side	1	400,000	400,000	Cebu City Health Office
10	Jul. 2005	Microscopes	OLYMPUS, CX31-12L02	60	130,000	7,800,000	Rgion 1,2,3,4A,4B,5,6,7,9,,10,12,Caraga, CAR, NCR, ARMM
11	Jun. 2004	Books for TB Microscopy	RIT	1	300,000	300,000	Accompanied Equipment for Project Office
12	Jun. 2004	Laboratory Instruments for QA	Various	1	398,050	398,050	Accompanied Equipment for Manila Public Health Laboratory
13	Jun. 2004	Laboratory Instruments for QA	Various	1	447,550	447,550	Accompanied Equipment for PHO Negros Occidental
14	Jun. 2004	Laboratory Instruments for DRS	Various	1	251,250	251,250	Accompanied Equipment for 1. IDO-CHD, 2. PHO-Negros Occidental
15	Feb. 2005	Hand Rap	XJ 0863-225	200	1,441	288,200	For QA Training
16	Feb. 2005	Slide Rack	Stainless for 20 pcs.	100	839	83,900	For QA Training
17	Feb. 2005	Mappe	Wooden Slide Holder	700	264	184,800	For QA Training
18	Feb. 2005	Alcohol Lamp		56	77	4,312	For QA Training
19	Feb. 2005	Koplin Jar	Vertical 10 pcs.	816	1,784	1,455,744	For QA Training
20	Feb. 2005	Slide Box	Plastic	####	1,152	2,324,736	For QA Training
21	Feb. 2005	Container Biot		12	8,600	103,200	For DRS
22	Feb. 2005	Hand Rap	200pcs	200	780	156,000	For QA Training
23	Feb. 2005	Coloration Vessel Stand		200	450	90,000	For QA Training
			SUB TOTAL			**21,739,862**	

Provision Equipment list for JFY 2005

1	Jan. 18, 2006	DESKTOP COMPUTER	IBM Think Center E50	2	153,191.20	306,382.40	1 Quezon City Health Dept. 1 IDO
2	Jan. 20, 2006	COPY MACHINE	Kyocera Mita KM-2550	2	376,639.20	753,278.40	1 Quezon City Health Dept. 1 IDO
3	Jan. 27, 2006	Vehicle (VERSA VAN)	MITSUBISHI L300	2	1,575,160.00	3,150,320.00	Quezon City Health Dept. Manila City Health Dept.
4	Mar. 3, 2006	MICROSCOPE	NIKON E200 MCA	25	139,920.00	3,498,000.00	For EQA Implementation Materials
5	Mar. 8, 2006	MICROSCOPE	NIKON E200 MCA	6	185634.92	1,113,809.52	For EQA Implementation Materials
6	Mar. 8, 2006	SLIDE BOX	INDIAN MADE	####	744.16	2,306,896.00	For EQA Implementation Materials
7	Mar. 8, 2006	ALCOHOL LAMP	INDIAN MADE	100	151.09	15,109.00	For EQA Implementation Materials
8	Mar. 16,	COPLIN JAR	INDIAN MADE	####	366.69	531,700.50	For EQA Implementation Materials
9	Mar. 16,	MAPPE	INDIAN MADE	650	401.49	260,968.50	For EQA Implementation Materials
10	Feb. 2, 2006	SLIDE RACK	AS ONE	100	379.00	37,900.00	For EQA Materials (Accompanied Equipment By Dr. Suchi)
11	Feb. 2, 2006	HAND RAP	AS ONE	200	655.00	131,000.00	For EQA Implementation Materials (Accompanied Equipment By Dr.
12	Feb. 2, 2006	TEXT BOOK	RIT	100	2,386.00	238,600.00	Accompanied Equipment By Dr.
			SUB TOTAL			**12,343,964.32**	

Provision Equipment list for JFY 2006

1	Jun. 2006	Books	Quality Smear Preparation for AFB	100	2,285.00	228,500.00	For EQA Implementation Materials
2	Aug. 2006	Hand Rap	For 170ml	160	620.00	99,200.00	For EQA Implementation Materials
3	Aug. 2006	Coloration Vessel Stand	For 20 pcs.	80	355.00	28,400.00	For EQA Implementation Materials
4	Jul. 2006	Computer Sets	IBM Thinkcenter E50	4	131,077.00	524,308.00	IDO
5	Jan. 2007	Microscopes	OLYMPUS CX-31	134	121,785.00	16,319,190.00	For EQA Implementation Materials
6	Jan. 2007	Slide Box	NS15991A	3500	356.50	1,247,750.00	For EQA Implementation Materials
7	Jan. 2007	Koplin Jar with lid	GP-KPG	1560	397.90	620,724.00	For EQA Implementation Materials
8	Jan. 2007	Mappe	GP-MPE	700	363.40	254,380.00	For EQA Implementation Materials
9	Jan. 2007	Alcohol Lamp	GP-LMP	80	223.10	17,848.00	For EQA Implementation Materials
			SUB TOTAL			**19,340,300.00**	

Annex-4 COUNTERPART TRAINING PROGRAM (As of Dec. 20, 2006)

No.	NAME	DURATION	TITLE	TRAINING PLACE	ORGANIZATION	POSITION	CURRENT POSITION
1	Dr. Arthur Lagos	Jan. 14- Mar. 2, 2003	Leadership Training in TB Control Program Management	RIT	JICA-QTBCP	Medical Adviser	USAID Medical Adviser
2	Dr. Ernesto Bontuyan	May 13- Aug. 10, 2003	Managing TB at Intermediate Level	RIT	IDO-DOH	Medical Specialist II, IDO, NCDPC	Medical Specialist II, IDO, NCDPC
3	Ms. Emerita Sinon	Sep. 23- Nov.30, 2003	TB Control Laboratory Management	RIT	CHD IX	NTP Regional Technologist	NTP Regional Technologist
4	Dr. Noel Macalalad	Jan. 13- Feb.29, 2003	Leadership Training in TB Control Program Management	RIT	NTRL	Head, NTRL	OIC Head, Lab. Research Division, RITM
5	Dr. Renato Pangan	May 11-Aug. 8, 2004	Managing TB at Intermediate Level	RIT	CHD III	NTP Regional Medical Coordinator	NTP Regional Medical Coordinator
6	Dr. Edith Gimotea	May 11-Aug. 8, 2004	Managing TB at Intermediate Level	RIT	CHD VI	NTP Regional Medical Coordinator	NTP Regional Medical Coordinator
7	Mr. Jonathan Basadre	Sep. 21- Nov. 28, 2004	TB Control Laboratory Management	RIT	CHD XIII	NTP Regional Medical Technologist	NTP Regional Medical Technologist
8	Dr. Jaime Lagahid	Jan. 11- Feb. 6, 2005	National TB Program Management	RIT	IDO-DOH	Director III, IDO, NCDPC	Director III, IDO, NCDPC
9	Dr. Irma Asuncion	Jul. 12- Oct. 18, 2005	Stop TB Action	RIT	CHD MM	NTP Regional Medical Coordinator	NTP Regional Medical Coordinator
10	Ms. Cristy Villarico	Sep.28- Dec. 2,2005	TB Control Laboratory Management	RIT	NTRL	Bacteriologist	Bacteriologist
11	Dr. Amelia Medina	Jan. 10- Feb. 25, 2006	National TB Program Management	RIT	NCR	Medical Specialist IV	Medical Specialist IV
12	Dr. Willie Cabauatan	May. 9- Aug. 5, 2006	Stop TB Action	RIT	CHD II	Regional Medical Coordinator	Regional Medical Coordinator
13	Ms. Ann Catherine Tan	Sep.26- Dec. 2,2006	TB Laboratory Network for DOTS Expansion	RIT	CHD III	Medical Technologist CHD III Reference Laboratory	Medical Technologist CHD III Reference Laboratory

LIST OF TRAININGS CONDUCTED AND SUPPORT BY DOH-JICA QTBCP

JFY	COURSE	BATCH	ACTUAL TERM	TOTAL # OF PAX	VENUE	AMOUNT (peso)
2002	Training of Doctors, Nurse and Med. Tech of DRS pilot Area	1	Sept 24-27, 2002	36	NTRL	250,000.00
	In-country Training Program					
	-Basic AFB Microscopy (Med. Tech.)	4	Nov 4 - Dec11, 2002	40	NTRL/CRL	c/o JICA PP
	- Quality Assurance Training (Med. Tech.)	4	Jan 6 - 24, 2003	33	NTRL/CRL	
	DRS Workshop for IDO,NTRL,WHO Doctors	1	Dec. 09, 2002	16	NTRL	11,600.00
	Finalization of DRS Proposal for IDO,NTRL,WHO Doctors	1	Dec. 18, 2002	18	NTRL	8,800.00
	DRS NATIONWIDE for IDO,NTRL,WHO Doctors		Jan, 2003 - present			950,000.00
	External Qualtiy Assurance Orientation in Cebu (Med. Tech.)	2	Jan 24 and Feb 7, 2003	80	Cebu	4,290.00
	DRS Re-orientation of Pilot Area (Med. Tech.)	1	Feb. 3 - 4, 2003	26	Atrium Mkt.	105,200.00
	DRS Nationwide Training for Medical Technologist (Regional Level)	5	Mar 4 - 21, 2003	60	NTRL/CRL	391,500.00
			Apr. 21-25, 2003			
	Evaluation workshop of DRS Pilot Area for Med.Tech.	1	Mar. 12-13, 2003	31	Lotus	170,011.00
	SUB-TOTAL					**1,891,401.00**
2003	Refresher Training in Eastern Samar (Med. Tech.)	2	May 20-21, 2003	51	Tacloban City	48,000.00
	Refresher Training in Nueva Ecija (Med. Tech.)	4	May 26-29, 2003	234	Cabanatuan	126,000.00
	In-country Training Program for Med. Tech.					
	- Basic AFB Microscopy	4	Aug 11-20, 25- Sept 3,	50	NTRL/CRL	550,000.00
			Sept 8 -17, 2003			
	- Quality Assurance Training for Med. Tech.	3	Sept 1-5, 8-12, 15-19	37	NTRL	370,000.00
	Refresher Training on MOP for Doctors, Nurses & DOH Rep. of Negros Occidental	4	Aug 5-8, 2003	180	Bacolod	112,515.00
	Joint Coordinating Committee Meeting	1	August 27, 2003	28	NTRL	7,000.00
	EQA Workshop for Med. Tech.	1	August 21, 2003	80	Lotus	150,000.00
	Refresher Training for Med.Tech. on EQA MCHO	1	Sept 4 - 5, 2003	9	NTRL	10,500.00
	Update on NTP for Health Workers in MCHO	3	Sept 17-19, 2003	68	Cherry Blossom	51,000.00
	Refresher Training for Med. Tech of MCHO on new QA System	3	Oct 21-28, 2003	37	NTRL	39,000.00
	Third Country Training Program for Doctors & Med. Tech.	1	Nov. 24 - Dec. 5, 2003	15	NTRL	1,173,365.66
	Writeshop for External Quality Assurance for Med. Tech.	1	Jan 20-21, 2004	20	NTRL	46,000.00
2003	FDC Training for Pilot Province (Laguna)	21	Jan 19- Mar 19, 2004	1208	Laguna	247,450.50
	Basic Training for AFB Microscopy for Medical Tech. of Neg. Occidental Prov.	3	Feb 9-18,23- Mar. 3,	39	NTRL	546,566.00
			Mar. 8-17			
	Refresher training on Quality Assurance for Med.Tech. Controller of Neg. Occidental Province	2	Feb. 19-20, Mar 4-5	4	NTRL	
	SUB-TOTAL					**3,477,397.16**
2004	Fixed Dose Combination Training Nationwide for Med.Tech.					
	Cebu Province	39	Apr-Jul/ 04	1704	PHO	335,724.75
	Cebu City	8	May 20-31/04	464	CHO	152,604.35
	Negros Oriental	32	Aug. 16- Oct 22/04	1225	PHO	370,106.25

JFY	COURSE	BATCH	ACTUAL TERM	TOTAL # OF PAX	VENUE	AMOUNT (peso)
2004	Siquijor	5	Aug 2-6/04	191	PHO	78,552.25
	Manila City	17	June-July /04	816	District	743,072.25
	Negros Occidental	25	May-Sept /04	1398	Bacolod	347,376.80
	Nueva Ecija	18	June 9-29/04	638	Cabanatuan	242,422.00
	Bulacan	24	June-July /04	1048	Bulacan	167,920.00
	Rizal	8	July 6-22/04	895	Rizal	250,096.00
	QA Training on New Reading Scale for Regional Med.Tech. (Regional Level)	3	Sept 20-Oct 8/04	48	NTRL	450,000.00
	QA Training on New Reading Scale for Med.Tech. in CH	12	May 31-July 9/04	177	CRL	340,000.00
	QA Training on New Reading Scale for Laguna Coordinators and validators	1	May 25-27/04	16	NTRL	19,000.00
	QA Training on New Reading Scale for Laguna Province Med. Tech	2	Jun 29- Jul 2 /04	31	Los Baños	46,000.00
	Monitoring and Supervision Training for Med.Tech. in M(	1	Oct 21/04	25	City State	16,610.00
	NTP Workshop for Nurses and Med. Tech (Med.Tech. /	1	Dec. 9 / 04	20	Manor	16,887.25
	FDC Training for Cebu Prov. DOH Reps and Hospital St	1	Dec. 9-10 /04	55	Cebu	102,332.00
	Third Country Training Program for Doctors / Med.Tech.	1	Nov. 15-26, 2004	16	NTRL	1,274,858.83
	In-country Training on Basic AFB Microscopy for Med.Tech.	4	Feb. 7- Mar. 9, '05	59	NTRL/CRL	650,000.00
	QA Training for New Reading Scale RHU Level for Med. Tech. of Pilot Province Area					
	CHD 1	5	Feb 1-16 /05	74	Pangasinan	148,864.05
	CHD 2	1	Feb. 24 /05	14	Cagayan	9,250.00
	CHD 3	2	Feb 8-11 /05	22	Bataan	42,122.00
	CHD 4 A	2	Feb 21-24 /05	31	Cavite	72,112.50
	CHD 4 B	1	Mar 3-4 /05	7	Marinduque	33,000.00
	CHD 5	2	Mar 1-4 /05	22	Sorsogon	59,722.00
	CHD 6	4	Feb 21- Mar 4 /05	44	Iloilo	124,357.00
	CHD 8	2	Mar 1-4 /05	16	S. Leyte	36,800.00
	CHD 9	2	Feb. 22-25 /05	29	Pagadian	61,600.00
	CHD 10	2	Feb 21-24 /05	20	Misamis Occ	61,493.40
	CHD 11	2	Jan 25-28 /05	16	Compostela	46,760.00
	CHD 12	2	Feb 8 -11 /05	18	Kidapawan	47,719.50
	CHD 13	1	Mar 8-9 /05	14	Agusan del N.	36,220.00
	CAR	1	Feb 22-23 /05	16	Benguet	50,710.00
	Refresher Training for Lab. Aide of MCHO (Lab. Aides)	2	Feb 21- Mar 8/05	23	QA Center	7,350.00
	Laboratory Management Workshop for Regional Med.Tech. /NTRL Staff	1	Feb 18-19 /05	25	Pearl Garden	9,618.00
	SUB-TOTAL					**6,451,261.18**
2005	QA Training for New Reading Scale RHU Level for Med.Tech. of Pilot Province Area in ARMM	2	May 17-18/ 24-25	23	Maguindanao	72,860.00
	QA Training for New Reading Scale for Med.Tech. of Expansion Site RHU Level	1	June 6-10, 2005		NTRL	64,834.00
	Midyear Program Review (Regional Medical Tech.)	1	August, 2005	15	Astoria Hotel	74,385.00
	Workshop for MCHO for Doctors/Nurses	1	Sept.,2005			24,305.25
	Workshop for QCHO for Doctors /Nurses		Nov. 7-10/05		Rembrandt	206,875.94

JFY	COURSE	BATCH	ACTUAL TERM	TOTAL # OF PAX	VENUE	AMOUNT (peso)
2005	Plenary Workshop for Doctors /Nurses in QCHO		Nov 15/05		Rembrandt	25,534.50
	National Consultative for Regional Medical Tech. Medical Tech.		Nov., 2005	15	Bayview Hotel	69,882.00
	Workshop on Operational Research for Doctors in DOH	1	Jan 13/06	14	Lotus Garden	11,200.00
	Laboratory Workshop/ Year start Nat'l Consultative for Regional Med. Tech.		Feb. 28-Mar 3/06	15	Pearl Manila	69,882.00
	DRS Big Group Meeting for DOH-IDO Doctors, WHO Doctors, NTRL Staff	1	Feb. 27/06	30	NTRL	11,550.00
	QA Training for New Reading Scale for Med.Tech. Expansion Site at Province Level					
	CHD 1	1	Feb 21-24/06	20	Baguio	100,096.05
	CHD 2	1	Jan 23-26/06	5	Tuguegarao	27,610.00
	CHD 3	1	Feb 7-10/06	23	Balibago	170,212.55
	CHD 4 A	1	Feb 21-24/06	12	NTRL	51,808.25
	CHD 5	1	Feb 7-10/06	9	Bicol	42,959.00
	CHD 6	1	Jan 31-Feb3/06	13	Iloilo	69,358.95
	CHD 8	1	Jan 24-27/06	6	Tacloban	48,900.00
	CHD 9	1	Dec 13-16/05	6	Zamboanga	57,963.45
	CHD 10	1	Jan 31-Feb 2/06	22	CDO	42,678.25
	CHD 12	1	Jan 17-20/06	11	Cotabato	56,550.00
	CAR	1	Feb 21-24/06	5	Baguio	33,985.04
	QA Training for New Reading Scale for Med.Tech. Expansion Site at RHU Level					
	CHD 1 Pangasinan and la Union	2	Jan 31-Feb 3/06	20	Baguio	77,450.00
	CHD 2 Nueva Vizcaya and Quirino	1	Feb 2-3/06	22	Tuguegarao	65,775.20
	CHD 3 Nueva Ecija and Zambales	3	Feb 23-24; Mar 7-10	57	N.E./ Olongapo	83,059.00
	CHD 4 A Rizal (only)	1	March 9-10/06	21	Antipolo	32,730.00
	CHD 5 Albay and Camarines Sur	3	Feb 14-15/21-24	41	Bicol	110,450.00
	CHD 6 Capiz and Aklan	3	Feb 16-17/21-24	33	Iloilo	131,442.05
	CHD 8 Biliran and Eastern Samar	4	Jan31-Feb 3/8-10	35	Tacloban	91,200.00
	CHD 9 Zamboanga de Norte and Basilan	2	Jan 23-26/06	32	Zambo City	121,350.00
	CHD 10 Lanao del Norte and Misamis Oriental	3	Feb 7-10/06	43	CDO	97,600.50
	CHD 12 Sultan Kudarat and Sarangani	4	Feb 16-17/21-24/06	53	SK & Sarangani	142,500.00
	CAR Abra and Apayao	2	Feb 27-Mar 2	31	Abra & Apayao	105,091.00
	In-Country Training Program for Med.Tech. Basic Microscopy 5 days	11	Jan 6 - Mar 10, 2006	150	NTRL/CRL	1,556,660.55
	SUB-TOTAL					**3,948,738.53**
2006	In-Country Training Program for Med.Tech. Basic Microscopy 5 days	3	Jun 26-July 14,2006	25	CHD III	176,420.00
	Feed Back on BLS Activity NCR for NTP Coordinator (D	1	July 10, 2006		Lotus Garden	51,000.00
	Workshop on M/S NCR for NTP Coordinators (Drs / Ns.	1	July 11-12, 2006		Days Tagaytay	121,341.60
	Lab. Aides Training for Quezon City (Lab. Aides)	1	July 17-21, 2006	20	NTRL	78,442.50
	Plenary session on M/S Activity for NCR Coordinator (D	1	July 27, 2006		Lotus Garden	36,000.00
	Training of Trainers for Regional Med.Tech.	2	Sept 11-15 &	10	NTRL	150,245.00
			Nov. 20-24, 2006	10	CTRL	128,150.00

JFY	COURSE	BATCH	ACTUAL TERM	TOTAL # OF PAX	VENUE	AMOUNT (peso)
2006	Quality Assurance Training (3rd Phase) for Med.Tech.					
	Provincial Level Region I	1	Oct. 3-6, 2006	22	Baguio City	120,950.00
	Region II	1	Oct. 17-20, 2006	12	Tuguegarao	
	Region III	2	Jul 25-28/Sept 5-8	33	Angeles City	206,250.00
	Region IV A	1	Sept 26-29	14	NTRL	59,000.00
	Region IV B	1	Oct 10-13	3	NTRL	44,550.00
	Region V	1	Aug. 29-Sept 1	12	CHD 5	55,570.00
	Region VI	1	Sept 19-22	19	Iloilo	71,300.00
	Region VIII	2	Aug. 29-Sept 1	22	Tacloban City	160,600.00
			Sept 5-8			
	Region IX	1	Aug. 29-Sept 1	7	Zamboanga	45,600.00
	Region X	1	Sept 19-22	28	CDO	120,400.00
	Region XII	1	Sept 19-22	9	Cotabato	71,600.00
	Region XIII	1	Sept 5-8	12	Butuan	75,000.00
	ARMM	1	Sept 18-21	8	Zamboanga	104,516.00
	CAR	1	Oct. 3-6, 2006	12	Baguio City	66,650.00
	Quality Assurance Training (3rd Phase) for Med.Tech.					
	RHU Level Region I	4	Oct 10-13/17-20	60	Baguio City	218,800.00
	Region II					
	Region III	5	Aug. 29-Sept 1	83	CHD III	309,590.00
			Oct 17-27,2006			
	Region IV A	2	Oct 24-27/ 06	51	Quezon prov.	151,450.00
	Region IV B	2	Nov. 21-24	71	Occ. Mindoro	162,050.00
			Nov. 28-Dec 1		Roblom	
	Region V	4	Sept 20-Oct 13	67	Legaspi City	160,610.00
	Region VI	3	Oct 26-27/Nov 8-9	37	Iloilo	114,030.00
			Nov. 14-15			
	Region VIII	8	Sept 14-Oct 18	78	Tacloban City	357,600.00
	Region IX	2	Sept 26-29	35	Zamboanga	101,250.00
	Region X	2	Oct 3-13	56	CDO	156,400.00
	Region XII	3	Oct 4-5/ Nov 18-19		Cotabato	156,000.00
	Region XIII	2	Sept 18-19/21-22	40	Butuan	117,950.00
	ARMM				Cotabato	254,466.00
	CAR	3	Oct 9-12/24-25	41	CAR	145,350.00
	SUB-TOTAL					**4,349,131.10**
	GRAND TOTAL					**20,117,928.97**

Annex-6 OPERATIONAL EXPENDITURES

1. JAPANESE SIDE (JFY 2002 - 2006)					
	JFY 2002	JFY 2003	JFY 2004	JFY 2005	JFY 2006
1. GENERAL ACTIVITIES COST (peso)	2,539,000	3,571,000	11,951,059	7,747,517	9,812,030
2. PROVISION OF EQUIPMENT (peso)	3,804,000	11,298,000	10,869,931	6,327,114	9,442,800
GRAND TOTAL (PESO)	**6,343,000**	**14,869,000**	**22,820,990**	**14,074,631**	**19,254,830**
77,362,451					

2. FILIPINO SIDE (JFY 2002 - 2006)
NTRL BUDJGET & EXPENDITURES (CY 2002 -2007)

	JFY 2002	JFY 2003	JFY 2004	JFY 2005	JFY 2006	JFY 2007
BUDGET	4,826,872.00	4,845,196.00	4,868,071.00	4,920,565.00	5,017,366.00	5,025,406.00
EXPENDITURES						
Provision of Officies, buildings and facilities (Electricity, Janitorial, Security, Telephone, Maintenance)	1,081,495.36	1,081,495.36	1,573,617.94	1,127,717.52	1,289,627.28	
Counterpart budget for the implementation of the Project (Salary)	3,076,872.00	3,095,196.00	3,118,071.00	3,170,565.00	3,267,366.00	
Drugs and other supplies and consumables (Supplies & Materials)	350,000.00	350,000.00	350,000.00	350,000.00	350,000.00	
TOTAL (PESO)	**4,508,367.36**	**4,526,691.36**	**5,041,688.94**	**4,648,282.52**	**4,906,993.28**	
23,632,023						

Annex-7 LIST OF COUNTERPARTS AND ADMINISTRATIVE PERSONNEL

NAME	ORGANIZATION	POSITION
1. PROJECT DIRECTOR		
Dr. Ethelyn Nieto	DOH	UNDER SECRETARY FOR HEALTH OPERATIONS
2. PROJECT MANAGER		
1) Dr. Yolanda Oliveros	NCDPC, DOH	DIRECTOR
2) Dr. Remigio Olveda	RITM,DOH	DIRECTOR
3. COUNTERPARTS		
1) Dr. Yolanda Oliveros	NCDPC, DOH	DIRECTOR III, OIC, NCDPC
2) Dr. Jaime Lagahid	IDO	MEDICAL OFFICER VIII
3) Dr. Rosalind Vianson	IDO	MEDICAL SPECIALIST IV
4) Dr. Celine Garfin	IDO	MEDICAL SPECIALIST IV
5) Ms Arleen Rivera	IDO	CHIEF HEALTH PROGRAM OFFICER
6) Dr. Ernesto Bontuyan	IDO	MEDICAL SPECIALIST II
7) Ms. Cerila Negad	IDO	CHIEF SUPERVISING PROGRAM HEALTH OFFICER
8) Dr. Agnes Ma. Oliva Delrrosario	IDO	SENIOR PROGRAM HEALTH OFFICER
9) Dr. Remigio Olveda	RITM	DIRECTOR IV
10) Dr. Noel Macalalad	NTRL	TECHNICAL HEAD
11) Dr. Nora S. Cruz	NTRL	LABORATORY SUPERVISOR
12) Ms. Ellen Castillo	NTRL	Med. Tec.
13) Mr. Cristino Narciso	NTRL	Med. Tec.
14) Ms. Paz Rostrata	NTRL	Med. Tec.
15) Ms. Erlinda Reyes	NTRL	Med. Tec.
16) Ms. Marienela A. Pisuena	NTRL	Med. Tec.
17) Ms. Alma Gonzales	NTRL	Med. Tec.

CHD Regional Level

NAME	ORGANIZATION	POSITION
Dr. Jovencio Ordoña	CHD III -Pampanga	Director IV
Dr. Renato Pangan	CHD III -Pampanga	NTP Med. Coor
Ms. Virginia Guintu	CHD III -Pampanga	NTP Nurse Coor
Ms. Ann Katherine Tan	CHD III -Pampanga	NTP Med. Tech
Dr. Gerardo Bayugo	CHD IV-A	Director IV
Dr. Francisco Ogsimer	CHD IV-A	NTP Med. Coordinator
Mr. John Oliver Villegas	CHD IV-A	NTP Med. Tech.
Dr. Lydia Depra-Ramos	CHD VI	Director IV
Dr. Edith Gimotea	CHD VI	NTP Med. Coordinator
Ms Cleotilde Matullano	CHD VI	NTP Nurse Coordinator
Mr. Robinson Canson	CHD VI	NTP Med. Tech.
Dr. Benita Pastor	CHD VII	OIC, Director IV
Dr. Enrique Sancho	CHD VII	NTP Med. Coordinator
Ms. Jocelyn Tabotabo	CHD VII	NTP Nurse Coordinator
Ms. Lucy Aguiman	CHD VII	NTP Med. Tech.
Dr. Milagros Bacus	CHD VIII	Director Iv
Dr. Flor Elona	CHD VIII	NTP Med. Coordinator
Ms. Ma Noel Borneo	CHD VIII	NTP NurseCoordinator
Ms. Flor Jimenez	CHD VIII	NTP Med. Tech.
Dr. Dolores Castillo	CHD XI	Director, IV
Dr. Eloisa Segura	CHD XI	NTP Med. Coordinator
Ms. Ninfa Fernandez	CHD XI	NTP Med. Tech.
Dr. Asuncion Anden	CHD MM	Director, IV
Dr. Amelia Medina	CHD MM	NTP Med. Coordinator
Ms. Merly Ramos	CHD MM	NTP Nurse Coordinator

Proviencial Health Office

NAME	ORGANIZATION	POSITION
Dr. Carlito Santos	PHO-Bulacan	Provincial Health Officer
Dr. Jocelyn Gomez	PHO-Bulacan	Provincial Medical Officer
Ms. May Fernando	PHO-Bulacan	Proviencial Nurse Officer
Ms. Elizabeth Viray	PHO-Bulacan	Proviencial Med. Tech.
Dr. Benjamin Lopez	PHO-Nueva Ecija	Proviencial Health Officer
Dr. Noemi Equila	PHO-Nueva Ecija	Proviencial Med.Coor.
Ms. Tita Alzate	PHO-Nueva Ecija	Proviencial Med. Tech.
Dr. Alsaneo Lagos	PHO Laguna	Proviencial Health Officer
Dr. Dale Atayan	PHO Laguna	Proviencial Med. Coor.
Ms Rio Oriel	PHO Laguna	Proviencial Med. Tech.
Dr. Iluminado Victoria	PHO Rizal	Proviencial Health Officer
Dr. Angelito Dela Cuesta	PHO Rizal	Proviencial Med. Coor.
Mr Ariel Jerusalem	PHO Rizal	Proviencial Nurse Coor.
Ms. Pia Crisolo	PHO Rizal	Proviencial Med. Tech.
Dr Luisa Efren	PHO Neg. Occidental	PHO/Med.Coordinator
Ms. Lorna Garde	PHO Neg. Occidental	PHO/Nurse Coordinator
Dr Cristina Giango	PHO Cebu	PHO/Med.Coordinator
Ms. Emilia Loquias	PHO Cebu	Prov. Nurse Coordinator
Ms. Marilyn Sua-an	PHO Cebu	Prov. Med. Tech.
Dr. Stella Ygoña	Cebu City Health Officer	Proviencial Health Officer
Dr. Susan Adlawan	Cebu City Health Officer	Proviencial Med. Coor.
Ms. Catalina Bongo	Cebu City Health Officer	Proviencial Nurse Coor.
Ms. Dorotea Bacalso	Cebu City Health Officer	Proviencial Med. Tech.
Dr. Ely Villapando	PHO Negros Oriental	Proviencial Health Officer
Dr. Bernarda Cortez	PHO Negros Oriental	Proviencial Med. Coor.
Ms Irma Solis	PHO Negros Oriental	Proviencial Nurse Coor.
Ms. Cerilita Bael	PHO Negros Oriental	Proviencial Med. Tech.
Dr. Reymoses Cabagnot	PHO Bohol	Proviencial Health Officer
Dr. Jessica Socorro Yu	PHO Bohol	Proviencial Med. Coor.
Ms. Polizina Frances	PHO Bohol	Proviencial Nurse Coor.
Ms. Emily Recentes	PHO Bohol	Proviencial Med. Tech.
Dr. Nell Alcoran	PHO Siquijor	Proviencial Health Officer
Dr. Redempta Cortez	PHO Siquijor	Proviencial Med. Coor.
Ms. Feldomer Guinto	PHO Siquijor	Proviencial Nurse Coor.
Ms. Araceli Maglinte	PHO Siquijor	Proviencial Med. Tech.
Dr. Reinerio Zamora	PHO Eastern Samar	Proviencial Health Officer
Dr. Marian Isederio	PHO Eastern Samar	Proviencial Med. Coor.
Ms. Esther Chan	PHO Eastern Samar	Proviencial Nurse Coor.
	PHO Eastern Samar	Proviencial Med. Tech.
Dr. Jose Baranda	City Health Office Manila	City Health Officer
Dr. Pascuala Agujo	City Health Office Manila	City Health Med. Coor.
Ms. Linda Debesa	City Health Office Manila	City Health Nurse Coor.
Ms. Ana Bacudio	City Health Office Manila	City Health Med. Tech.
Dr. Antonietta Inumerable	City Health Office Quezon City	City Health Officer
Dr. Carlo Madrid	City Health Office Quezon City	City Health Med. Coor.
Ms. Felisa Tang	City Health Office Quezon City	City Health Nurse Coor.
Dr. Ma. Paz Ugalde	City Health Office Quezon City	City Health Officer
Dr. Carlo Madrid		City Health Med. Coor.
Ms. Felisa Tang		City Health Nurse Coor.

(Annex-8-1 Result of Baseline Survey in Negros Occidental)

Monitoring and supervision report

Findings

1 Human Resource

- Nurse coordinator of the province is very well motivated, experienced and technically sound. Her devoted work for the program should be highly appreciated.
- However, lack of trained provincial medical coordinator is a constraint for the improvement from the following reasons.

(1) It is very difficult for a nurse coordinator alone to persuade and convince MHO, who is suspicious on the NTP policy.

(2) Setting up of the TB diagnostic committee is indispensable to reduce unnecessary treatment, which result in the waste of fund for anti-drugs and possible side effect. It also requires strong commitment of medical TB coordinator with enough knowledge and skill on NTP.

(3) Private public mix is also a challenge to increase case detection rate. Coordination with private physician is a job of medical coordinator.

- Some RHUs do not have medical technologist. Well-trained microscopist are satisfactorily doing the job, however, considering the sustainability of the program, it is much better to ask the support from the LGU by hiring Med Tech.

2 DOTS implementation

- DOTS implementation is good in general, i.e. cure rate of 76% is above the national average. Case detection rate is also higher than the national average. However, there is a great difference of performance between the pilot area where DOTS was started in 1997 and the rest of the area. It is due to the frequency of the monitoring and supervision.
- Some RHUs has developed unique strategies through their experiences to tackle the problems they had enfaced. They would be helpful to improve the performance of the RHU which has not find the solution.
- Some RHUs are seriously problematic. It might require frequent monitoring and supervisory visit.
- In some RHU/CHC, So many smear negative cases are registered. It suggests unnecessary treatment for smear negative patients are being given.

3 Training

- A total of 10 MHOs, 30PHNs, 18 Med Techs, 120 RHMs and many BHWs are not yet trained on NTP. It is also big constraint to maintain the performance.

4 Laboratory service

- Although confirmation for the positive slide is done, quality control (QC) is not yet properly in place.
- In some RHUs, poor quality of the laboratory service is a constraint for the improvement of the program.
- Microscopy in some RHUs are not well functioning.

5. Commitment of the LGUs

- Commitment of the LGUs are generally good. However more advocacy to some LGUs are recommended.

Recommendation

1. Assignment of the medical coordinator is recommended, especially for the next challenge.
2. Monitoring and supervision should be strengthened. Ensuring the transportation is required.
3. Conduct of a workshop/ refresher training utilizing the staff from the good performer as resource person is expected to be effective.
4. Set up of the TB diagnostic committee is also urgent issue.
5. Functioning QC system should be carefully set up, considering inter-local health zone and revision of the QC guideline, which will be in the second half of this year..
6. Training of the newly hired should be urgently considered with the coordination to the CHD

February 21, 2003

Seiya Kato, M.D., Ph.D.
Chief Advisor
DOH-JICA Project for
Quality Tuberculosis Control Program

Appendix 1

Data on Negros Occidental Province

1. Demographical data

Population: 2.5 M (2.1M excluding Bacolod City)

No of municipality: 31 (including 12 cities)

No of provincial hospitals: 1+2

No of district hospitals: 10

2. Provincial Health Office

PHO: Dr. Luisa B. Efren

Medical TB Coordinator: none

Nurse TB Coordinator: Evangeline "Vangie" ganza

Med Tech (3): Natividad Maple, Iya Fesepida, Raymond Cadiz Epelaberos

Provincial Health Office is looking into implementation of "inter-local health zone system"

3. DOTS implementation (refer to Appex2)

(1) pilot started in 1997, followed by the area implemented in 2000 and 2001

(2) Staff

All most all RHU have Med Tech (province dispatch 7 Med Tech)

Training status: Most were trained on implementation, however, 10 MHO, 30 PHN ,18 Med Tech, 120RHM and many BHW are newly hired without training

(3) Case finding

Positive rate is 10-20% on average

CDR for new smear positive is 85% in the province

(4) Case holding(2001)

Cure rate is 76%

(5) Laboratory in PHO

Four Med Tech were trained on smear exam. Only 1 trained on QC

QC activity includes only confirmation of positive slide. Assessment of slide preparation is not yet done

(6) Drug

Last year, problem on supply of the drugs were serous

Drugs for Cat III are procured by LGU, which is generally supportive

CDS had started 2002

(7) Monitoring and supervision

Province has 3 vehicle which are not for NTP. The nurse coordinator is provided with only 1000 Pesos for transportation, which is good for 3 times of monitoring in a month. In 1997 they could use vehicle for monitoring and supervision of the NTP, which made it possible to go to the field quarterly. Difference of the frequency of the monitoring and supervision resulted in the difference of performance.

(8) TB diagnostic Committee

It is not yet set up.

Bacolod City

1. Demographic data & set up on NTP

Population: 450,0000

BHS 61

2. Implementation on NTP

(1) NTP implementation

NTP register is managed in CHO

They have only one nurse coordinator

NTP register is not updated. The performance is very poor

(2) Laboratory

Laboratory service is centralized. All specimen is transferred to the CHO laboratory.

Number of the slide is 30+/day

Four med Tech are working on NTP

They have one microscope for NTP

Total number of sputum in 2002 was 9165, of which positive slide were 571.

Appendix 2 Data of the RHUs

1. Set up on NTP

	Name of RHU/CHC	Population	No. of BHS	No of Hospital	No. of Private	MHO	Nurse	Med. Tech	Midwives	BHW	incentive
1	Mucia	61000	23	0	5	1	4	1	22	65	No
2	Hinoba-an	51964	0	1	0	1	4	2	17+4casual	300+	100-150
3	Sipalay	63474	14	1	0	3	4	1regular, 1casual	21	60	400+BRGY
4	Cauyan	88610	50(25)	disrict	1	1	1	1	50	142	200+BRGY
5	Ilog	47582	15	0	0	1	2	1	18	145	0
6	Kabankalan	153173	32	4 (2gov+2pri)	appro.25	1	8	1	49+10	356	1100
7	Himamaylan	93980	15	1	5	1	3	1	20	150	120+Brgy
8	La Castelana	60445	13	1(owned by Mayor<M.D.>)	0	1	3	1(voluntary)	20+8(contractual)	129	Brgy(200-1000)
9	Moises Padilla	35446	8	0	visitng	1	1	0	15	65	Brgy(300-200)
10	Isabela	49826	17	district H	3	1	2	0	17	206	Brgy(50-200)
11	Binalbagan	59605	16+2sub	0	0	1	2	1	25	0	0
12	Hinigaran	76702	24	primary	6	1	2	1	32	115	Brgy (150-600)
13	Pulupandan	26346	8	0	2	1	2	1	8	0	0
14	Bago	144942	?	?	?	6	40 inc hospital	?	?	?	?
15	Don Sarvador	17651	?	?	?	1	1 contractual	0	6	0	0
16	San Caros	119636	21	1(city hospital)	many	Dr. Camosa+1	6	1	20	593	300+Brgy
17	Calatrava	73619	22	1	2	1	3	1	22	473	Brgy (100-300)
18	Toboso	41637	9	0	0	1	1	0	9	173	Brgy (100-300)
19	Sagay	132714	24+sub	1city hospital	0	5 (Dr.Pillia)	9	3	46	521	500+Brgy
20	Cadiz	145181	22	1district	5	6	7	2	24	375	800+Brgy
21	Victorias	83518	16	1private	0	2	7	3	19	242	300+Brgy700
22	Saravia	55328	21	0	2	1	3	1	15	328	Brgy (150-450)
23	Silay	110170	19	1provincial	20	2+5contractual	10	1+1contractual+ lab Tech	18	88	220/day=1760
24	Talisay	80945	27	0	8	3	9	3	20	291	500+brgy

2. Case finding

Name of RHU/CHC	TB symptom	3sputum collection	3sputun collection rate	No of positive cases	posive rate	No of New Sm(+)	Case notification /100,000
Mucia	931	834	90%	0	0%	79	129.5
Hinoba-an	381	377	99%	85	22%	77	148.2
Sipalay	377	377	100%	78	21%	68	107.1
Cauyan	551	544	99%	68	12%	65	73.4
Ilog	380	380	100%	60	16%	56	117.7
Kabankalan	1444	1444	100%	181	13%	177	115.6
Himamaylan	627	627	100%	130	21%	148	157.5
La Castelana	197	177	90%	53	27%	46	76.1
Moises Padilla	188	171	91%	29	15%	26	73.4
Isabela	259	220	85%	35	14%	35	70.2
Binalbagan	330	311	94%	65	20%	56	94.0
Hinigaran	231	188	81%	72	31%	58	75.6
Pulupandan	350	350	100%	91	26%	78	296.1
Bago	1846	1846	100%	240	13%	192	132.5
Don Sarvador	93	93	100%	21	23%	20	113.3
San Caros	1320	1121	85%	142	11%	113	94.5
Calatrava	339	339	100%	72	21%	69	93.7
Toboso	179	164	92%	7	4%	6	14.4
Sagay	503	493	98%	109	22%	94	70.8
Cadiz	1000	967	97%	137	14%	163	112.3
Victorias	907	846	93%	57	6%	49	58.7
Saravia	466	409	88%	125	27%	100	180.7
Silay	777	697	90%	164	21%	121	109.8
Talisay	903	771	85%	106	12%	105	129.7

3. Case holding

Name of RHU/CHC	No of New Sm(+)	N						rate					
		Cure	Comp	Died	Failure	Lost	T.O.	Cure	Comp	Died	Failure	Lost	T.O.
Mucia	82	33	22	5	3	19	0	40.2%	26.8%	6.1%	3.7%	23.2%	0.0%
Hinoba-an	75	65	0	2	2	2	4	86.7%	0.0%	2.7%	2.7%	2.7%	5.3%
Sipalay	51	46	0	1	0	1	3	90.2%	0.0%	2.0%	0.0%	2.0%	5.9%
Cauyan	84	80	0	1	0	4	0	95.2%	0.0%	1.2%	0.0%	4.8%	0.0%
Ilog	52	46	2	3	1	0	0	88.5%	3.8%	5.8%	1.9%	0.0%	0.0%
Kabankalan	134	118	4	3	1	7	1	88.1%	3.0%	2.2%	0.7%	5.2%	0.7%
Himamaylan	100	92	0	3	0	5	0	92.0%	0.0%	3.0%	0.0%	5.0%	0.0%
La Castelana	39	21	9	2	0	6	1	53.8%	23.1%	5.1%	0.0%	15.4%	2.6%
Moises Padilla	22	17	3	1	0	1	0	77.3%	13.6%	4.5%	0.0%	4.5%	0.0%
Isabela	42	14	22	2	0	6	0	33.3%	52.4%	4.8%	0.0%	14.3%	0.0%
Binalbagan	52	41	6	1	0	3	1	78.8%	11.5%	1.9%	0.0%	5.8%	1.9%
Hinigaran	34	20	9	1	0	2	2	58.8%	26.5%	2.9%	0.0%	5.9%	5.9%
Pulupandan	90	87	0	3	0	0	0	96.7%	0.0%	3.3%	0.0%	0.0%	0.0%
Bago	224	209	0	9	2	2	2	93.3%	0.0%	4.0%	0.9%	0.9%	0.9%
Don Sarvador	31	24	1	1	1	4	0	77.4%	3.2%	3.2%	3.2%	12.9%	0.0%
San Caros	96	78	4	0	0	12	2	81.3%	4.2%	0.0%	0.0%	12.5%	2.1%
Calatrava	50	46	1	2	0	1	0	92.0%	2.0%	4.0%	0.0%	2.0%	0.0%
Toboso	20	11	7	1	0	1	0	55.0%	35.0%	5.0%	0.0%	5.0%	0.0%
Sagay	139	103	33	2	0	1	2	74.1%	23.7%	1.4%	0.0%	0.7%	1.4%
Cadiz	161	115	26	2	5	13	0	71.4%	16.1%	1.2%	3.1%	8.1%	0.0%
Victorias	46	35	5	3	0	3	0	76.1%	10.9%	6.5%	0.0%	6.5%	0.0%
Saravia	92	69	11	2	1	8	1	75.0%	12.0%	2.2%	1.1%	8.7%	1.1%
Silay	155	73	53	8	1	16	4	47.1%	34.2%	5.2%	0.6%	10.3%	2.6%
Talisay	116	82	15	1	1	13	4	70.7%	12.9%	0.9%	0.9%	11.2%	3.4%

(Annex-8-2 Result of Baseline Survey in Manila City)

Executive Summary

One of the major health problems confronting the Philippines today is tuberculosis. It is a leading cause of illness and death in the country, and its prevalence is so high that the Philippines has become one of the 22 countries in the world with a heavy TB burden. The country's National TB control program (NTP) was first implemented in 1978, and has undergone some revisions in its policies and guidelines to improve its performance. Currently, the NTP is utilizing the DOTS strategy to improve the treatment of the individual cases, and improve the program management.

The government of Japan continues to support the NTP through the DOH-JICA Project for a Quality TB Control Program (JICA-QTCP) mainly through technical support and capacity building under the scheme of technical cooperation. The project areas include several provinces and cities in regions 3, 4, 6, 7, and 8. This year, plans were made to include NCR as one of the project's areas of operation, and Manila was the prospective site. Discussions were held in May 2003 between Manila Health Department, DOH (NCR), and JICA-QTCP to plan for a possible technical cooperation in Manila. It was then decided by the parties concerned that a baseline survey of the TB control program in Manila is needed. The survey was conducted from June 2 to 20, 2003 in 24 health centers covering the 6 city districts.

The survey's findings indicate that the city's NTP policies conform with the national guidelines. Management of the program is by the Chief of the MHD's TB Control Division, who is very knowledgeable on the NTP. At the health center level though, the staff's skills and knowledge needs to be refreshed and updated, particularly in the area of program management. Improvements are also necessary in the following areas: monitoring and supervision of the program and the laboratory services, quality control system of the laboratory services, and recording/reporting. Regarding the TB laboratories, the current set-up requires some improvements that will enhance the effectiveness of their services. Case finding and case holding activities can also use some improvements, particularly in the aspect of treatment supervision and defaulter tracing. The inadequacies in these areas of the program have resulted in the majority of the health centers' inability to reach acceptable cure rates.

Introduction and Background Information

TB Situation

Globally, TB remains a major health problem, with approximately 2 million people dying of TB each year (WHO, 2002). WHO estimates that between the period 2002 and 2020, about 1000 million people will be newly infected, over 150 million people will get sick with TB, and 36 million will die of the disease, if the efforts to control TB are not further strengthened.

In the Philippines, TB is still a major cause of morbidity and mortality, and the country is one of the 22 countries in the world with a high TB burden. The prevalence of smear (+) TB in the Philippines for both urban and rural populations is 3.1/1000.*(1)* However, in the urban poor settlements, the prevalence for smear (+) TB is higher at 5.6/1000.*(2)* The estimated annual risk of tuberculous infection (ARTI) in the urban poor settlements is 6.5%, compared to 2.6% in the general urban populations. *(2)* In Manila (with an estimated population of almost 1.6 million in 2002), TB was reported as the 4th leading cause of morbidity, and the 5th leading cause of mortality (MHD, 2002).

The National Tuberculosis Control Program of the Philippines

The National Tuberculosis Control Program (NTP) was first implemented in 1978. However, an external evaluation of the NTP in 1993 showed the following constraints that affected the program's performance, including: inadequate budget for drugs, poor quality of diagnostic tests, irregular program monitoring and supervision, non-standard approaches to diagnosis and treatment, and the poor compliance to treatment by the patients. *(3)* Revisions were then made in the NTP's policies and guidelines to improve its performance. The current NTP utilizes the Directly Observed Treatment Short Course (DOTS) strategy based on the WHO framework for effective TB control programs. Geographic coverage of DOTS in the Philippines has reached 97% at the end of 2002, and the program has achieved an overall cure rate of 73%, with a case detection rate of 57% (DOH). This is still below the targets of 85% cure rate, and 70% case detection rate. However, the findings of the NTP external review conducted in July 2002, indicate that the program is moving steadily towards these targets.

Japan's Official Development Assistance (ODA) for TB Control in the Philippines

Japan provides various forms of Official Development Assistance (ODA) to its partner countries through the Japan International Cooperation Agency (JICA), and the current ODA for the Philippine public health sector is under the scheme of technical cooperation for TB control. The first project under this scheme was the Public Health Development Project (September 1992 to

August 1997 was conducted in Cebu Province. This project led to the development of the new NTP policies and guidelines, in collaboration with the DOH. The second phase of the technical cooperation was the DOH-JICA TB Control Project, which ran from September 1997 to August 2002. This project contributed to the expansion of the NTP (DOTS) to all provinces in Region 7, 2 provinces in Region 3, 2 provinces in Region 4, and in Eastern Samar (R8). Under the project, the creation of a quality control system for the sputum microscopy services was initiated, and the National TB Reference Laboratory (NTRL) was established. The third phase of the technical cooperation (DOH-JICA Project for Quality TB Control Program) will run from September 2002 to August 2007. Through this project, JICA will continue to support the NTP by: (1) assisting the NTP in the monitoring and supervision activities of the regions, provinces, and cities; (2) the networking of TB laboratories among the NTRL, the regional and provincial laboratories, and the microscopy centers; and (3) conducting operations researches in order to upgrade, and to ensure, the quality of DOTS implementation.

Rationale for the Baseline Survey of the NTP in Manila

In order to ensure the good quality of program implementation, the DOH and the international partners of the NTP (WHO, JICA, World Vision, Medicos del Mundo, CIDA, and USAID), decided that the partner agencies should provide technical support, and assist in the monitoring and supervision, even to the areas which are outside of the individual partner agency's project coverage. This is also in line with the current JICA project's list of activities in support of the NTP. Towards this end, JICA made consultations with the DOH (central and CHD-NCR offices) in May 2003, regarding the prospects of providing technical assistance to the city of Manila. Meetings were held between JICA, CHD-NCR, and the Manila Health Department to discuss the possibility of technical cooperation between the city of Manila and JICA. The parties then decided to conduct a baseline survey of the NTP's performance in Manila in 24 of the city's 49 health centers, including their corresponding laboratory services, to determine the possible strategies for technical support.

Conduct of the Survey and its Findings

Survey Team and Methods

The survey team was composed of representatives of the Manila Health Department's TB Control Division and the District Health Offices, DOH Center for Health Development (NCR), National TB Reference Laboratory (RITM), and JICA. The survey was conducted in 24 health centers (4 in each of the 6 districts of Manila) from June 2 to 20, 2003. The survey was done through field visits of the health centers, review of the health centers' relevant NTP records, staff interviews, and assessment of the microscopy services. The survey team also visited the Manila Public Health Laboratory, this being a major component of the city's TB microscopy services. The assessment points include: (1) review of local NTP policies; (2) health center staff and their

TB control activities; (3) microscopy laboratory set-up, and quality control procedures; (4) case finding activities, including the accomplishments for 2002; (5) case holding activities, including the treatment outcomes for the cohort of new smear positive cases in 2001; (6) NTP recording and reporting; (7) NTP monitoring and supervision; (8) anti-TB drugs, and other supplies; and (9) the involvement of other sectors in the city's TB control program.

Findings

- Local NTP Policies

The TB control program policies of Manila conform with the policies and guidelines of the NTP, which are based on the WHO framework. The DOTS strategy was started in Manila in 2000, and this is being implemented at the city's health centers. Overall management of the program is being handled by the Chief of the TB Control Division of the Manila Health Department (who is also the NTP Medical Coordinator) assisted by the Nurse NTP Coordinator. Both are capable, and very knowledgeable of the NTP, but they have limited opportunities to visit the field units.

The NTP Nurse District Supervisors (1 per district) are in charge of program monitoring and supervision, while the 2 Laboratory Supervisors from the Manila Public Health Laboratory are responsible for the monitoring, supervision, and quality control of the TB laboratory services.

- Microscopy Laboratories and Quality Control

Most of the health centers visited (21 of 24) have their own microscopy laboratory, with adequate manpower consisting of trained medical technologists, complemented by sputum canvassers or laboratory aides. The existing set-up in these laboratories is functional, although in some of the laboratories (9 of 21), improvement is needed regarding laboratory ventilation, and the set-up for smearing and staining (sink/water supply). The recommended standard binocular microscopes were available in 20 of the 21 laboratories visited (one laboratory had a monocular unit in use). Of the 20 binocular microscopes, one was defective and needs a replacement. In general, the quality of smear preparation is adequate, with only a few of the microscopists needing improvements in their technique. While the medical technologists are doing only sputum smear examinations, it was noted that some of them are also handling some NTP tasks such as record keeping and drug dispensing. These tasks are normally assigned to the public health nurses (PHNs). Laboratory recording is generally good in most of the health centers, however, it was observed that some do not utilize the standard NTP Laboratory Request Form and the NTP Quarterly Laboratory Report Form.

Quality Control (QC)

There are a total of 6 validators (all medical technologists) for the city (1 per district); and all were trained in NTP quality control procedures. These validators are also doing routine sputum

smear examinations in the health center laboratories, aside from their validation job. There are 2 laboratory supervisors (med. tech.) for the city, with each supervisor responsible for the quality control of 3 districts. However, only 1 of the 2 supervisors has undergone training in microscopy quality control. The selection of the slides for validation is being done by the laboratory supervisors during their monthly monitoring visits; these slides are then submitted by the center's staff to the validators. The slides validation is done in an unblinded manner in the health centers where the validators are based. A consolidated feedback form is then accomplished by the validators, which are then handed over to the med. tech. microscopists. However, there is no feedback to the laboratory aides - who are also involved in the preparation of the smears. The consolidated quality control results for 2002 showed a 100% overall agreement, with no false readings recorded. However, from our observations in some of the laboratories visited, the quality of the smears has to be improved. These observations also suggest that the validation system itself may have to be modified to reflect a more realistic picture of the laboratories' performance.

- Health Center Staff and TB Control Activities

All of the health centers visited are manned by doctors, nurses, medical technologists (except in 3 microscopy laboratories which are manned by laboratory aides), and complemented by the barangay health workers (BHW). Most of the doctors, nurses, and MTs (except the newly hired) have been trained in the basic NTP, and were also oriented in the new Manual of Procedures of the NTP. The doctors are responsible for the diagnosis and classification of cases, and together with the nurses, are also responsible for the initiation and maintenance of treatment. The review of the treatment cards showed a number of misclassified cases, and some instances wherein the selected treatment regimen is not appropriate.

The NTP activities are conducted mostly at the health center, including the diagnosis and treatment of cases. Sputum specimens for examination are submitted by the patients directly to the microscopy centers, and it usually takes 3-5 days before the results are available (for diagnostic sputum examinations). Follow up sputum examinations take a shorter period, usually 2-3 days.

Directly observed treatment (DOT), as a rule, is being done at the health center particularly during the intensive phase, with either a nurse or a BHW as treatment partner. Treatment during the maintenance phase, on the other hand, is variable, depending on the patient's bacteriologic status at the time of diagnosis. This could be in the health center for the initially smear (+) cases; while for the smear negative cases, maintenance treatment is usually in the patient's house with either a BHW or, a family member, as treatment partner. In the latter instance, treatment

supervision by the health worker becomes less frequent - usually just once a week, during the time of collection of the weekly drug supply.

Defaulter-tracing mechanisms are in place, and are usually handled by the nurses and the barangay health workers (BHWs). This is usually initiated after a patient misses 2-3 days of treatment at the health center, or after missing drug collection for 1 week. However, it seemed that the tracing is not working very well, or is not being implemented properly, considering the significant level of treatment defaulters. New approaches, or stricter implementation, of defaulter tracing may be necessary to reduce the number of patients defaulting from treatment. Health education on TB is integrated into the general educational activities of the health center through the mothers' classes, community assemblies, pre-clinic lectures, and is a component of the TB treatment counseling package.

- Case Finding

Passive case finding is the policy in Manila, although, active case finding is occasionally done in some districts in conjunction with special projects such as the "Sama sa Masa" outreach project, and the "Operation Dahak" project of District 1. The total population coverage for the survey areas is 973,618 with about 347,761 (about 36% of the total) belonging to the so-called economically depressed population (urban poor). In 2002, the 3-sputum examination rate for TB symptomatics was generally good, with an average value of 91% (median: 95%). The acceptable rate for 3-sputum examinations is at least 90%, but ideally, it should be 100%. The positivity rate for diagnostic sputum examinations is on average, 11% (median: 12%). Nine of the 24 (38%) centers, however, achieved a positivity rate below 10%. Collectively, a total of 704 new, smear (+) cases were discovered in 2002 (case notification rate: 73.2/100,000). The number of smear (+) cases discovered, however, may be low, considering the demography of the areas covered.

The proportion of smear (+) cases out of the total number of PTB cases registered for treatment is below the recommended level of 60% - 80%. The mean proportion of smear (+) cases in the group is 31% (median: 29%). Only 3 of the 24 centers (12.5%) achieved a level of 60% or higher. On the other hand, the proportion of smear (-) PTB is very high, ranging from 54% to 94% with an average of 68% (median: 72%). The recommended proportions for smear (-) cases is only 40% or less. In addition, the high proportion of smear negative PTB, in the setting of low HIV prevalence, may suggest a high level of over-diagnosis (based on chest X-rays) among this subset of patients. Consequently, a correspondingly high level of unnecessary treatment may have also resulted from this. It was noted that the TB Diagnostic Committee is not active in some districts of the city.

- Case Holding

Anti-TB treatment is generally done at the health center under the direct supervision of the treatment partner, which is usually a nurse, a BHW or, as in some health centers, a medical technologist or the laboratory aide. As mentioned previously, treatment supervision during the maintenance phase is reduced, and is usually done by a family member (acting as treatment partner). Moreover, there were instances wherein treatment was on a self-administered basis, especially among those whose illness is relatively mild. In some health centers, the survey team noted that a number of cases were misclassified, many follow up sputum examinations were either missed or delayed, and the recording of drug intake or collection is often incomplete. The mean cure rate for the group was only 63% (median: 68%). However, 5 of the 24 (21%) health centers were able to achieve high cure rates (over 85%), namely: Barrio Obrero, Palomar, Dimasalang, Luzviminda, and Rosario Reyes. Defaulter rates are high, ranging from 4% to 42%; the mean defaulter rate for the group is 12% (median: 11%). Only 9 (38%) health centers had defaulter rates below 5%. The high defaulter rate, if not addressed, foreshadow an even more serious problem of MDR TB in the future. Treatment failure rate was, on average, only 1%. These data suggest that treatment supervision and defaulter tracing may have to be implemented more strictly.

- Records and Reports

The review of treatment cards, TB registers, and NTP patient ID cards showed that in some health centers, relevant patient information (especially the past history) was often incomplete. Furthermore, the entries regarding sputum collection/examination (dates), drug collection, and treatment outcome were usually incomplete, and at times, erroneous. The maintenance of these records also needs improvement.

- Monitoring and Supervision

The health centers are being visited for monitoring and supervision on a monthly basis by the District Supervisors. However, the findings regarding recording and reporting, and overall performance, suggest that monitoring needs to be done in a more comprehensive manner, and the level of supervision have to be increased. Monitoring by the Program Supervisors and the Laboratory supervisors is being done separately.

- Anti-TB Drugs and Other Supplies

The anti-TB drug supply seems to be adequate at this time. In some health centers though, the supply for some forms (laboratory request forms, counting sheets, and NTP ID cards) are inadequate. The recently introduced (in late 2002) NTP treatment sheets are not yet available in the health centers.

- Involvement of Other Sectors in the NTP

In general, the active involvement of the other sectors in the NTP, especially the community-based NGOs, religious and social development groups, is still at a low level. The participation of the barangay health volunteers in the NTP is also still at a low level. At this time, most of the private medical practitioners, private and government hospitals, have no formal coordination with the city's TB control managers or implementers regarding their TB control activities.

Conclusion and Recommendations

The implementation of the TB control program in the 24 health centers visited by the survey team is generally, in accordance with the current guidelines set by the DOH for the national TB control program. Some inadequacies relating to program implementation, monitoring and supervision, the laboratory services, and laboratory quality control, have been noted. These factors contributed to the inability of most of the health centers visited to achieve the targets of the NTP, particularly the 85% cure rate. The potential for achieving better performances is present, and in line with the goal of improving the overall performance, the following are recommended:

1. Monitoring and supervision of the program and laboratory services should be strengthened to ensure that the program is implemented properly at all times. The following activities are recommended to accomplish this end: (a) refresher training or workshops on monitoring and supervision should be conducted for the District Supervisors and Laboratory supervisors; (b) encourage more field visits by the NTP Medical Coordinator and the NTP Nurse Coordinator; (c) monitoring and supervision by the program and laboratory coordinators should be conducted simultaneously to ensure a more effective coordination between these two aspects of the NTP; and, (d) ensure the provision of adequate travel allowances for the program coordinators and supervisors.
2. Upgrade the knowledge and skills of the health center staff (particularly the doctors and nurses) regarding the management of the NTP at the treatment unit level. Refresher training is recommended for the physicians-in-charge and nurses-in-charge for this subject.
3. Upgrade the quality of the microscopy services including the quality control system, and its monitoring and supervision. This may be done by ensuring the proper set-up of the existing microscopy laboratories, upgrading the defective equipment, and the creation of microscopy laboratories in critical areas of the city to ensure its accessibility to the people. Refresher training on Laboratory Service Quality Control for the validators and supervisors is also recommended.
4. Establish a TB Task Force, which will assist the program managers in the assessment of the status of the NTP implementation in the city, and help in solving the key problems

that are besetting the program. Initially, the Task Force may be composed of representatives of the Manila Health Department, including the Medical and Nurse NTP Coordinators, DOH-CHD NCR, Manila's District Health Offices, the National TB Reference Laboratory (RITM), and JICA-QTCP.

5. Reactivate the TB Diagnostic Committee to ensure the proper evaluation of the smear negative TB suspects, and to ensure that proper and judicious treatment will be provided to all active TB cases.
6. Facilitate the participation of the other sectors, especially those already involved in community work, to the city's TB control program.

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(Annex-8-3 Result of Baseline survey in Quezon City)

DOTS IMPLEMENTATION IN QUEZON CITY
(Baseline Survey Report)
June 2005

DOH-JICA Project for Quality Tuberculosis Control Program
National Center for Disease Prevention and Control (DOH)
Center for Health Development Metro Manila (DOH)
National Tuberculosis Reference Laboratory (RITM/DOH)
Quezon City Health Department

Japan International Cooperation Agency

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Foreword

We in the Quezon City Health Department (QCHD) greatly appreciate the NTP Baseline Survey (situational analysis) that was conducted by the JICA-QTBCP and DOH-NCDPC in collaboration with QCHD. The survey provided concrete and scientifically derived data and information on the state of NTP-DOTS implementation in Quezon City. The survey findings gave us a firm basis for instituting needed reforms and program interventions to address the needs, and weak points in the delivery, supervision, and monitoring of DOTS services in the city.

The survey was also timely in that its results were presented at about the same time that the need for more effective tuberculosis (TB) control in the city was brought to the attention of the city's chief executive, the Honorable Mayor Sonny Belmonte.

Mayor Belmonte subsequently approved the development of the *Sagip Baga* project as a full-fledged effort to stop TB in Quezon City by mobilizing the resources of all stakeholders from the public and private sectors in the fight against TB.

The QCHD greatly benefited from the survey's findings and recommendations as they helped us mobilize resources to conduct the needed training of our front-line service providers and their supervisors. It also helped us in our efforts to improve our systems and procedures, particularly with respect to monitoring and supervision, and laboratory quality assurance.

We thank JICA and DOH for initiating this survey and for selecting Quezon City as one of the sites for their technical assistance program. While the survey revealed many of our weaknesses, we are confident that we can improve our future performance by adhering to its recommendations.

Ma. Paz Ugalde, M.D.
City Health Officer
Quezon City Health Department

Preface

The Baseline Survey of DOTS implementation in Quezon City was done to assess the status of the city's tuberculosis control program, and to determine the specific needs of the city in terms of strengthening program implementation. The survey findings will be used to inform the local health policy makers regarding the status of the program in the city, and to guide QCHD in planning interventions for program improvement. It will also inform the regional and national NTP managers of the Department of Health (DOH) regarding the status of DOTS implementation in a highly urbanized setting in the Philippines. For JICA, the survey findings will serve as a guide in developing a framework for technical support to Quezon City. This report describes how DOTS is being implemented in Quezon City and outlines JICA's recommendations for QCHD.

The survey was planned and conducted under the leadership of Dr. Masashi Suchi (Chief Advisor, JICA) in coordination with Dr. Ma. Paz Ugalde (City Health Officer, QCHD), Dr. Annie Inumerable (Assistant CHO, QCHD), Dr. Verdades Linga (Planning Officer, QCHD), Dr. Jaime Lagahid (Director, Infectious Disease Office, NCDPC/DOH), Dr. Rosalind Vianzon (NTP Manager, NCDPC/DOH), Dr. Ernesto Bontuyan (NCDPC/DOH), Dr. Celine Garfin (NCDPC/DOH), Dr. Gerardo Bayugo (Regional Director, CHD-MM), Dr. Amelia Medina (NTP Medical Coordinator, CHDMM), Dr. Nilda de Gula (CHD-MM), Dr. Noel Macalalad (Head, NTRL), and Dr. Nora Cruz (NTRL).

The Field Survey Team was composed of Dr. Akihiro Ohkado (JICA; Survey Team Leader), Dr. Mie Kasamatsu (JICA), Dr. Arthur Lagos (JICA), Ms. Maricel Trono RMT (JICA), Ms. Cristina Villarico RMT (NTRL), Dr. Carlo Madrid (Medical NTP Coordinator, QCHD), and Ms. Felisa Tang RN (NTP Nurse Coordinator, QCHD). Dr. Ohkado, Dr. Lagos, and Ms. Trono summarized the survey findings. Ms. Merle Ramos (NTP Nurse Coordinator, CHDMM) provided supplemental data from CHD-MM. The draft document was prepared by Dr. Lagos, and was reviewed by Dr. Ohkado, Dr. Suchi, Dr. Kasamatsu, Dr. Ugalde, and Dr. Vianzon. Mr. Shigeo Kobayashi (JICA) handled the logistical requirements of the survey; and Ms. Gracie Chavez (JICA) provided administrative assistance in the publication of this report.

List of Abbreviations

BCG	Bacille Calmette-Guerin
BHW	Barangay Health Worker
CDR	Case Detection Rate
CHD-MM	Center for Health Development, Metro Manila
DHO	District Health Officer
DMC	District Medical Coordinator (NTP)
DNS	District Nurse Supervisor
DOH	Department of Health (Philippines)
DOH-JICA QTBCP	DOH-JICA Project for Quality Tuberculosis Control Program
DOT	Directly Observed Therapy
DOTS	Directly Observed Treatment Short-course strategy
EQA	External Quality Assurance
GFATM	Global Fund to Fight AIDS, Tuberculosis, and Malaria
HBT	Home based treatment
HCT	Health center based treatment
JICA	Japan International Cooperation Agency
LCP	Lung Center of the Philippines
MSE	Monitoring, Supervision, and Evaluation
NCDPC	National Center for Disease Prevention and Control (DOH)
NGO	Non-governmental organization
NTP	National Tuberculosis Control Program
NTRL	National Tuberculosis Reference Laboratory
PTSI	Philippine Tuberculosis Society Incorporated
QCHD	Quezon City Health Department
SNTB	Smear Negative Tuberculosis
SPTB	Smear Positive Tuberculosis
TB	Tuberculosis
TBDC	TB Diagnostic Committee
WHO	World Health Organization

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Executive Summary

DOTS in the Philippines

Tuberculosis is the 6th leading cause of morbidity and mortality in the Philippines; it is still a major public health problem in the Philippines. In 1996, the Philippine National Tuberculosis Control Program (NTP) implemented the Directly Observed Treatment Short course strategy (DOTS) in the country; nationwide public sector coverage of DOTS was achieved in 2002. Targets of the program include a cure rate of at least 85%, and a case detection rate (CDR) of at least 70%. The NTP has recently achieved the global targets with a 71% CDR for 2004 and a treatment success rate of 88% (cure rate is 81%) for the 2003 cohort (DOH, 2005).

In the National Capital Region (NCR; or Metro Manila), tuberculosis is the 5th leading cause of morbidity, and the 4th leading cause of mortality (CHD-MM, 2001). Metro Manila has a population about 10.4 million (CHD-MM, 2005), about 35% of which are living in urban poor settlements that are spread throughout Metro Manila. The prevalence of TB is higher in the urban poor settlements than in the general urban population. However, access to basic health services in these settlements is generally poor. The DOTS strategy was implemented throughout Metro Manila in 2000. The result of DOTS activities in the various cities and municipalities of Metro Manila are variable, which reflects the differences in the quality of implementation between the LGUs. Metro Manila has achieved a CDR of 58% in 2004, and a cure rate of 75% for the 2003 cohort.

JICA Support for TB Control in the Philippines

Japan's assistance to public health in the Philippines focusing on tuberculosis control started in 1992 through a series of technical cooperation projects between the Japan International Cooperation Agency (JICA) and the Philippines' Department of Health (DOH). The projects were designed to assist the Philippines in developing national guidelines, in strengthening its institutional capacity for DOTS implementation, and in developing human resources.

The major accomplishments of the first two projects (1992 to 2002) include the pilot testing of the new NTP guidelines based on DOTS in 1994 and subsequently proving its feasibility and effectiveness in the Philippine setting, the establishment of the Cebu TB Reference Laboratory, and the expansion of DOTS to different areas in the Philippines covering around 18% of the total population. JICA also contributed to the revision of the NTP's Manual of Procedures in 2001, and established the Philippines' National Tuberculosis Reference Laboratory in 2002. The current project (JICA Project for Quality Tuberculosis Control Program) is providing inputs to the NTP in order to raise the quality of DOTS implementation in the country. This is through the strengthening of the monitoring and supervision system, through the establishment of the nationwide laboratory quality assurance network for sputum smear microscopy, and by strengthening the NTP's capacity for conducting operational research.

New directly supported areas were chosen in addition to the areas supported in the two previous projects. The selection of these areas was made in consultation with the DOH National Center for Disease Prevention and Control (NCDPC), the DOH Center for Health Development, and the local government's health authorities. The new support areas include Negros Occidental Province (Region 6; 2003), the City of Manila (NCR; 2003), and Quezon City (NCR; 2005). The areas were selected because substantial improvement in their TB control performance is expected to have a big impact on the control of TB in their respective regions because of the big population in these areas.

Geographic and Socio-economic Information on Quezon City

Quezon City is located at the northeastern part of Metro Manila; it has a total land area of 171.7 square kilometers, which is about one fourth of the size of Metro Manila. The city's population of about 2.4 million (2005) is the biggest among all cities of the country. Quezon City is divided into four political districts (with five health districts), which are further sub-divided into 142 barangays. Pockets of urban poor (squatter) settlements exist throughout the city, and the proportion of the population living in these settlements ranges from 20% to almost 100% of a barangay's total population. The city's population is composed mostly of migrants from different parts of the country, and about 67% of the total population belongs to the economically productive age groups (15 years and older). Small and medium-scale business establishments dominate business in the city.

Purpose, Procedures, and Findings in the Quezon City Baseline Survey

DOTS strategy was started in Quezon City in the last quarter of 1999. The baseline survey was conducted to assess the status of DOTS implementation in the city and to identify the city's specific needs to improve its accomplishments. The findings from this survey will be used to inform health policy makers and serve as a guide for planning new strategies or interventions to further improve the program. The field survey team, composed of staff from JICA, NTRL, and QCHD, gathered quantitative and qualitative data through records and reports review, interviews of health workers and health center clients, and field observations.

The city government's support to the program is strong, and the leadership of the Quezon City Health Department has been more than adequate. The city's field health workers are working hard to implement DOTS; modest improvements in program performance were gained over the years but the overall accomplishments are still below the program targets.

The survey has identified several points for improvement including the variable manner of conducting case finding and case holding activities, the inadequate laboratory network and quality of sputum microscopy, the lack of an effective program monitoring, supervision, and evaluation, and the weak community participation in TB control activities. Other program challenges exist as well, such as addressing the issues related to the difficult access to basic health services in urban poor settlements, the relative shortage of human resources, the lack of coordination and networking of TB control activities with other sectors, and the recurrent logistical problems that tend to disrupt key activities of the program.

Introduction

DOTS in the Philippines

Tuberculosis (TB) is the 6th leading cause of morbidity and mortality in the Philippines; it is still one of the major public health problems in the country. The National Tuberculosis Control Program (NTP) started to implement the Directly Observed Treatment Short course (DOTS) strategy in 1996 in several areas of the country. The strategy was adopted to improve program and case management in the country after DOTS was proven to be feasible and effective in the Philippine setting. Pilot testing of the new NTP guidelines based on DOTS was started in a model area in Cebu Province under the JICA Project in 1994. The strategy was gradually expanded throughout the country until 100% geographic coverage in the public sector was achieved in 2002. The NTP aims to achieve a cure rate of at least 85% among the smear positive cases treated, and to detect at least 70% of the estimated number of new smear positive (NSP) cases in the country. The NTP recently achieved the global target with an average case detection rate (CDR) of 71% in 2004 and a cure rate of 81% for the 2003 cohort; the overall treatment success rate is already 88% (DOH, 2005).

The National Capital Region (NCR), or Metro Manila, is the most urbanized region in the country. Its population of about 10.4 million (2004, CHD-MM) is the second highest among the 17 regions in the Philippines. Metro Manila's population density of 15,617 persons per square kilometer is much higher than the country's average population density of 260 persons per square kilometer. About 35% of Metro Manila's population is living in urban poor settlements. These settlements are spread in about 526 communities throughout Metro Manila and are often situated on vacant private or public lands in high-risk locations such as along the riverbanks, near garbage dumpsites, along railroad tracks, under bridges, and beside industrial establishments. Access to basic health services is generally limited in these areas.

Tuberculosis is still one of Metro Manila's leading public health problems. The DOH Center for Health Development Metro Manila (CHD-MM) reported TB as the 5th leading cause of morbidity (based on notification data for all forms of TB) and the 4th leading cause of mortality with rates of 217/100,000 and 29/100,000 respectively. In urban poor settlements, the prevalence rate of smear positive tuberculosis (SPTB) was reported at 560/100,000; this is much higher compared to that of the general urban population, with a prevalence of 310/100,000 (NPS, 1997). The DOTS strategy was implemented in the different local government units (LGUs) of Metro Manila in 2000; however, the quality of implementation between the LGUs has been variable. Metro Manila achieved an overall CDR of only 58% in 2004 and an average cure rate of 75% for the 2003 cohort of new smear positive (NSP) cases. The defaulter rate is high, ranging from 0% to 21%, with an average of 6.6%; the transfer out rate is also relatively high at 4.7%, with a range of 0% to 13.9%.

JICA Support for TB Control in the Philippines

Japan's assistance to public health in the Philippines focusing on TB control started in 1992 through a series of technical cooperation projects undertaken by the Japan International Cooperation Agency (JICA) in partnership with the Philippines' Department of Health (DOH). Various activities are conducted in the JICA projects to assist in the development of national guidelines, in strengthening institutional capacity for DOTS implementation, and in human resource development.

During the first project (JICA Public Health Development Project; 1992–1997), a model area was developed in Cebu Province to test the feasibility and effectiveness of the new NTP

policies and guidelines, which were based on the concept of DOTS. The evaluation of the Cebu model by DOH, WHO, and JICA showed that DOTS is feasible and effective in the Philippine setting and led to the expansion of DOTS to the rest of the country. The Cebu TB Reference Laboratory was also established during this project.

In the second project (JICA Tuberculosis Control Project; 1997–2002) the Cebu model for DOTS implementation was replicated in the remaining provinces of Region 7 including Siquijor, Bohol, and Negros Oriental, as well as in other provinces such as Laguna, Rizal, Bulacan, Eastern Samar, and Nueva Ecija, covering about 18% of the Philippine population. DOTS expansion to other parts of the Philippines was supported by other partner agencies (WHO, World Vision, etc). The Project also participated in the revision of the NTP's Manual of Procedures (MOP) in 2001. Under this project, the National Tuberculosis Reference Laboratory (NTRL) in Muntinlupa City was established to provide technical support to the laboratory activities within the network of the NTP.

The current project entitled DOH-JICA Project for Quality Tuberculosis Control Program (DOH-JICA QTBCP) aims to improve the quality of DOTS implementation in the Philippines by strengthening the monitoring and supervision systems to improve program management, by ensuring the quality of the TB microscopy services through the creation of a nationwide quality assurance network, and by strengthening the program's capacity to plan and conduct operational researches (e.g. Nationwide Anti-TB Drug Resistance Surveillance, etc). JICA, in collaboration with DOH, has developed the Handbook for Monitoring and Supervision in 2003, which serves as a field guide for NTP coordinators and supervisors. JICA is also providing the NTP with technical support for the establishment of the nationwide laboratory EQA network at the central, regional, provincial, and microscopy center level. JICA, in collaboration with WHO and DOH (NCDPC and NTRL), has also developed the manual on Quality Assurance for Sputum Smear Microscopy.

New areas were added to JICA's Directly Supported Areas (DSA) of the two previous projects; these are Negros Occidental Province (Region 6), and the City of Manila (NCR) in 2003. Quezon City was selected as another support area in NCR in 2005. The selection process involved several discussions between JICA, the National Center for Disease Prevention and Control (NCDPC/DOH), CHD-MM, and the Quezon City Health Department (QCHD).

Quezon City: Geographic and Socio-Economic Information

Quezon City is located at the northeastern part of Metro Manila; it has a land area of 171.7 square kilometers, which is about one fourth the size of Metro Manila. The city's population of about 2.4 million (in 2005) is the biggest among all cities of the country. The population is composed mostly of migrants from different parts of the country, and about 67% of the total population belongs to the economically productive age groups (15 years and older). More than 45% of the city's total land area is being used for residential purposes, although various national agencies, political, academic, and specialized medical institutions are located in the city. Major roads link the city to the rest of Metro Manila and adjacent provinces, while secondary and tertiary roads provide access to different parts of the city.

The city is divided into four political districts, and five health districts, which are further sub-divided into 142 barangays. The barangays, in turn, are divided into smaller areas or *sitios*. Pockets of urban poor settlements exist throughout the city; these settlements have varied population sizes that are estimated to range from about 20% to almost 100% of a barangay's total population. Small and medium-scale business establishments dominate business in the city; these establishments are engaged mostly in the distribution of finished products or in the provision of basic personal services.

Purpose and Procedures of the Baseline Survey

The survey was conducted to assess the progress of TB control in Quezon City and to gather information regarding DOTS implementation in the city. The findings will be used to inform local health authorities and other stakeholders regarding the city's performance under DOTS, as well as to guide the local policy makers in planning for improvement. The survey findings will also provide NCDPC/DOH and CHD-MM with information regarding DOTS implementation in a highly urbanized setting. For JICA, the findings will form the framework for technical support to the city.

JICA held several meetings with QCHD, NCDPC, CHD-MM, and NTRL in May 2005 to discuss the activities to be conducted in the city, and to plan the baseline survey. The field visits were conducted from June 15 to July 7, 2005 by a field survey team composed of staff from JICA, NTRL, and QCHD. The field survey team visited 28 of the city's 58 health centers including the city's 16 microscopy centers, two public hospital-based DOTS clinics, an NGO TB-DOTS facility, and one community-based NGO providing social services in a big urban poor settlement in the city. Structured data collection forms were used to collect quantitative and qualitative data through the review of routine NTP records and reports, observations of activities, and interviews with health staff at the district and health center level, community volunteers, and patients.

Survey Findings

TB CONTROL IN QUEZON CITY

TB Control Network

The DOTS strategy was implemented citywide in the last quarter of 1999, and NTP/DOTS services have been integrated into the city's primary health care network composed of 58 health centers. The city's TB control policies are in accordance with the national guidelines as stated in the NTP's Manual of Procedures. TB control services are also provided in the Quezon City Jail with technical and logistical support from QCHD, and manpower support from volunteer groups and individuals doing social work inside the jail. BCG vaccination is provided in the city's immunization program. A number of public and private hospitals, as well as some NGOs, are also providing TB control services, with various levels of coordination with QCHD. However, there are also other community-based NGOs that provide social and medical services, including some aspects of TB control, but whose activities are not coordinated with QCHD.

Program Management and Leadership

The program enjoys strong local government support through the leadership of the city Mayor and the City Health Officer; the overall management of the program is by the City Health Officer. The QCHD Planning, Training, and Research Division, and the City NTP Medical and Nurse Coordinators are responsible for program monitoring, supervision, evaluation (MSE), and coordination. The District Health Officers (DHOs) exercise technical and administrative supervision over the health centers. CHD-MM provides technical support in terms of training, and program monitoring and evaluation, as well as logistical support by providing laboratory supplies, some forms, and anti-TB drugs (for patients under Categories 1 and 2). QCHD provides the other logistical requirements including the supplemental anti-TB drugs for Category 3 patients.

PROGRESS OF TB CONTROL IN QUEZON CITY

Tuberculosis is the city's fourth leading cause of morbidity (based on the notification data for all forms of TB), and the fifth leading cause of mortality (QCHD, 2004). A total of 1,290 new smear positive cases were registered in 2004 for an overall CDR of only 48.7%, which is below the regional average. A downward trend has been observed in the case notification rates from 2002 to 2004 (Table 1).

On the other hand, the cure rate of NSP cases has been increasing steadily from the year 2000 to 2003, although, this is still below the target of 85%. The relatively low cure rate is mainly due to the large proportion of patients whose treatment outcome was reported as "treatment completed", and to the large number of cases who defaulted from treatment (Table 2). The outcome "treatment completed" rate has been decreasing over the years (from 29% in 2000 to 9% in 2003), but is still unacceptably high. The level of treatment defaulting has also been decreasing but at a relatively slow pace, and the rate of almost 7% is still high. Treatment failure and death rates in the NSP cohorts have remained low. DOTS has been implemented in the city since late 1999 but the activities are still conducted in a non-standardized manner in the health centers resulting into wide variations in the level of accomplishments. This reflects the lack of effective program monitoring and supervision.

Table 1. Selected NTP Case Finding Data in Quezon City From 2001 to 2004
(Source: CHDMM)

	2001	2002	2003	2004
City population	2,168,301	2,191,242	2,298,459	2,345,376
Total TB symptomatics	8,371	15,237	19,416	15,526
NSP cases	963	1,514	1,372	1,290
All cases	3,195	4,441	3,303	2,519
Proportion of SPTB /all PTB	31.6%	36.1%	45.2%	55.9%
CNR NSP (per 100,000)	44.4	69.1	59.7	55.0
CNR All cases (per 100,000)	147.4	202.7	143.7	107.4

Legend: NSP – new smear positive TB; SPTB – smear positive TB; CNR – case notification rate

Table 2. Treatment Outcomes of New Smear Positive Cases in Quezon City: 2000 to 2003
(Source: CHD-MM)

	2000		2001		2002		2003	
	no.	%	no.	%	no.	%	no.	%
No. Registered	1236		1029		1452		1372	
Cured	694	56.0%	708	68.8%	1023	70.4%	1067	77.8%
Treatment Comp.	358	29.0%	175	17.0%	275	18.9%	122	8.9%
Died	21	1.7%	17	1.7%	26	1.8%	21	1.5%
Failure	13	1.1%	13	1.3%	10	0.7%	7	0.5%
Defaulter	98	7.9%	80	7.8%	70	4.8%	91	6.6%
Transfer-out	52	4.2%	36	3.5%	48	3.3%	64	4.7%
Total	1236	100.0%	1029	100.0%	1452	100.0%	1372	100.0%

TB LABORATORY SERVICES

Laboratory Network

Quezon City's AFB microscopy laboratory network is made up of 16 laboratories in selected health centers. These laboratories also perform other routine laboratory examinations in addition to AFB sputum smear examinations. Each laboratory serves an average of three health centers - the range is from two to nine health centers (Table 3). The average population coverage of each laboratory is about 149,000 but the population coverage for each laboratory ranges from 84,000 to more than 260,000. The physical set-up of the microscopy laboratories is generally adequate except in two laboratories. In some areas of the city, access to the laboratories is relatively difficult.

Laboratory Staff and Workload

The laboratory staff is composed of one medical technologist and one laboratory aide. However, there are only 15 medical technologists and 15 laboratory aides currently manning the 16 laboratories. The medical technologists perform microscopy reading and other routine laboratory examinations, while the laboratory aides process the sputum specimens and perform the smearing and staining of slides in most instances. The current microscopy workload ranges from 5 to 30 reading slides per day with an average of 14 slides per day. The results of diagnostic sputum examinations are usually available in three to five days in the health centers with laboratories, and in about seven days in those without.

External Quality Assurance
Quality assurance for sputum smear microscopy is through the NTP's External Quality Assurance (EQA) system, which the city started to implement in the third quarter of 2004. However, the manner of EQA implementation still needs to be improved in all aspects. Slide selection using the Lot Quality Assurance System (LQAS) is not done by the city's NTP coordinators but by the laboratory controllers themselves. Feedback to the microscopists is through the monthly meetings of medical technologists; however, feedback done in this manner was relatively inadequate in terms of clarifying the results of slide re-checking, in determining the probable causes of discrepancies, and in finding solutions to perceived problems. On-site visits are not yet done since no specific personnel have been assigned exclusively for EQA work.

Table 3. Population Coverage Of Sputum Microscopy Laboratories Quezon City (2005)

District	Microscopy Laboratory	No. of Health Centers Covered	Total Population Covered
1	Project 7	5	181,671
	Frisco	9	260,380
2	Culiat	4	223,071
	Banlat	4	241,573
	Novalichez	3	121,627
2A	Sta. Lucia	4	148,915
	Payatas B	2	123,932
	Holy Spirit	2	98,380
	Bagong Silangan	3	168,336
	Batasan Super HC	2	120,681
3	Old Balara	4	126,312
	Project 4	3	84,406
	E. Rodriguez	3	95,246
4	Kamuning	4	141,606
	Kalayaan	3	131,041
	Pinyahan	3	121,071

CASE FINDING

Policy
Passive case finding with sputum microscopy as the primary diagnostic tool is the standard practice. In some areas, community outreach activities are held periodically to increase case detection. In some health centers, the examination of symptomatic household contacts of SPTB cases is done routinely.

Sputum Collection and Examination
The average 3-sputum examination rate among the TB suspects is over 98% (Annex 1). However, the manner of specimen collection for diagnostic sputum examinations is variable, and oftentimes, did not follow the standard "spot – early morning – spot" collection scheme; the quality of smear preparation also needs improvement.

Diagnosis of Smear Positive TB
In the survey sites, the smear positive rate showed a wide variation between the health centers, with rates ranging from 0% to 24%. The average smear positive rate is more than 13%. The computed NSP case notification rate (CNR; adjusted to one year) is also variable. The mean CNR is about 64/100,000 (median: 53/100,000), and it ranges from 17/100,000 to 258/100,000 (Annex 2). Overall, the detection of SPTB is relatively low.

The citywide proportion of SPTB cases entered into treatment has been increasing over the years from 32% in 2001 to 56% in 2004 (Table 1). In the survey areas, the proportion has reached an average of 62% but the variation between the health centers is also wide, with proportions ranging from 25% to 90%. The results suggest that the quality of TB diagnosis is somewhat improving but other factors, such as the limited supply of the Regimen 3 drugs, and the strict prioritization of SPTB cases for treatment, have also contributed to the increasing trend. Further improvement in this aspect of case finding is needed.

TB Diagnostic Committee (TBDC)
The diagnosis of smear-negative PTB (SNTB) is mainly based on clinical and radiologic grounds following the standard NTP protocol. The patients' clinical data as contained in the standard TBDC referral form and the X-ray films are sent by the health center to the TBDC; the TBDC then makes the diagnosis (by consensus) and provides recommendations for case management. However, at the health center level, compliance to the diagnostic protocol for SNTB has been inconsistent.

Quezon City has only one TBDC that evaluates all SNTB suspects from the health centers. This committee meets only once a month instead of the recommended 2x a month resulting in a turnaround time of about one month for the diagnosis of SNTB, and leading to a long delay in the treatment of SNTB cases. In District 4, the SNTB cases are referred to an external TBDC belonging to the Philippine Tuberculosis Society Incorporated (PTSI); the turnaround time for diagnosis in this instance is much shorter at two weeks.

Referrals from Other Providers
Referrals from private clinics, public and private hospitals, and from other public clinics in Quezon City and other parts of Metro Manila, have also contributed to case finding in the city. However, the documentation of these referrals is often incomplete, and it was difficult to determine the actual number that was added to the city's case finding. The referrals from private doctors for "continuation of treatment" further added to the health centers' caseload. Feedback to the referring units regarding the result of the referrals, or the outcome of treatment given at the receiving unit, is generally inadequate. At the moment, there is no effective mechanism in place to track the results of the referrals.

CASE HOLDING

Treatment Delay
The gap between the time of diagnosis of SPTB and the time that treatment was started (treatment delay) was quite significant in late 2004 and early 2005. In the first quarter of 2005, the mean treatment delay in the survey areas was 13 days (range: 0 to 36 days). The delay was attributed to the disruptions in drug supply, the patients' care-seeking behavior, and to some practices within the health system.

Treatment Outcome
Treatment outcome in the survey sites showed a wide variation in cure rates ranging from 12% to 98%. The average cure rate for the NSP cases is only 78% (median is 75%). Treatment completion rate is high with an average of 8%, and ranges from 0% to 88%. The

average defaulter rate is also relatively high at 8.6% with a range of 0% to 30% (Annex 3). The shortage of laboratory reagents led to the omission of follow-up sputum examinations in many instances resulting in high “treatment completed” rates but lower cure rates. However, the failure of some health workers to collect follow-up sputum specimens is the major reason for the high “treatment completed” outcome. A number of factors have contributed to the high defaulter rates but the variable manner and quality of Directly Observed Therapy (DOT), and the weak defaulter tracing are some of the more important reasons.

Patterns of Directly Observed Therapy

The health workers implemented various patterns of DOT to cope with local difficulties or constraints such as difficult access to the health center, the shortage or absence of BHWs at the community level, and the conflicting schedules between the patients’ convenient time and the health facilities’ time of operations. In addition, the BHWs ability to supervise treatment was limited by the transportation costs involved when traveling to distant parts of their catchment areas, and by the security risks in certain areas or communities.

The patterns of DOT in the survey areas include the following: (a) Health Center Based Treatment (HCT) for the entire duration of treatment, wherein the treatment partner could be the nurse, midwife, or the BHW; (b) Home Based Treatment (HBT) for the entire course of treatment, which is usually done in either the patient’s or the treatment partner’s house with the BHW being utilized mainly, but not exclusively, as treatment partner; (c) Combination of HCT (during the intensive phase) and HBT (during the maintenance phase); (d) Flexible DOT: wherein HCT is done only for patients with relatively good access to the clinic, while HBT is implemented for the patients who are perceived to have access problems; and (e) Modifications of treatment patterns wherein treatment observation by a health worker is not necessarily done in a continuous manner. An example of the last pattern is one wherein HCT is done only on Mondays and Thursdays, while the drug supply for the remaining days are brought home by the patient and drug intake is “supervised” by a family member. There were also instances where self-administered treatment was done particularly among patients who are working or attending school. Among the SNTB cases, the manner of treatment supervision is vague; it seemed that the supervision of SNTB cases is lax compared to that of the SPTB cases.

With regards the pattern of DOT, using HCT exclusively was not always effective because of the access problems particularly in urban poor settlements. The HBT, which is essentially a community-based approach, seemed to be more practical because treatment becomes accessible to the patients. However, some of the BHWs described their manner of treatment supervision through the “daily or weekly inspection of blister packs” which somehow reduced the effectiveness of this pattern of DOT. There was also a variety of treatment partners used for DOT. Some health centers used family members or former TB patients as treatment partners in HBT, but other centers did not allow this practice. However, the lack of reliable treatment partners limited the potential of HBT. Flexible DOT is another good approach but the health workers’ criteria for determining access to the health facility were not clearly defined and were not evaluated.

Factors for Treatment Default

From interviews, health workers cited several factors that contributed to the high treatment defaulter rates, these include the “high mobility” of patients and the “transient nature of their residence” in urban poor settlements, the “uncooperative attitude” of some patients towards treatment, the time and monetary costs (access issues) involved in daily HCT, and in some cases, the inadequate management of adverse reactions to treatment.

The health workers mentioned that some patients, particularly those from the squatter settlements, returned to their home provinces once they were diagnosed with TB despite

having started treatment – the reason for this is not clear. There were also patients, still under treatment, who moved to other places once they felt physically improved to pursue employment opportunities but without informing the health authorities. Our interviews with some patients also showed that their level of awareness regarding TB and its treatment is relatively low. This lack of awareness on the patients' part may be contributing to their so-called uncooperative attitude.

For some patients, treatment compliance was made difficult by the strict policy of Health Center-based Treatment in several facilities despite existing accessibility problems. The relocation of squatter populations, including some patients under treatment, to areas outside of Metro Manila also contributed to cases of treatment default.

Defaulter Tracing

Defaulter tracing usually starts after a patient has missed treatment for two to three days; although in some centers, this was started on the same day that a patient has missed treatment. In others still, defaulter tracing is done after treatment was missed for one week. However, the capability of the health centers to conduct defaulter tracing is variable (e.g. some health centers have vehicles for this activity). In general, the midwife or the BHW carries out the defaulter tracing with the health center nurse and/or the District Nurse Supervisor providing assistance only in difficult situations. The participation of community leaders and volunteers in defaulter tracing is minimal.

Some health workers introduced measures that were designed to facilitate defaulter tracing and to promote treatment compliance. Examples include the collection of additional contact or reference information such as the relatives' or neighbors' telephone numbers (cell or landline) and addresses, the attachment of the patient's picture on the treatment card, and the signing of "contracts" signifying the patient's commitment to complete the full course of treatment. However, the effectiveness of these measures is not yet known.

RECORDING AND REPORTING

Recording and reporting is under the responsibility of the health center nurse, but in some facilities, the medical technologist or the midwife is the one handling the records and reports. In general, the quality of recording and reporting needs improvement. In some centers, inconsistencies and inaccuracies were noted in the entries in the TB Register, Laboratory Register, Treatment Cards, and the TB Symptomatics Masterlist. There were also inconsistencies in the data contained in the NTP reports apparently because of some confusion regarding the data collection sources, and the formulas for the computation of the indicators.

MONITORING, SUPERVISION, AND EVALUATION

At the city health office, monthly executive meetings are held regularly to discuss issues and problems related to the public health programs, with TB control being a regular part of the agenda. However, the field supervisory visits from the city level have been infrequent.

The District Health Officers (DHO) and District Nurse Supervisors (DNS) regularly conduct MSE of all health programs in their respective areas. Recently, QCHD appointed several health center physicians as District Medical Coordinators (DMC) to further strengthen the district level's capability on MSE. The district level's field supervisory visits to the health centers are conducted quite frequently (e.g. more than once a month) but the MSE methods

employed are not standardized and were not very effective. Data management, analysis and interpretation need some refinement as well.

At the health center level, staff meetings are held periodically to assess the status of DOTS implementation in their respective catchment areas. However, the community level activities were not sufficiently monitored, nor were the community health volunteers adequately supervised. In addition, the capacity of the health center staff to conduct a meaningful assessment of their activities needs some improvement.

LOGISTICS

The drug supply for Regimen 1 (2HRZE/4HR) and Regimen 2 (2HRZES/1HREZ/5HRE) is sufficient at the time of the survey, but the counterpart Regimen 3 (2HRZ/4HR) drugs are inadequate for the city's needs. Some HC doctors had to prescribe the Regimen 3 drugs to patients who are perceived to be in urgent need of treatment. Laboratory reagents for AFB sputum microscopy are also in very short supply.

According to some health workers, the shortage of anti-TB drugs and the lack of laboratory reagents have forced them to reduce the level of their case finding activities. Moreover, the shortage of drugs caused a backlog of TB cases awaiting treatment in the latter part of 2004. At the same time, the follow-up sputum examinations for some patients under treatment were not done because of the lack of laboratory reagents.

LINKAGES

Links with other TB Care Providers

Informal arrangements exist between QCHD and the other health providers in Quezon City. These arrangements allow the provision of support for each other's TB control activities. For example, the Lung Center of the Philippines (LCP) provided some Regimen 3 drugs to a number of patients referred by health centers. They also performed sputum examinations for patients referred by health centers during the times when reagents were not available in the city. LCP also supported the health centers in managing complicated TB cases. PTSI, on the other hand, provides TBDC services for District 4's SNTB referrals, while the Quezon Institute (QI/PTSI) also provides hospital care for patients suffering from TB complications. QCHD, on the other hand, provides anti-TB drugs to the PTSI DOTS clinic.

The community-based NGO, the Committee of German Doctors provides social and medical services (including DOTS) to depressed communities in several areas of Metro Manila (e.g. Payatas). Other community-based NGOs such as the "I CAN Foundation" and *Abot Kamay Foundation* are also providing social and medical services, including some aspects of TB control, to promote development in the depressed communities. These organizations have the capacity to provide more specific support to the TB control program in their areas of operation but the collaboration with QCHD still needs to be improved. Overall community participation in TB control activities, particularly in case holding, case finding, and health promotion is still weak.

Links with the Academe and Special Projects

In contrast to the NGOs, the arrangements between QCHD and some medical training centers and are formal. These arrangements provide for the rotation of medical interns in the city's health centers, giving the interns the opportunity to learn about the public health programs. On the other hand, the interns provide additional manpower for the health centers.

Other TB control projects being conducted in the city in coordination with QCHD and CHD-MM are the DOTS Plus Expansion Project at the LCP DOTS Center and at QI, and the Community DOTS-Plus Project; both are under the supervision of the Tropical Disease Foundation Incorporated (TDFI). This project is funded by the Global Fund to fight AIDS, Tuberculosis and Malaria (GFATM). Another project in Quezon City is the Pharmacy DOTS Initiative of the Philippine Tuberculosis Initiatives for the Private Sector (PhilTIPS) which is being funded by the United States Agency for International Development (USAID).

HEALTH HUMAN RESOURCES

There are currently 55 doctors, 63 nurses, and 114 midwives manning the 58 health centers in the city. The ratio of the health center doctors and nurses to the population is about 1:43,000 and 1:38,000 respectively (ideal ratio is 1:20,000). Five of the health center physicians are also assigned as District Medical Coordinators and are tasked to assist in MSE activities in addition to their regular duties. There are only 15 medical technologists doing microscopy work in the 16 laboratories, with 4 of them also working as EQA controllers. The ratio of the medical technologists to the population is around 1:159,000 (Table 4). Except for the newly hired or newly assigned staff, all of the field service personnel have undergone the standard DOTS training and other NTP refresher courses organized by DOH. All of the medical technologists have undergone the standardized training on TB sputum smear microscopy and external quality assurance, while the laboratory aides have undergone a one-day on-the-job training (conducted by QCHD) in sputum smearing but no training on staining. The District Nurse Supervisors are undergoing on-the-job training on MSE of all public health programs.

There are about 300 “active” BHWs in the city, but not all of them are participating in NTP work. The BHW to population ratio is about 1:8,000; this is far from the ideal ratio of 1:120. Moreover, the distribution of the BHWs in the different barangays is uneven. Community health volunteers (CHV) also provide support to the health center staff but not all are involved in TB control activities. In general, the health workers have a strong determination to implement DOTS.

Table 4. Ratio of Quezon City Health Center Staff to Population (2005)

Health worker	No.	Ratio
Physician	55	1:43,000
Nurse	63	1:38,000
Medical technologist	15	1:159,000
Midwife	114	1:21,000
Laboratory aide	15	1:159,000
BHW	300	1:8,000

ACCESS TO HEALTH SERVICES

In general, the primary care health centers are accessible for the residents within the original communities, but access for residents in the urban poor settlements is relatively poor. In Quezon City, access is often limited by the distance to the health centers, by the availability and cost of transportation, and by the incompatibilities between the patients’ personal schedule and the health center’s time of operations.

Moreover, the availability of transportation is not consistent, especially within the urban poor settlements where tricycles are usually the only available mode of transport. However, the tricycle fare is variable, and is often higher than the standard jeepney fares. Cost of one-way travel to the health center ranges from 20 pesos to 80 pesos - a considerable amount for people with very limited resources.

Conclusion

The DOTS strategy for TB control was implemented in Quezon City in late 1999 and services are provided through the city's primary health care network. The leadership from QCHD and the political support of the local government is strong and the field health workers have shown a firm determination to implement DOTS in their areas. Modest improvements in program performance have been achieved, but the city's overall level of accomplishments has not yet reached the targets.

Case finding is still relatively low, particularly in the detection of SPTB, and the quality of diagnosis needs further improvement. The variable and often ineffective manner of DOT conducted by the field workers, as well as the weak defaulter tracing, resulted in low cure rates and high "treatment completed" and defaulter rates. The implementation of an effective community based DOT is limited by the lack of community treatment partners. In general, DOTS activities are conducted in a non-standardized manner resulting into wide variations in accomplishments between health centers. The variations in the conduct of activities reflect not only the diverse situations in the field, but also the relative lack of effective monitoring and supervision.

The laboratory network for sputum microscopy is relatively inadequate given the city's big population and geographic area, and a gap exists in the quality of the microscopy services. The implementation of EQA needs to be standardized as well. The quality of recording and reporting also needs improvement, and program MSE should be conducted in a more efficient and effective manner. Disruptions in case finding and case holding activities resulting from the unstable supply of drugs and laboratory reagents should be prevented or minimized.

The city is facing other program challenges such as improving access to the basic health services for the residents of urban poor settlements, increasing community participation in the implementation of DOTS, strengthening the coordination and networking with the other sectors involved in community development, and addressing the relative shortage of human resources. Specific strategies and the allocation of resources are needed to fill the gaps in the city's TB control program.

Recommendations

Laboratory Services

1. QCHD should ensure the adequate physical set-up of the laboratories to provide a suitable working environment for the laboratory staff.
2. The establishment of additional laboratories should be considered especially in areas with big urban poor settlements.
3. The capability of the laboratory aides to perform smearing and staining should be strengthened (i.e. through training, etc) to improve the quality of slide preparation.
4. Monitoring and supervision of laboratory activities should be done at least quarterly either through the EQA on-site visits, or through the regular NTP supervisory visits. Laboratory aides should also be included in the supervision process.
5. The city's EQA team should be organized so that specific personnel can focus on quality assurance activities. Establishment of the EQA center is also recommended so that EQA activities can be centralized and be better managed.

Case Finding

1. Case finding efforts should be increased through more intensive health education and promotion activities at the community level especially in high-prevalence settings such as the urban poor settlements and the jail. Further improving the quality of services at the health centers will help attract more clients.
2. The quality and accessibility of the laboratory services should be increased to improve their capacity to detect SPTB.
3. The current composition of the TBDC should be expanded, and its frequency of meetings increased to shorten the delay in the diagnosis and management of cases.
4. The health center staff should be encouraged to comply with the standardized diagnostic protocols to further improve the quality of diagnosis.
5. QCHD should actively engage the private health providers and community-based NGOs for their support in case finding and case management.

Case Holding

1. Flexibility in applying particular DOT patterns should be encouraged; however, the selection of the pattern to use should be guided by objective criteria. As much as possible, DOT patterns that do not ensure supervised drug intake on a continuous and reliable manner should be discouraged.
2. The conduct of DOT, especially HBT, should be monitored and supervised at least weekly by the health center managers, and periodically by the district supervisors, to ensure that proper treatment supervision is being done. The community health volunteers involved in case holding should also be supervised periodically to ensure the proper conduct of activities.
3. The number of BHWs and other community-based treatment partners should be increased to facilitate the case holding activities, particularly DOT at the community level. Establishing a network of responsible "volunteers" from the existing community-based organizations will help ensure the availability of treatment partners in the city.
4. Defaulter tracing action should be strengthened. The local community leaders should be engaged for defaulter tracing. The health center's resources for defaulter tracing should be increased.

Recording and Reporting

1. The assigned and trained health center staff (i.e. the Public Health Nurse) should be responsible and accountable for the NTP records and reports.
2. Supervisors should routinely check and ensure the good quality of records and reports. In particular, consistency of the data recorded in the laboratory register, TB register, and treatment cards should be ensured.
3. The standard formats for NTP reporting should be adopted.

Monitoring, Supervision, and Evaluation

1. The District supervisory team's (DHO, DMC, and DNS) capabilities for MSE should be strengthened. An initial step would be to provide them with a formal training to standardize the key procedures and activities for MSE.
2. A tool for MSE that is appropriate for the city's needs should be developed based on standard references (e.g. MOP, Handbook on Monitoring and Supervision, etc). QCHD should solicit technical support from relevant partners for this activity.
3. QCHD should create specific plans, including a budget, for MSE
4. Field MSE visits to the health centers should be conducted regularly, at least on a quarterly basis. The results of MSE activities should be shared with other program managers and should be utilized for program planning and management. Whenever possible, technical experts from the DOH-NCDPC, CHD-MM, and other partners should be invited to join the field visits to strengthen the District supervisory teams' techniques in MSE.
5. The health center staff, as well as the District MSE teams, should also monitor and supervise the activities at the community level to ensure proper implementation.
6. Program implementation reviews should be conducted regularly; the participation of technical experts from other agencies in these activities is recommended. Program implementation in difficult settings such as in the urban poor communities and the prison, as well as the various initiatives implemented by the field staff, should also be evaluated.

Logistics

1. The city should consider the procurement of a sufficient amount of supplemental anti-TB drugs and laboratory reagents which will serve as buffer stocks to complement the supply from DOH.
2. Adequate buffer stocks of anti-TB drugs should always be maintained at the health centers to prevent delays in the initiation of treatment.

Linkages

1. Existing linkages with other organizations such as the private health providers, non-profit organizations, hospitals, factories, business groups, and the academe should be expanded and formalized.
2. QCHD should strengthen the coordination and networking of activities with the other partners, especially those providing social services in the community.

Health Human Resources

1. Additional BHWs should be recruited to increase the community-based manpower; however, it must be ensured that the new recruits will also be active in the NTP and not just on selected health programs.
2. Human resource issues among the health center staff should be addressed to ensure the effective provision of services.

Access

1. QCHD should consider the establishment of sub-centers or satellite units with the appropriate staff, especially in the urban poor settlements, to improve access to the health services.
2. Issues related to accessibility should be studied further so that steps can be taken to ensure equitable access to the health services across all sectors of the community.

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Annexes

Annex 1

NTP Laboratory Activities in Case Finding in Survey Areas (Quezon City: 3rd quarter 2004 - 1st quarter 2005)

Health Center	3rd quarter 2004					4th quarter 2004					1st quarter 2005					Total			
	TBS	3 sp exm		Sm(+)		TBS	3 sp exm		Sm(+)		TBS	3 sp exm		Sm(+)		TBS	3 sp	Sm(+)	
		no.	%	no.	%		no.	%	no.	%		no.	%	no.	%		exm (%)	no.	%
Old Balara	72	65	90.3	19	26.4	58	52	89.7	14	24.1	58	54	93.1	13	22.4	188	91.0	46	24.3
Pinyahan	103	103	100.0	15	14.6	76	76	100.0	14	18.4	143	143	100.0	15	10.5	322	100.0	44	14.5
Krus na Ligas	na	na	na	na	na	na	na	na	na	na	41	41	100.0	8	19.5	41	100.0	8	19.5
Kalayaan	213	213	100.0	10	4.7	193	193	100.0	2	1.0	154	154	100.0	6	3.9	560	100.0	18	3.2
Kamuning	46	46	100.0	8	17.4	67	67	100.0	9	13.4	51	49	96.1	2	3.9	164	98.7	19	11.6
Bernardo	na	na	na	na	na	na	na	na	na	na	107	103	96.3	21	19.6	107	103.0	21	19.6
Project 4	56	56	100.0	2	3.6	32	32	100.0	6	18.8	35	35	100.0	4	11.4	123	100.0	12	11.3
Murphy	98	98	100.0	5	5.1	53	53	100.0	2	3.8	54	54	100.0	7	13.0	205	100.0	14	7.3
Libis	36	36	100.0	6	16.7	19	19	100.0	3	15.8	36	36	100.0	4	11.1	91	100.0	13	14.5
E. Rodriguez	102	102	100.0	12	11.8	81	81	100.0	14	17.3	94	94	100.0	9	9.6	277	100.0	35	12.9
Bagong Pag-asa	43	43	100.0	6	14.0	33	33	100.0	4	12.1	39	39	100.0	8	20.5	115	100.0	18	15.5
Bago Bantay	40	40	100.0	8	20.0	25	25	100.0	4	16.0	32	32	100.0	5	15.6	97	100.0	17	17.2
Project 7	53	51	96.2	3	5.7	31	29	93.5	2	6.5	41	41	100.0	2	4.9	125	96.6	7	5.7
San Antonio	na	na	na	na	na	na	na	na	na	na	3	3	100.0	0	0.0	3	100.0	0	0.0
San Francisco	57	57	100.0	9	15.8	36	36	100.0	6	16.7	28	28	100.0	7	25.0	121	100.0	22	19.2
Culiat	76	74	97.4	11	14.5	117	109	93.2	5	4.3	106	94	88.7	12	11.3	299	93.1	28	10.0
MH Pedro	39	38	97.4	4	10.3	56	53	94.6	9	16.1	71	68	95.8	14	19.7	166	96.0	27	15.3
Banlat	97	96	99.0	11	11.3	52	52	100.0	3	5.8	71	71	100.0	10	14.1	220	99.7	24	10.4
Bagbag	78	78	100.0	18	23.1	59	52	88.1	8	13.6	103	98	95.1	12	11.7	240	94.4	38	16.1
Novaliches	149	145	97.3	33	22.1	101	101	100.0	21	20.8	118	116	98.3	20	16.9	368	98.5	74	20.0
Nagkaisang Nayon	80	79	98.8	8	10.0	67	65	97.0	6	9.0	61	60	98.4	3	4.9	208	98.0	17	8.0
Batasan Annex*	70	70	100.0	10	14.3	na	na	na	na	na	67	67	100.0	3	4.5	137	100.0	13	9.4
Payatas A	114	113	99.1	14	12.3	64	62	96.9	9	14.1	102	100	98.0	10	9.8	280	100.0	33	12.0
Bagong Silangan	67	67	100.0	15	22.4	71	68	95.8	6	8.5	86	86	100.0	12	14.0	224	98.6	33	14.9
Holy Spirit	144	142	98.6	14	9.7	103	101	98.1	12	11.7	144	143	99.3	15	10.4	391	98.7	41	10.6
Commonwealth	96	96	100.0	9	9.4	69	69	100.0	11	15.9	74	74	100.0	10	13.5	239	100.0	30	12.9
Santa Lucia	43	42	97.7	9	20.9	39	39	100.0	11	28.2	66	63	95.5	11	16.7	148	97.7	31	21.9
Total	**1972**	**1950**	**98.9**	**259**	**13.1**	**1502**	**1467**	**97.7**	**181**	**12.1**	**1985**	**1946**	**98.0**	**243**	**12.2**	**5459**	**98.2**	**683**	**13.3**

Legend: TBS - TB symptomatics; na - data not available; * - previously known as Batasan Hills Health Center

0.0
74 24.3
100.0 22.0 12.9

Annex 2

Case Finding Results in Survey Areas By District and Health Center: Quezon City (3Q 2004 – 1Q 2005)

Dist	HC name	Population 2005	3Q-04			4Q-04			1Q-05			Total	Average	CNR NSP*
			NSP	NSN	%NSP	NSP	NSN	%NSP	NSP	NSN	%NSP	NSP	%NSP	per 100,000
1	1. Bagong Pag Asa	43,158	4	10	28.6%	7	7	50.0%	6	9	40.0%	17	39.5%	52.4
	2. Bago Bantay	33,278	6	4	60.0%	4	4	50.0%	2	7	22.2%	12	44.4%	48.0
	3. Project 7	27,055	3	6	33.3%	2	6	25.0%	2	6	25.0%	7	28.0%	34.4
	4. San Antonio	23,714	2	5	28.6%	1	1	50.0%	0	3	0.0%	3	25.0%	16.8
	5. San Franciscio del Monte	37,031	6	5	54.5%	4	1	80.0%	5	3	62.5%	15	62.5%	53.9
	Total District 1	164,236	21	30	41.2%	18	19	48.6%	15	28	34.9%	54	41.2%	43.7
2	1. Culiat	60,684	9	10	47.4%	5	8	38.5%	9	2	81.8%	23	53.5%	50.4
	2. MH Pedro	71,106	5	5	50.0%	6	5	54.5%	11	1	91.7%	22	66.7%	41.1
	3. Banlat	74,649	10	2	83.3%	2	2	50.0%	6	1	85.7%	18	78.3%	32.1
	4. Bagbag	83,513	6	1	85.7%	5	3	62.5%	8	11	42.1%	19	55.9%	30.3
	5. Novalichez	66,296	22	10	68.8%	1	5	16.7%	18	11	62.1%	41	61.2%	82.3
	6. Nagkaisang Nayon	42,448	9	4	69.2%	6	8	42.9%	2	4	33.3%	17	51.5%	53.3
	Total District 2	398,696	61	32	65.6%	25	31	44.6%	54	30	64.3%	140	60.1%	46.7
2A	1.Batasan Annex HC	48,280	5	7	41.7%	6	13	31.6%	12	14	46.2%	23	40.4%	63.4
	2. Payatas A	61,966	10	3	76.9%	7	11	38.9%	10	4	71.4%	27	60.0%	58.0
	3. Bagong Silangan	35,379	8	8	50.0%	8	9	47.1%	17	3	85.0%	33	62.3%	124.1
	4. Holy Spirit	98,380	5	15	25.0%	18	8	69.2%	10	9	52.6%	33	50.8%	44.6
	5. Commonwealth	72,928	0	12	0.0%	11	2	84.6%	11	1	91.7%	22	59.5%	40.1
	6. Sta. Lucia	20,592	12	2	85.7%	13	2	86.7%	15	5	75.0%	40	81.6%	258.4
	Total District 2A	337,525	40	47	46.0%	63	45	58.3%	75	36	67.6%	178	58.2%	70.1
3	1. Old Balara	68,958	13	4	76.5%	9	1	90.0%	11	0	100.0%	33	86.8%	63.6
	2. Project 4	37,902	2	2	50.0%	5	1	83.3%	0	3	0.0%	7	53.8%	24.6
	3. Murphy	24,754	10	5	66.7%	2	2	50.0%	10	6	62.5%	22	62.9%	118.2
	4. Libis	31,778	9	6	60.0%	2	0	100.0%	5	1	83.3%	16	69.6%	67.0
	5. E. Rodriguez	33,913	15	2	88.2%	8	1	88.9%	16	2	88.9%	39	88.6%	153.0
	Total District 3	197,305	49	19	72.1%	26	5	83.9%	42	12	77.8%	117	76.5%	78.9
4	1. Pinyahan	55,393	15	0	100.0%	18	0	100.0%	12	5	70.6%	45	90.0%	108.0
	2. Krus na Ligas	49,445	6	6	50.0%	4	2	66.7%	8	3	72.7%	18	62.1%	48.4
	3. Kalayaan	44,531	6	2	75.0%	0	3	0.0%	2	5	28.6%	8	44.4%	23.9
	4. Kamuning Super	40,647	8	8	50.0%	4	1	80.0%	14	4	77.8%	26	66.7%	85.1
	5. Bernardo	26,647	10	4	71.4%	12	1	92.3%	22	3	88.0%	44	84.6%	219.6
	Total District 4	216,663	45	20	69.2%	38	7	84.4%	58	20	74.4%	141	75.0%	86.6
TOTAL		1,314,425	216	148	59.3%	170	107	61.4%	244	126	65.9%	630	62.3%	63.7

Legend: HC – health center; NSP – new smear positive; NSN – new smear negative; *CNR NSP – new smear positive case notification rate adjusted to one year

Annex 3

Treatment Outcome of New Smear Positive Cases (2004 Cohort) In Survey Sites By District and Health Center

Dist.	Health Center name	NSP registered	Cured		Completed.		Died		Failure		Default (Lost)		Transferred Out		Total Evaluated	
1	1. Bagong Pag Asa	20	15	75.0%	0	0.0%	1	5.0%	0	0.0%	4	20.0%	0	0.0%	20	100.0%
	2. Bago Bantay	15	11	73.3%	3	20.0%	0	0.0%	0	0.0%	1	6.7%	0	0.0%	15	100.0%
	3. Project 7	12	11	91.7%	0	0.0%	1	8.3%	0	0.0%	0	0.0%	0	0.0%	12	100.0%
	4. San Antonio	4	3	75.0%	1	25.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	4	100.0%
	5. San Franciscio del Monte	19	14	73.7%	4	21.1%	0	0.0%	0	0.0%	0	0.0%	1	5.3%	19	100.0%
Total District 1		70	54	77.1%	8	11.4%	2	2.9%	0	0.0%	5	7.1%	1	1.4%	70	100.0%
2	1. Culiat	24	19	79.2%	0	0.0%	0	0.0%	0	0.0%	5	20.8%	0	0.0%	24	100.0%
	2. MH Pedro	12	6	50.0%	4	33.3%	0	0.0%	0	0.0%	2	16.7%	0	0.0%	12	100.0%
	3. Banlat	27	23	85.2%	0	0.0%	1	3.7%	0	0.0%	0	0.0%	3	11.1%	27	100.0%
	4. Bagbag	26	18	69.2%	2	7.7%	1	3.8%	2	7.7%	3	11.5%	0	0.0%	26	100.0%
	5. Novalichez	50	27	54.0%	3	6.0%	3	6.0%	0	0.0%	15	30.0%	0	0.0%	48	96.0%
	6. Nagkaisang Nayon	22	19	86.4%	1	4.5%	0	0.0%	0	0.0%	1	4.5%	1	4.5%	22	100.0%
Total District 2		161	112	69.6%	10	6.2%	5	3.1%	2	1.2%	26	16.1%	4	2.5%	159	98.8%
2A	1.Batasan Annex HC	28	19	67.9%	1	3.6%	0	0.0%	1	3.6%	6	21.4%	1	3.6%	28	100.0%
	2. Payatas A	36	18	50.0%	9	25.0%	0	0.0%	0	0.0%	9	25.0%	0	0.0%	36	100.0%
	3. Bagong Silangan	34	24	70.6%	4	11.8%	0	0.0%	1	2.9%	3	8.8%	2	5.9%	34	100.0%
	4. Holy Spirit	53	52	98.1%	0	0.0%	1	1.9%	0	0.0%	0	0.0%	0	0.0%	53	100.0%
	5. Commonwealth	31	19	61.3%	0	0.0%	0	0.0%	0	0.0%	6	19.4%	6	19.4%	31	100.0%
	6. Sta. Lucia	38	33	86.8%	1	2.6%	2	5.3%	0	0.0%	1	2.6%	1	2.6%	38	100.0%
Total District 2A		220	165	75.0%	15	6.8%	3	1.4%	2	0.9%	25	11.4%	10	4.5%	220	100.0%
3	1. Old Balara	46	42	91.3%	0	0.0%	0	0.0%	0	0.0%	2	4.3%	2	4.3%	46	100.0%
	2. Project 4	13	12	92.3%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	7.7%	13	100.0%
	3. Murphy	27	21	77.8%	3	11.1%	0	0.0%	0	0.0%	3	11.1%	0	0.0%	27	100.0%
	4. Libis	17	2	11.8%	15	88.2%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	17	100.0%
	5. E. Rodriguez	38	35	92.1%	0	0.0%	1	2.6%	1	2.6%	0	0.0%	1	2.6%	38	100.0%
Total District 3		141	112	79.4%	18	12.8%	1	0.7%	1	0.7%	5	3.5%	4	2.8%	141	100.0%
4	1. Pinyahan	59	56	94.9%	2	3.4%	0	0.0%	0	0.0%	1	1.7%	0	0.0%	59	100.0%
	2. Krus na Ligas	30	19	63.3%	6	20.0%	2	6.7%	0	0.0%	3	10.0%	0	0.0%	30	100.0%
	3. Kalayaan	15	11	73.3%	0	0.0%	0	0.0%	0	0.0%	1	6.7%	3	20.0%	15	100.0%
	4. Kamuning Super	39	37	94.9%	0	0.0%	0	0.0%	0	0.0%	2	5.1%	0	0.0%	39	100.0%
	5. Bernardo	57	53	93.0%	4	7.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	57	100.0%
Total District 4		200	176	88.0%	12	6.0%	2	1.0%	0	0.0%	7	3.5%	3	1.5%	200	100.0%
TOTAL		**792**	**619**	**78.2%**	**63**	**8.0%**	**13**	**1.6%**	**5**	**0.6%**	**68**	**8.6%**	**22**	**2.8%**	**790**	**99.7%**

Annex 4

List of Facilities Visited and Persons Interviewed During the Baseline Survey (2005)	
District 1	
1. Bagong Pag Asa	Dr. Noe Legasto, Mrs. Melinda Somera
2. Bago Bantay	Ms. Ruth Mae Alas-as, Mrs. Evelyn Camara; Mr. Basilio Magistrado, Mr. Elgar Mendoza
3. Project 7	Dr. E. Cenidoza, Ms. Precy Faustino, Ms. Asuncion Badilla, Dr. I. Troncales, Dr. Stephanie Co, Ms. Marianita Constantino
4. San Antonio	Dr. M. Anselmo, Ms. Liwayway de la Cruz, Ms. Esperanza Olesco
5. San Franciscio del Monte	Dr. M. Marasigan, Ms. Fe Pagaspas, Ms. Evangeline Alfonso, Ms. Mylene Sibal
District 2	
1. Culiat	Dr. Patria Saludo, Ms. Luchie Bacula, Ms. Ana Silarde, Ms. Imelda Alcantara, Mr. Hajji Fahad
2. MH Pedro	Dr. Leonido, Ms. Florita Estrella, Ms. Remedios Romero
3. Banlat	Dr. A. Molina, Ms. Jessica Recto, Ms. Amelia Clemente
4. Bagbag	Ms. Eden Baccay, Ms. Lourdes Garcia
5. Novalichez	Dr. Elenita Plata, Ms. Grace Martinez, Ms.Olive Gaviola
6. Nagkaisang Nayon	Dr. C. Almacen, Mrs. H. Madrid, Dr. SJ Celo
District 2A	
1.Batasan Super HC	Dr. M. Dizon, Ms. Rosalina Yamat, Mr. Lorenzo Reyes, Ms. Nimfa Rola
2. Batasan Annex	Dr.R. Alagano, Mr. Edgardo Dimaapi
3. Payatas A	Dr. I. Alilio, Ms. Margie Pagimola, Ms. Ermelinda Breiz, Ms. Angelica Palad
4. Bagong Silangan	Dr. A. Villarroman, Mr. Dale Echavez, Mr. Bernard Yumang
5. Holy Spirit	Ms. Natividad David, Ms. Charity Bagawan, Ms. Lorna Malabiga, Ms. Miguela Costales, Mr. Jose Nicol
6. Commonwealth	Dr. A. Carriaga, Ms. Concepcion Casenas
7. Sta. Lucia Super	Dr. L. Eleria, Ms. Ruena Jumadiao, Ms. Josephine Dingle
District 3	
1. Old Balara	Dr. S. Tercero, Mr. Edgar Almoguera, Ms. Tess Magtira
2. Project 4	Dr. M. Santos, Ms. Marialyn Labrador, Ms. Roselyn Ramil
3. Murphy	Dr. B. Florendo, Ms. Cristina Francisco
4. Libis	Ms. Irma Adriano
5. E. Rodriguez	Dr. M. Buenaventura, Mr. Gil de Guzman, Ms. Violy Borason, Dr. P. Arias, Ms. Nida Ancheta
District 4	
1. Pinyahan	Dr. N. Ungson, Ms. Carmencita Uy, Ms. Merly Tejada, Ms. Angelita David
2. Krus na Ligas	Dr. A. Monteira, Ms. Lorna Molina
3. Kalayaan	Dr. A. Antalan, Ms. Marissa Vergara, Ms. Vener Rubio
4. Kamuning Super	Dr. N. Zarate, Ms. Nerissa Penaflor, Ms. Lorrine Mendiola
5. Bernardo	Dr. A. Rebadulla, Ms. Lilibeth Genio
Non-QCHD Facilities	
1. Lung Center of the Philippines	Dr. V. Lofranco, Ms Clyde Baclar
2. East Avenue Medical Center	Dr. A. Antonio, Dr. S. Duran, Ms.Teresa. Sotomayor
3. PTSI-DOTS Center	Dr. J. Valderrama, Dr. V. Perez, Dr. W. Gabaldon, Mr. Averdin Bucad
4. I CAN Foundation	Ms.Yukiyo Nomura

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 1 ILOCOS REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controller (n)	
					Trained	Untrained		Trained	Untrained
Pangasinan	2,664,762	58	54	54	55	13	PHO	10	
la Union	589,734	19	19	19	20				3
Ilocos Sur	536,425	32	32	32	29	3			6
Ilocos Norte	443,136	22	22	22	22	7			2
Dagupan	143,446	1	1	2	3				1
San Carlos	157,230	6	1	1	6				1
Urdaneta	121,337	2	2	2	2				
Alaminos	77,983	2	2	2	2	1			
San Fernando	111,249	1	1	1	1	1			
Vigan	48,577	1	1	1	1	1			
Laoag		3	1	1	2				
Candon	54,411	1	1	1	1				
PPMD: DDVMH	99,750		1	1	4	1			
PTS Dagupan			1	1	1				
DARC			1	1	1				
TOTAL	**5,048,040**	**148**	**140**	**141**	**150**	**27**	**1**	**10**	**13**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 2 CAGAYAN VALLEY REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controller (n)	
					Trained	Untrained		Trained	Untrained
Cagayan	953,990	28	28	28	58		PHO	4	
Isabela	1,172,531	36	36	36	52			1	
Quirino	165,952	6	6	6	21			1	
Nueva Vizcaya	397,267	15	15	15	34			1	
Cauayan City	114,699	2	2	2	2			1	
Santiago City	121,958	1	1	1	2			1	
Tuguegarao City	133,430	1	1	1	5			1	
TOTAL	**3,059,827**	**89**	**89**	**89**	**174**		**1**	**9**	

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 3 CENTRAL LUZON

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Aurora	203,673	5	5	6	3	5	none	1	
Bataan	529,162	16	14	13	15	1	PHO	4	
Bulacan	1,732,305	48	31	31	30	2	PHO	1	1
Nueva Ecija	1,226,351	27	27	27	24		PHO	6	
Pampanga	1,493,550	40	21	21	22		PHO	1	2
Tarlac	849,838	27	15	19	14	2	PHO	1	1
Zambales	477,795	16	7	7	8	3	PHO	1	1
Angeles City	272,006	6	6	5	6		none		1
Balanga	74,456	3	3	2	3		rhu	1	1
Cabanatuan	246,377	5	1	1	1	1	PHO		1
Gapan	86,974	3	2	2	2		PHO		1
Malolos	171,032	3	3	3	3		PHO		1
Muñoz	68,125	1	1	1		1	PHO		1
Olongapo	188,347	17	1	2	1	3	PHO	1	
Palayan	38,719	1	1	1	2		PHO		1
San Fernando	253,711	4	4	4	4		none		1
San Jose del Monte	347,283	5	5	4	2	2	PHO		1
Tarlac	274,835	10	10	9	5		PHO	1	
San Jose	118,963	3	1	1	1	1	rhu		1
TOTAL	8,652,514	240	158	159	146	21	6	18	15

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 4 - A (CALABARZON)

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Batangas	1,428,319	41	41	32	36		PHO		1
Cavite	2,067,211	29	29	28	34	2	PHO	9	
Laguna	1,737,079	33	21	21	21	6	PHO	5	
Quezon	1,590,746	40	40	37	40				16
Rizal	1,507,435	31	16	25	24		PHO		3
Antipolo City	631,170	2	2	2	2		PHO		
Batangas	269,044	6	1	2	1	1	CHO		
Calamba	348,422	2	1	2	1				
Sta.Rosa	254,572	2	2	3	2	1			
Cavite	105,507	5	1	1	2				
Lipa	247,299	5	1	2	2	3	CHO		2
Lucena	213,238	2	2	3	3				1
San Pablo	231,128	6	2	2	2		PHO		
Tagaytay	45,287	1	1	1	1				
Tanauan	115,860	2	2	1	1	1	CHO		
Trece Martirez	51,503	1	1	1	1				
TOTAL	**10,843,820**	**208**	**163**	**163**	**173**	**14**	**7**	**14**	**23**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 4 - B (MIMAROPA)

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Marinduque	214,561	8	7	7	7		PHO	1	
Mindoro Oriental	596,034	18	18	18	18				
Mindoro Occidental	397,850	11	11	11	26			8	
Palawan	624,573	21	19	19	19		PHO		5
Romblon	271,219	17	13	13	17				2
Puerto Princesa City	172,573	1	1	1	4		CHO		3
Calapan City	116,676	1	1	1	1				
TOTAL	**2,393,486**	**76**	**69**	**69**	**92**		**3**	**9**	**10**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 5 BICOL REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Albay	998,562	17	17	17	26				2
Camarines Norte	476,417	12	12	12	13				3
Camarines Sur	1,418,722	32	32	32	50				2
Catanduanes	277,058	11	11	11	17				4
Masbate	757,308	21	21	21	30				2
Sorsogon	705,368	16	16	16	24		PHO	1	
Legazpi City	171,487	1	1	1	1				
Iriga	94,783	1	1	1	1				
Naga	147,833	1	1	1	1				
TOTAL	**5,047,538**	**112**	**112**	**112**	**163**		**1**	**1**	**13**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 6 WESTERN VISAYAS

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Aklan	489,475	17	17	17	17			1	
Antique	507,725	17	17	17	17			1	
Capiz	549,235	16	16	16	16		PHO	1	
Guimaras	155,708	5	5	5	5			1	
Iloilo	1,618,703	46	46	46	45	1	PHO	4	
Negros Occidental	1,179,779	19	19	19	19		PHO	1	
Bacolod City	447,915	1	1	1	4	4	CHO	1	1
Bago	147,943	1	1	1	1				
Cadiz	148,186	1	1	1	1				
La Carlota	58,885	1	1	1	1				
Iloilo	397,530	9	9	9	7	4		1	
Roxas	135,462	1	1	1	3			1	
Passi	75,634	1	1	1	3		CHO	1	
Sagay	135,462	1	1	1	1				
San Carlos	123,451	1	1	1	1				
Silay	112,452	1	1	1	1				
Talisay	82,621	1	1	1	1				
Escalante	81,689	1	1	1	1				
Sipalay	64,788	1	1	1	1				1
Himamaylan	92,700	1	1	1	1				1
Victorias	85,332	1	1	1	1				
Kabankalan	156,345	1	1	1	1				
TOTAL	**6,847,020**	**144**	**144**	**144**	**148**	**9**	**5**	**13**	**3**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 7 CENTRAL VISAYAS

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Bohol	1,186,273	50	50	49	38	4	PHO	3	
Cebu	3,582,342	64	64	63	45	6	PHO	4	
Negros Oriental	1,220,844	29	29	29	30	2	PHO	2	
Siquijor	87,110	6	6	5			PHO	2	
Cebu City	809,082	5	5	5	11	2	CHO	9	
Mandaue	208,799	3	3	3	4	0	CHO	4	
Danao	98,636	1	1	1	2		PHO	0	
Lapu lapu	245,769	1	1	4	4	1	CHO	2	
Toledo	157,943	1	1	1	2		PHO	0	
Tagbilaran	90,497	1	1	1	2		PHO	1	
Bais	71,507	1	1	1	2		PHO	0	
Canlaon	49,797	1	1	1	2		PHO	0	
Dumaguete	118,408	1	1	1	3		PHO	0	
Talisay	171,309								
Tanjay	71,646								
TOTAL	**8,169,962**	**164**	**164**	**164**	**145**	**15**	**7**	**27**	

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 8 EASTERN VISAYAS

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
North Leyte	1,316,255	45	42	34	20	20			5
South Leyte	323,453	18	18	16	11	4	PHO	3	
Biliran	148,083	8	8	9	4	4			1
East Samar	389,799	26	23	26	14	9			2
North Samar	545,631	24	19	8	13	2			1
Western Samar	525,763	25	25	22	5	4	PHO		2
Tacloban City	188,929	1	1	2	1	2		1	
Ormoc	163,701	1	1	1	1	1			
Maasin	78,214	2	1	2		1			
Calbayog	164,569	6	6	6		6		1	
PPMD Caremeds		1	1	1	1				
RTR Hospital		1	1	1	1				
TOTAL	**3,844,397**	**158**	**143**	**127**	**71**	**53**	**2**	**5**	**11**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 9 ZAMBOANGA PENINSULA

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Zamboanga del Norte	712,825	25	17	17	17		ZNPH		
Zamboanga del Sur	731,653	26	18	18	16	3	CHD		
Zamboanga Sibugay	541,940	16	13	13	22	4	IDH		
Dapitan City	71,671	3	3	3	1		CHO		
Dipolog	109,157	1	1	1	1		CHO		
Isabela	79,487	3	2	2	2				
Pagadian	160,215	4	3	3	3		CHO	4	
Zamboanga	680,486	15	4	4	4		CHO	1	
TOTAL	**3,087,434**	**93**	**61**	**61**	**68**	**7**	**7**	**5**	

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 10 NORTHERN MINDANAO

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
Bukidnon	845,886	20	22	22	22		PHO		2
Camiguin	80,852	5	5	5	5		HOSP		2
Misamis Occidental	296,511	14	14	14	14		HOSP		1
Misamis Oriental	727,253	24	24	24	24		PHO	3	
Lanao del Norte	538,964	22	15	15	9		HOSP		1
Cagayan de Oro City	513,065	1	4	4	9		CHO		2
Gingoog	126,826	1	1	1	3				
Valencia	172,570	1	1	1	1				
Malaybalay	144,770	1	1	1	1				
Oroquieta	65,147	1	1	1	1		CHO		1
Ozamis	122,775	1	1	1	1				
Tangub	55,347	2	1	1	2				
Iligan	305,678	1	6	7	10	1	CHO		1
TOTAL	**3,995,644**	**94**	**96**	**97**	**102**	**1**	**8**	**3**	**10**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 11 DAVAO REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
DAVAO DEL NORTE	811,424	17	18	18	18				3
DAVAO DEL SUR	837,258	15	15	15	9	7			4
DAVAO ORIENTAL	476,113	16	15	15	15	1			4
COMPOSTELA VALLEY	639,667	15	15	15	18	2	PHO	2	
DAVAO CITY	1,285,017	20	18	19	24	1	CHO		7
TOTAL	**4,049,479**	**83**	**81**	**82**	**84**	**11**	**2**	**2**	**18**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 12 COTABATO REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
NORTH COTABATO	974,631	17	17	17	21	11	PHO	3	
SOUTH COTABATO	648,801	11	11	11	15				1
SULTAN KUDARAT	576,185	12	12	12	15			2	
SARANGANI	500,188	7	7	7	10				3
COTABATO CITY	180,802	1	1	1	1				
KIDAPAWAN CITY	113,516	1	1	1	1		CHO	1	
GEN. SANTOS CITY	512,273	5	5	5	7				3
TOTAL	**3,506,396**	**54**	**54**	**54**	**70**	**11**	**2**	**6**	**7**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD 13 CARAGA REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n) F/NF	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
AGUSAN DEL NORTE	300,400	11	11	13/5	20		PHO	5	
AGUSAN DEL SUR	610,151	14	21	31/24	36	10			6
SURIGAO DEL NORTE	387,256	27	29	36/1	28	1			1
SURIGAO DEL SUR	951,184	18	28	27/1	28				3
BUTUAN CITY	291,321	4	4	4F/5	4				2
SURIGAO CITY	127,005	4	3	3F/5	4	2			1
BISLIG CITY	111,664	4	4	5F/2	5				1
TOTAL	**2,778,981**	**82**	**100**	**119/43**	**125**	**13**	**1**	**5**	**14**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD METRO MANILA

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
MANILA	1,509,559	49	29	25	28		PHL	8	
QUEZON CITY	2,396,328	59	14	16	16		ERHC	3	
PASAY	305,958	13	13	13	6		ELL	4	
CALOOCAN	1,372,400	39	13	15	14		CCL	2	
MAKATI	407,301	29	6	10	7		BSL	2	
MANDALUYONG	254,996	26	5	10	10		MAIN	2	
PARAÑAQUE	492,723	16	10	9	10		SIHC	2	
LAS PIÑAS	547,644	28	7	6	6		CHO	2	
PATEROS	59,925	5	1	3	2		MRFHC	1	
TAGUIG	582,574	21	4	4	4		TMHO	3	
PASIG	545,511	43	6	9	6		MAIN	3	
MARIKINA	432,155	17	1	3	5		MAIN	1	
SAN JUAN	111,371	20	3	3	6		WC	1	
MALABON	330,672	24	2	12	5		DHC	1	
NAVOTAS	232,450	9	8	6	6		NELIC	2	
VALENZUELA	544,411	39	6	10	16		MAIN	4	
MUNTINLUPA	359,378	12	7	9	7		MAIN	3	
TOTAL	**10,485,356**	**449**	**135**	**163**	**154**		**17**	**44**	

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

CHD CORDILLERA ADMINISTRATIVE REGION

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
ABRA	220,251	27	27	27	28				2
APAYAO	107,883	7	7	10	12				2
BENGUET	341,768	13	13	12	18	4	PHO		1
IFUGAO	169,855	9	11	11	21		PHO	2	
KALINGA	191,416	15	12	12	12				2
MOUNTAIN PROVINCE	151,942	10	10	12	14				1
BAGUIO CITY	286,942	1	1	5	3		CHO		1
TOTAL	**1,470,057**	**82**	**81**	**89**	**108**	**4**	**3**	**2**	**9**

NATIONAL TUBERCULOSIS REFERENCE LABORATORY
NTP LABORATORY NETWORK
2005 JUNE

AUTONOMOUS REGION FOR MUSLIM MINDANAO

Province/City	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
LANAO SUR	746,924	36	14	14	13				1
MAGUINDANAO	881,509	26	22	22	10		PHO	2	2
BASILAN	294,909	6	6	6	7				
SULU	692,041	18	13	13	16				1
TAW TAWI	370,009	12	12	12	15				1
MARAWI CITY	151,069	1	1	1	1				
TOTAL	**3,136,461**	**99**	**68**	**68**	**62**		**1**	**2**	**5**

NATIONAL TUBERCULOSIS REFERENCE LABORATRORY
NTP LABORATORY NETWORK
2005 JUNE

PHILIPPINES

REGIONS	Population	RHU / CHC (n)	Microscopy centers(n)	Microscope (n)	Med. Tech. (n)		QA Center	Controllers (n)	
					Trained	Untrained		Trained	Untrained
CHD 1 - ILOCOS REGION	5,048,040	148	140	140	150		2	10	13
CHD 2 - CAGAYAN VALLEY	3,059,827	89	89	89	174		2	9	
CHD 3 - PAMPANGA	8,652,514	240	158	159	146	21	6	18	15
CHD 4-A - CALABARZON	10,843,820	208	163	163	173	14	7	14	23
CHD 4-B - MIMAROPA	2,393,486	76	69	69	92		3	9	10
CHD 5 - BICOL REGION	5,047,538	112	112	112	163		1	1	13
CHD 6 - WESTERN VISAYAS	6,847.02	144	144	144	148	9	5	13	3
CHD 7 - CENTRAL VISAYAS	8,169,962	164	164	164	145	15	7	27	
CHD 8 - EASTERN VISAYAS	3,844,397	158	143	127	71	53	2	5	11
CHD 9 - ZAMBOANGA PEN	3,087,434	93	61	61	68	7	6	5	
CHD 10 -N. MINDANAO	3,995,644	94	96	97	102	1	8	3	10
CHD 11 -DAVAO REGION	4,049,479	83	81	82	84	11	2	2	18
CHD 12 - COTABATO REGION	3,506,396	54	54	54	70	11	2	6	7
CHD 13 CARAGA REGION	2,778,981	82	100	119/43	125	13	1	5	
CHD METRO MANILA	10,485,356	449	135	163	154		17	44	
CHD CAR	1,470,057	82	81	91	111		3	2	9
CHD ARMM	3,136,461	99	68	68	62		1	2	
TOTAL	79,576,239	**2375**	**1858**	**1783**	**2038**	**155**	**75**	**175**	**132**

Note: Untrained Controllers have old QA System training

Annex-10-1 Summary of PDM workshop on 21st February 2007 (for Group 1)

Report on PDM

SESSION-1

GROUP 1

Members: Dr. Jaime Lagahid - Director III – IDO -NCDPC DOH
Dr. Rosalind Vianzon – NTP Manager – IDO – NCDPC DOH
Dr. Editha Gimothea- Regional NTP Med Coordinator- CHD6
Ms. Lorna Garde – Prov Nurse Coor.-Negros Occidental
Dr. Katsunori Osuga – Chief Adviser – DOH –JICA QTBCP
Dr. Yumiko Yanase – Project Leader – DOH JICA QTBCP
Ms Cirila Negad – Nurse – IDO- NCDPC DOH
Dr. Nimfa Zarate – District Supervisor – CHO Quezon City
Dr Susan Vinloan – District Supervisor – CHO Quezon City
Dr. Aurora Alfonso – Medical officer – CHO Manila
Mr. Takeshi Kanome – Assistant Resident Representative – JICA Phil. Office
Dr. Niela Alvarez – Medical Adviser – DOH-JICA QTBCP

OUTPUT: QUALITY DOTS implementation is ensured through capacity building activities and strengthening monitoring and supervision system.

NO.	ACTIVITIES	ACHIEVEMENTS	ISSUES/CONCERNS
1.1	Develop Monitoring and Supervision Manual	Developed a “user friendly handbook” because the handbook is easy to use and understand. The development of the handbook facilitated the revision of the Manual of Procedures for the NTP especially on the Monitoring and Supervision section. The method used in the development of the handbook is more of the “participatory approach” because it is basically the contribution of most of the persons involved in NTP (NTP managers, coordinators and JICA experts/consultants)	No orientation on the Supervision and Monitoring Manual in non-project areas.

		It facilitated the development of the NTP monitoring checklist in one of the DSA.	
1.2	Distribute Monitoring and Supervision Manual to all regions and conduct orientation	All areas were given the copy of the handbook, including the non-project areas. All project areas are utilizing the manual	Not all the non-project areas are utilizing the manual
1.3	Review the TB control performance of province/chartered city nationwide and decide the DSA where the performance of TB control is not satisfactory with NCDPC and CHDs	Baseline survey conducted in the DSAs facilitated the training of the health staff especially in Basic Microscopy training and EQA	
1.4	Conduct situational analysis of the DSA on TB control activities and its environment with CHD and NCDPC.	Baseline survey conducted in Manila and Quezon City led to the training of the District supervisors on supervision and monitoring. It also resulted to the prioritization of areas for supervision and monitoring.	No feedback yet on the result of the baseline survey conducted in Las Pinas, Valenzuela, San Juan, Muntinlupa and Caloocan City.
1.5	Organize refresher trainings to the province/chartered city NTP coordinators and staff of health centers based on the findings of the above analysis	Refresher training courses for the health staff resulted in the improvement of their capability and skills in the implementation of NTP. Orientation of the staff on Supervision and monitoring enhanced their skills especially at the level of the district and health center supervisors	Rapid turnover of health workers No training yet on Monitoring and supervision for the Provincial NTP Coordinator and Health Center Supervisor in Negros Occidental
1.6	Strengthen NTP monitoring and supervision by province/chartered city NTP coordinators in DSA.	-Provision of vehicle by JICA facilitated the regular monitoring activities of the provincial/district and city coordinators. -Counterpart shares, as gasoline allowance and travel allowance, are being provided by the LGUs -In one of the DSAs, the District Supervisors were able to conduct Inter-district monitoring activities. -It is a joint monitoring team approach.	- Inadequate support in some LGUs.

		(JICA consultants, Provincial/City coordinators)	
1.7	Strengthen NTP monitoring and supervision by NCDPC, NTRL and CHDs through joint monitoring activities and regional workshops		No joint monitoring activities by NCDPC, NTRL and CHDs. CHD NTP coordinator has multiple tasks. No vehicle for monitoring. No funding (gasoline and travel allowance) for monitoring activities of CHD coordinators
1.8	Strengthen NTP to coordinate activities among international partners at PACT meeting		Difficulty in convening PACT members due to their availability.

SESSION-2

No. Activity	ISSUES/CONCERNS	SUGGESTED ACTIVITIES
1.1	No orientation on the Supervision and Monitoring Manual in non-project areas.	Conduct orientation of the Handbook of Monitoring and Supervision in non-project sites (c/o DOH)
1.2	Not all the non-project areas are utilizing the manual	
1.3		
1.4	No feedback yet on the result of the baseline survey conducted in Las Pinas, Valenzuela, San Juan, Muntinlupa and Caloocan City.	To feedback results of the baseline survey to the LGUs of some areas of NCR by DOH and JICA experts.
1.5	Rapid turnover of health workers No training yet on Monitoring and supervision for the Provincial NTP Coordinator and Health Center Supervisor in Negros Occidental	Advocate for hiring of vacant positions for the newly elected LCEs Advocate to JICA to provide continuous technical assistance as training, supervision and monitoring.
1.6		
1.7	No joint monitoring activities by NCDPC, NTRL and CHDs. CHD NTP coordinator has multiple tasks	- Schedule regular monitoring activities with NCDPC, NTRL and CHD NTP coordinators.

		- Dialogue with management on additional manpower support for NTP
1.8	Difficulty in convening PACT members due to their availability.	Utilize CCM to gather key partners
Others		
	Lack of equipments for training (LCD, laptop, overhead projector)	Provision of training equipments by JICA
	TB in Children	TB in Children Training c/o DOH
	Strengthening PPMD in Quezon City	Advocacy symposia for private referring physicians c/o Global fund/PhilCAT
	Emerging MDR-TB (PMTM)	Develop MDR TB Guidelines c/o DOH
	Emerging TB problem in special group as in city jail	Collaboration/ Training of personnel in City Jail c/o LGUs/CHDs
	Lack of monitoring system for Drug resistant TB	Establish culture and sensitivity facility at the Regional level.

Prepared by:

NIELA J. ALVAREZ M.D.
February 27, 2007

SUMMARY ON THE PDM WORKSHOP (Group 2)

Maricel L. Trono
Medical Technologist
JICA-QTBCP

Project Design Matrix (PDM) workshop was held on 21 February 2007 at the National Tuberculosis Reference Laboratory (NTRL) mainly to review the project's achievements and current status. The representatives of DOH-IDO, NTRL, Negros Occidental PHO, Manila CHO and Quezon CHO participated in the workshop. The participants were divided into 2 groups to discuss the output of the project according to the activities stated in the PDM. The following highlights the discussion of group 2. The group's focal point of discussion was on the laboratory aspect of the PDM (Output 2 and 3)

The members of Group 2 are as follows:

Dr. Ernesto Bontuyan – Medical Specialist, DOH-IDO
Dr. Noel Macalalad – Officer-In-Charge, Head, Laboratory Research Division, RITM
Dr. Nora Cruz – Officer-In-Charge, Head, NTRL
Ms. Cristy Villarico – Medical Technologist, NTRL
Ms. Paz Rostrata – Medical Technologist, NTRL
Ms. Alma Palparan – Medical Technologist, NTRL
Ms. Marinella Galit – Medical Technologist, NTRL
Ms. Erlinda Reyes – Medical Technologist, NTRL
Ms. Natividad Maple – Medical Technologist, Negros Occidental
Ms. Jessica Beltran – Medical Technologist, Manila City
Ms. Mae Laeson – Program Assistant, JICA Philippine Office
Dr. Shoichi Endo – Consultant, JICA-QTBCP
Maricel Trono – Medical Technologist, JICA-QTBCP

On Session 1:

The group identified the following key points as the strengths of the project in terms of Output 2 and 3.

1) Under the project, EQA system and procedures were standardized nationwide following the international guidelines. The publication of a national EQA manual was published and distributed nationwide that served as reference for implementation. Recognizing that EQA is now an integral part of quality DOTS implementation, DOH has included EQA in the manual of procedures for NTP (MOP).

2) The laboratory network in the country (from NTRL to peripheral) benefited a lot from the technical support provided by the project on EQA through the massive

support on trainings, provision of necessary laboratory equipment and dispatch of JICA experts. These mechanisms served as springboards in standardizing EQA nationwide.

3) Many medical technologists/microscopists nationwide became skilled and proficient in the performance of Sputum Smear Microscopy through the trainings provided and through EQA implementation. As a result, the general quality of laboratory service, specifically at the peripheral level, improved significantly. In the DSAs in particular, EQA targets has been achieved and maintained in most of the microscopy centers assuring good quality of laboratory performance.

4) With the step-wise approach to expand EQA in the country, trainings have been conducted for all provinces and implementation is now on-going.

5) With the establishment of EQA nationwide, hierarchy in the country's laboratory network has been defined and set in place. With this, relationship and coordination among various agencies within the network have improved. More involvement of laboratory personnel in national and regional meetings for NTP was seen, asserting that the laboratory has been given due attention and more pro-active role in NTP.

6) With the establishment and operation of EQA in the DSAs, more commitment and support from the LGUs was felt by the counterparts. Moreover, coordinators showed more active leadership in its implementation. These could be attributed to the strong advocacy, support and collaboration initiated by the project.

7) The conduct of DRS helped strengthen the collaborative ties between JICA, DOH, WHO and the LGUs and it paved the way to establish proficiency on culture and DST in NTRL.

8) With the operational research on the conduct of training for Lab Aides, the activity strengthened the technical capability of laboratory aides hence contributed to the improvement of case finding activities in Quezon City. It further heightened the awareness of stakeholders as to the importance of the role of the lab aides for NTP.

The group also identified some challenges that were encountered in the implementation of project activities pertaining to Quality Laboratory services:

1) Although EQA has been standardized nationwide, variable quality of outputs have been observed. This may have been brought about by the operational limitations in each province/city like limited monitoring capability.

2) In some areas where EQA is being implemented, there is weak political commitment of LGUs. For instance, difficulties were encountered in the set-up of EQA center specifically lack of manpower and budgetary support for EQA infrastructure. Weak advocacy in these areas could be one of the major reasons for this. However, this does not seem to be true for DSAs due to the strong advocacy provided by the project.

3) There is lack of maintenance system and support for laboratory equipment, specifically microscope. Currently, there is no existing mechanism by which a

microscope can be sent to an intermediate site for maintenance and repair nor there is available and technically competent manpower for service.

4) Data management for EQA needs to be strengthened. Currently, delay in the submission of reports by CHDs is a major issue. There is a need to investigate the causes of delay and remind the CHDs on the importance of report submission to address the problem.

5) Technical and operational difficulties were encountered in the conduct of Drug Resistance Survey. Among them were the absence of intermediate check on the quality of culture examination and limitations in the shipment of samples. Currently, finalization of DRS is still pending. One possible reason for which is the weak capability to identify specific problems for meaningful analysis.

On Session 2:

The following activities were suggested by the group to further strengthen the project's accomplishments or fill in the gaps that will left by the project.

1) Basic Microscopy training for medical technologists/microscopists needs to be provided for newly hired or assigned personnel in the DSAs prior to the end of the project.

2) Finalization of DRS results should be pushed by the project so that final report can be disseminated to all stakeholders who have long been anticipating for the results for program planning and necessary interventions.

3) Identification of problem areas on EQA through review and analysis of EQA data within 1 year of implementation and initiation of necessary interventions such as trainings and workshops to strengthen capacity building for the weak areas. This is aimed at strengthening NTRL's data management for EQA.

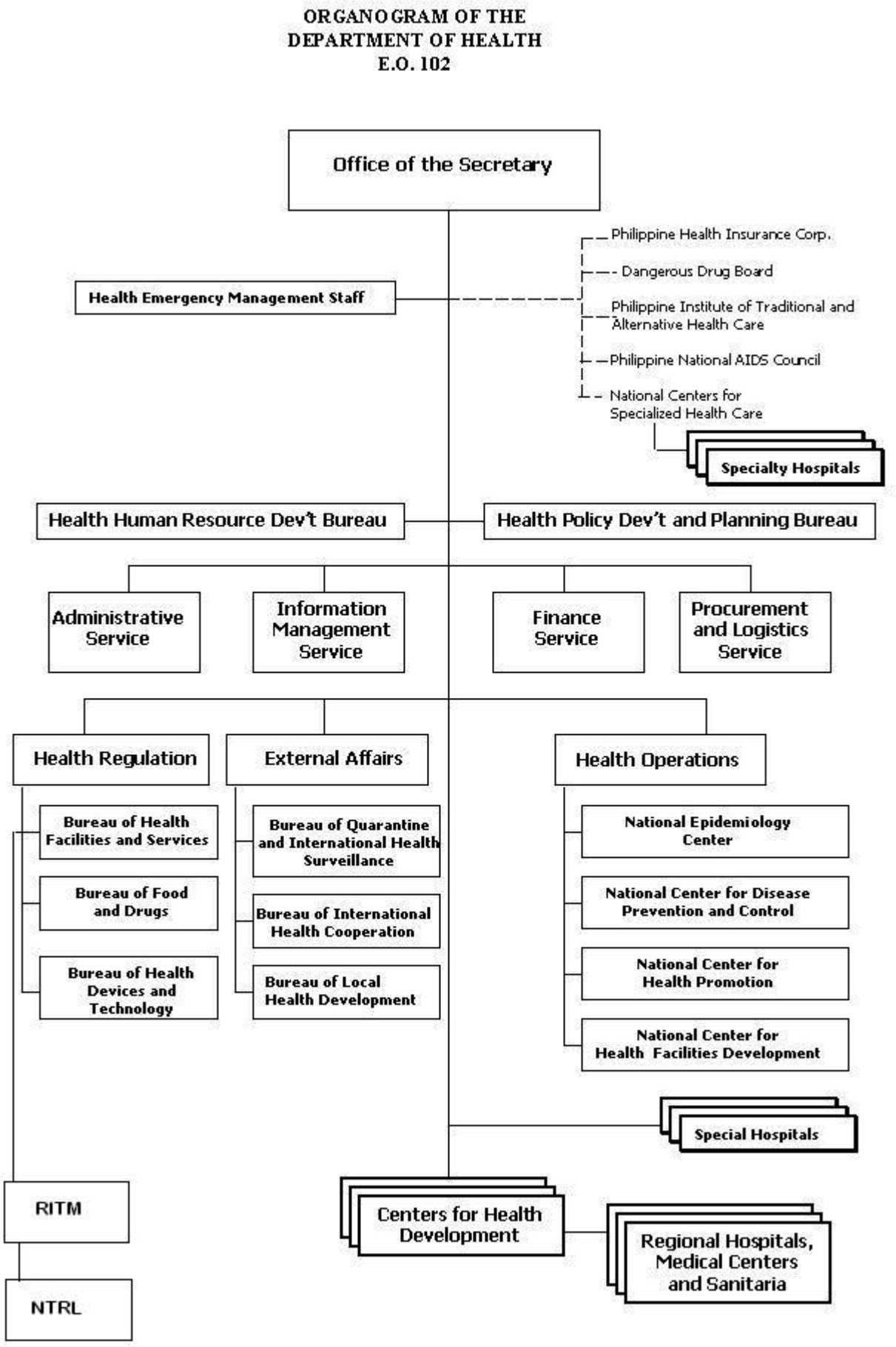
4) Establishment of laboratory network of and strengthening linkage with the private sector (eg PPMD units) by NTRL through the conduct of baseline surveys, formation of PPMD directory and implementation of EQA system in private laboratories performing Sputum Smear Microscopy.

5) Establishment of mechanism for equipment inventory and maintenance of microscope by DOH-IDO and NTRL to address prevailing problems on defective microscopes.

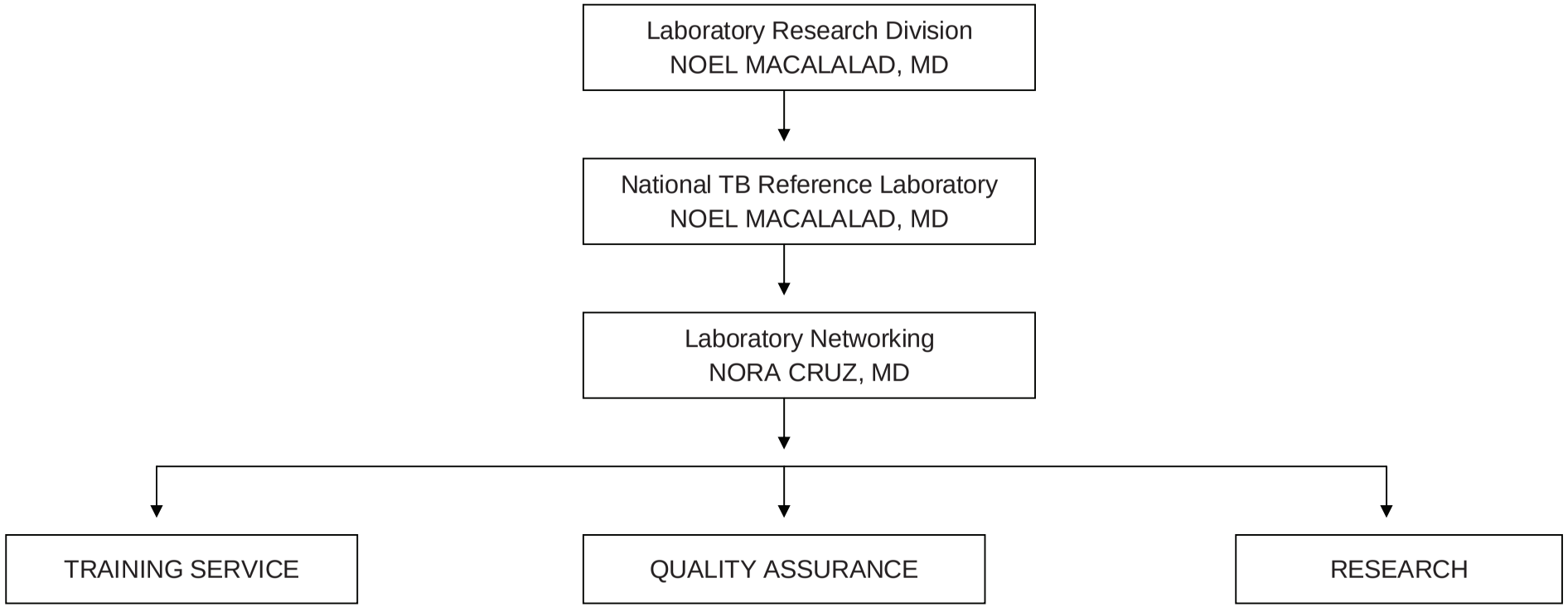
   The DOH-IDO has committed to providing and developing technical expertise in microscope troubleshooting.

6) Conduct of regional workshops on EQA to share experiences on implementation and discuss issues and concerns relevant to its operations. This activity would aim to address problems surrounding EQA activities and improve the quality of implementation.

２．DOH 組織図


ORGANOGRAM OF THE
DEPARTMENT OF HEALTH
E.O. 102
Office of the Secretary
Philippine Health Insurance Corp.
Dangerous Drug Board
Health Emergency Management Staff
Philippine Institute of Traditional and Alternative Health Care
Philippine National AIDS Council
National Centers for Specialized Health Care
Specialty Hospitals
Health Human Resource Dev't Bureau
Health Policy Dev't and Planning Bureau
Administrative Service
Information Management Service
Finance Service
Procurement and Logistics Service
Health Regulation
External Affairs
Health Operations
Bureau of Health Facilities and Services
Bureau of Food and Drugs
Bureau of Health Devices and Technology
Bureau of Quarantine and International Health Surveillance
Bureau of International Health Cooperation
Bureau of Local Health Development
National Epidemiology Center
National Center for Disease Prevention and Control
National Center for Health Promotion
National Center for Health Facilities Development
Special Hospitals
RITM
NTRL
Centers for Health Development
Regional Hospitals, Medical Centers and Sanitaria

Research Institute for Tropical Medicine
NATIONAL TUBERCULOSIS REFERENCE LABORATORY



Nora Cruz, MD
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Erlinda Reyes
Ma.Paz Rostrata
Marienella Galit
Cristina Villarico
Alma Gonzales

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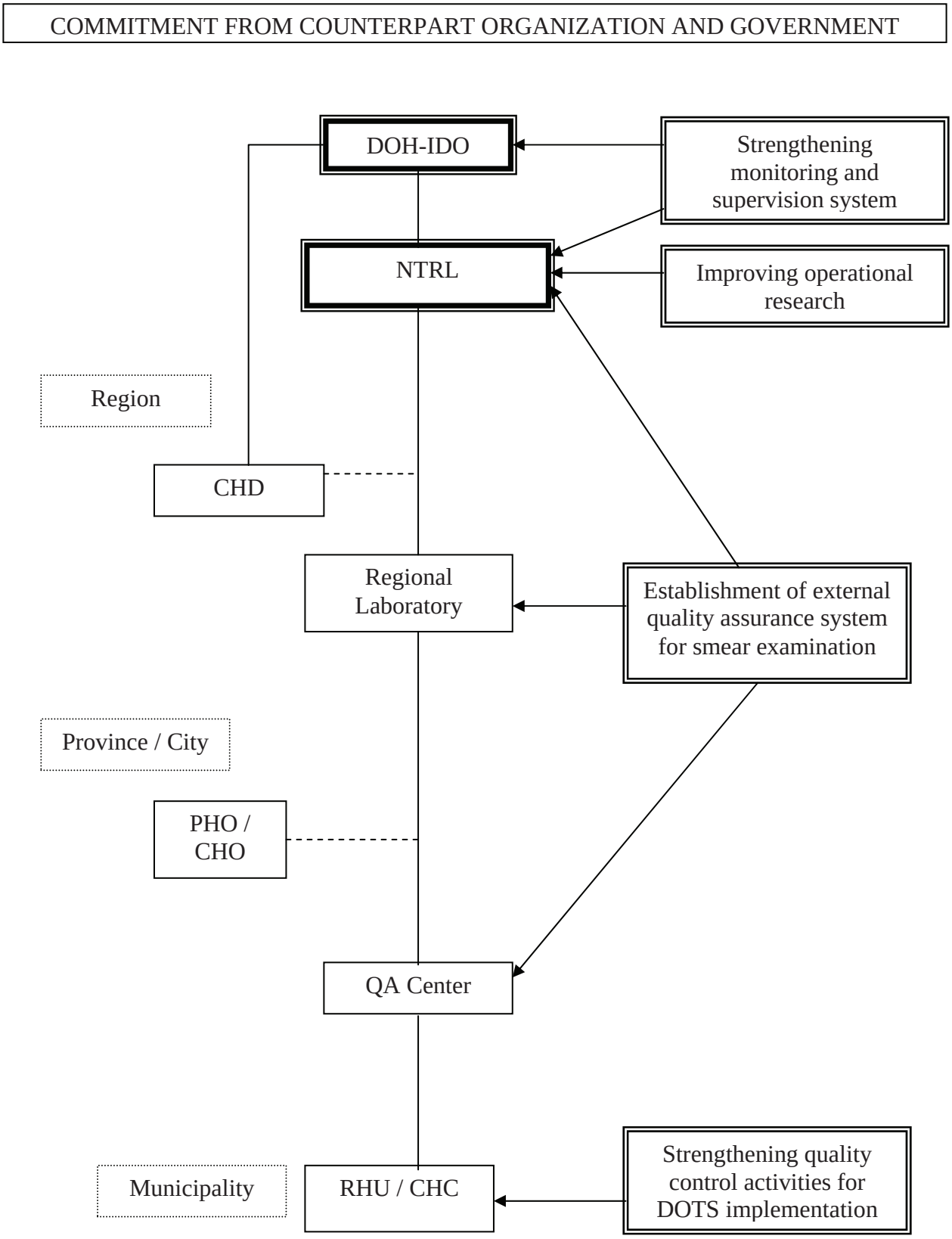
Alma Gonzales
Erlinda Reyes
Alma Gonzales

Socorro Lupisan, MD
Rosario Capeding, MD
Noel Macalalad, MD
Jaime Montoya, MD
Rodrigo Romulo,MD
Lita Vizconde, MD
Lydia Sombrero
Gloria Reclusado

４．DOTS 実施組織図


COMMITMENT FROM COUNTERPART ORGANIZATION AND GOVERNMENT
DOH-IDO
Strengthening monitoring and supervision system
NTRL
Improving operational research
Region
CHD
Regional Laboratory
Establishment of external quality assurance system for smear examination
Province / City
PHO / CHO
QA Center
Municipality
RHU / CHC
Strengthening quality control activities for DOTS implementation

Five Evaluation Criteria Others	Evaluation Question		Criteria and Method for Judgment	Required Data	Information Source	Data Collection
	Question	Sub-question				
OUTPUT	OUTPUT	Output-1: Is Quality DOTS implementation ensured, through capacity building activities and strengthening monitoring and supervision system?	1-1 Is the monitoring and supervision manual developed and distributed to at all regions?	・Inventory list of the manual ・Opinion of involved parties	・Inventory List of the manual ・CP (HC staff etc), Experts ・Other donors	Review of material Questionnaire Interview
			1-2 Do all the provinces /chartered cities where the Project has directly strengthened monitoring and supervision (Directly Supported Areas, DSAs) attain and maintain all the target listed below in 2007?	NTP reports Provincial NTP reports Opinion of involved parties	・NTP reports of provinces in DSAs ・Statistics of RHUs ・CP, Experts	Review of material Questionnaire Interview
			(1) Monitoring and Supervision manual is distributed to all the RHUs and utilized in the region			
			(2) 100% of RHUs, and provinces and CHDs submit the reports to the above levels within one month after deadline.			
			(3) In 100% of DSAs TB Coordinators, including District Coordinators/Supervisors, make regular supervisory visits to each RHU at least quarterly.			
			(4) Provinces receive regular supervision and advisory support from CHD and DOH			
			(5) Smear positive proportion among the newly registered pulmonary TB cases is 60% or more.			
			(6) Three sputum collection rate is 90% or more.			
			(7) Cure Rate is 85% or more.			
			(8) DOTS enrollment rate is 100%			
			1-3 Feed back of results and lessons in all DSAs to NTP regularly.			
		Output-2: Does quality laboratory services become available by the formation of the network?	2-1 Is number of Major Error by the internal quality control for sputum smear microscopy at NTRL decreased to zero in 2006-2007?	Record of sputum smear test in NTRL (microscopy test/ Major Error)	Record of NTRL	Review of material
			2-2 Do all the EQA centers at provincial/chartered city function in 2007? (Nationwide)	EQA record in each province	Provincial EQA report	Review of material
			2-3 Is number of Major Error at EQA Centers and RHUs decreased to be zero in 2007?	QA record in each province	Provincial EQA report	Review of material
		Output-3: Is capacity to plan and conduct operational researches, such as Nationwide drug Resistance Survey (DRS), to monitor the program strengthened?	3-1 Is number of Operational Research developed?		Project reports	Review of material
			3-2-1 For each Operational Research			
			(1) A protocol operational research developed.	Protocol documents	Protocol documents	Review of material

Five Evaluation Criteria Others	Evaluation Question		Criteria and Method for Judgment	Required Data	Information Source	Data Collection
	Question	Sub-question				
			(2) Report is compiled and presented to national and regional level	OR reports	OR reports	Review of material
			(3) Number of points of operational research result utilized for the strategy development for NTP by the end of the Project.	Notice to regional level HCs	Manuals/guidelines related to NTP Notices Opinions of involved parties	Review of material Interview
	Project Purpose	Cure Rate is 85% or more	Progress of cure rate.	Statistics	NTP report, WHO annual report, CP, Experts	Review of material, Questionnaire, Interviews
		Case Detection Rate is 70% or more	Progress of case detection Rate.	Statistics	NTP Report (Annual, Quarterly), WHO annual report, CP, Experts	Review of material, Questionnaire, Interviews
	Overall goal	Tuberculosis in the Republic of the Philippines in controlled	smear positive TB cases and TB mortality rate	Statistics	・Health Information System: HIS ・CP, Experts	Review of material, Interviews
Implementation Process	Were activity was done?	1-1 Develop Monitoring and Supervision Manual.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-2 Distribute Monitoring and Supervision Manual to all regions and conduct orientations.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-3 Review the TB control performance of province/chartered city nationwide and decide the DSA where the performance of TB control is not satisfactory with NCDPC and CHDs.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-4 Conduct a situational analysis of the DSA on TB control activities and its environment with CHD and NCDPC.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-5 Organize refresher trainings to the province/chartered city NTP coordinators and staff of health centers based on the findings of the above analysis.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-6 Strengthen NTP monitoring and supervision by province/chartered city NTP coordinators in DSA.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-7 Strengthen NTP monitoring and supervision by NCDPC, NTRL and CHDs through joint monitoring activities and regional workshops.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		1-8 Strengthen NTP to coordinate activities among international partners at PACT meeting.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		2-1 Strengthen capacity of the training management in NTRL, CTRL and some regional laboratories.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		2-2 Conduct EQA trainings to all CHD Regional NTP Coordinators and Regional medical technologists concerned.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews

Five Evaluation Criteria Others	Evaluation Question		Criteria and Method for Judgment	Required Data	Information Source	Data Collection
	Question	Sub-question				
		2-3 Set up a pilot area (one province/chartered city per region) to introduce EQA system at provincial level.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		2-4 Train the province/chartered city NTP Coordinators and controllers (medical technologists at Quality Assurance center) in pilot areas in collaboration with NTRL and CTRL.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		2-5 Strengthen CHD to monitor EQA activities at QA Centers through monitoring activities and national consultative workshop.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		2-6 Expand EQA system in two to four provinces/chartered cities per region annually in accordance with the developed criteria for expansion.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		3-1 Develop the protocol for DRS in collaboration with other partners such as WHO.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		3-2 Conduct DRS based on the protocol and analyze the collected data with the steering committee.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		3-3 Feedback the results of the DRS to national/international partners through workshops and/or international conference.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		3-4 Reflect the findings of OR to improve the NTP policy.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		3-5 Assess needs of OR to improve the NTP policy and develop the protocol with holding workshops/seminars, and implement OR as same as 3-1 to 3-4.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
		3-6 Strengthen capacity of NTP staff in the assessment of needs, planning and procedures through conducting actual operational research with technical guidance such as holding workshops and providing textbook / reference materials.	Comparison with the original plan	Progress and achievement of each item, revision of PO	・Project reports ・Monitoring reports ・CP, Experts	Review of material, Interviews
	Appropriate Monitoring?	Monitoring system	Comparison with the original plan	Monitoring system Revision of PDM Experience of Revision based on the external conditions	・Project reports ・CP, Experts	Review of material, Interviews
		Revise and Revision of PO	Comparison with the original plan	Monitoring system Revision of PDM Experience of Revision based on the external conditions	・Project reports ・CP, Experts	Review of material, Interviews
		Revise and Revision of PO because of external analysis	Comparison with the original plan	Monitoring system Revision of PDM Experience of Revision based on the external conditions	・Project reports ・CP, Experts	Review of material, Interviews

Five Evaluation Criteria Others	Evaluation Question		Criteria and Method for Judgment	Required Data	Information Source	Data Collection
	Question	Sub-question				
	Appropriate relationship ?	Smooth communication among Experts and CPs Whether appropriately solved the problem when it occurred?		Communication method between Experts and Counterpart Process of problem solution	CP, Experts CP, Experts	Questionnaire, Interview Questionnaire, Interview
	Ownership	Initiative of CPs Adequate allocation of Staff and Budget for the Project implementation		for Implementation ・Initiative of CPs ・Budget allocation （IDO, NTRL, LGU etc) ・Staff allocation （IDO, NTRL, LGU etc)	CP, Experts	Interview
1. Relevance	Are Overall Goal and Project Purpose in line of Philippines policy? Are they have conformity with the Target group needs?	1.1 Are Overall Goal and Project Purpose in line with Philippines development policy?	Development policy of Philippines	Development policy in Health sector	Development plan of Philippines	Review of material
		1.2 Are Overall Goal and Project Purpose relevant with the viewpoint of Philippine side's needs?	Needs of Philippine's side	Position of NTP in Philippines	Document regarding the Health sector development, Opinion of involved parties (ＣＰ， Experts, Donors)	Review of material, interview, questionnaire
		1.3 Are Overall Goal and Project Purpose relevant with the Japanese ODA policy?	Japanese ODA policy for the Philippines	Japanese ODA policy for the Philippines	MOFA, JICA's documents	Review of material
2. Effectiveness	Were gained expected achievement through out Project implementation?	Achievement of Project purpose	Cure rate, Completion rate, Case Detection rate	Statistics	NTP Report (Annual, Quarterly), WHO Annual Report, CP, Experts, the Donors	Review of material, interview, questionnaire
		Outputs and Project purpose		Relationship of each OUTPUTs & the Project Purpose	・Project reports ・CP, Experts	Review of material, interview, questionnaire
		Contribution of trainings to the achievement of project purpose		・Opinion of involved parties	・Training course evaluation report ・Trainees	Review of material Questionnaire
		Trainee's performance after training. Do they work for related job with the training?		Opinion of involved parties	・Staff allocation ・Trainees	Review of material Questionnaire Interview
		Are the installed equipment utilized?		・Conditions of installed equipments (used item and its frequency) ・Opinion of involved parties	・Utilization record, service record ・Monitoring Report ・C/P, Experts	Review of material, Interviews
	Obstacle of the achievement of project purpose	Impeding factor/ external condition		Actual situation of external conditions	・Project reports ・CP, Experts	Review of material, interview, questionnaire
		Resignation of trained staff was impeding factors for the achievement of the Project purpose?		Resignation rate, reason of resignation	・CP ・Experts	Interview
3. Efficiency	Were INPUTs adequate? (Timing, Quantity, Cost, Performance)	3.1 Japanese side	Were INPUTs adequate? (Timing, Quantity, Cost, Performance)	Assignment Record of Experts (Timing, Field, Number)	・Project reports ・CP, Experts	Review of material, interview, questionnaire
				Procurement record of equipments (Timing, specification, quantity)	・Project reports ・CP, Experts	Review of material, interview, questionnaire
				CP training record (Timing, sector, quantity)	・Project reports ・CP, Experts	Review of material, interview, questionnaire
				Operation cost	・Project reports ・CP, Experts	Review of material, interview, questionnaire
		3.2 Philippine's side	Were INPUTs adequate? (Timing, Quantity, Cost, Performance)	Allocation of ＣＰ staff (Timing,, Field, quantity)	・Project reports ・CP, Experts	Review of material, interview, questionnaire

Five Evaluation Criteria Others	Evaluation Question		Criteria and Method for Judgment	Required Data	Information Source	Data Collection
	Question	Sub-question				
				Operation cost	・Project reports ・CP, Experts	Review of material, interview, questionnaire
				Office, facility and equipment for the Project implementation	・Project reports ・CP, Experts	Review of material, interview, questionnaire
	How the INPUTs are utilized and managed?	3.3 Utilization of INPUTS		Utilization of human resources (Experts, CPs)	・Project reports ・CP, Experts	Review of material, interview, questionnaire
				Utilization of facility and equipments	・Project reports ・CP, Experts	Review of material, interview, questionnaire
		3.4 Operation and Management system of the Project		Joint meeting's process and their function	・Project reports ・CP, Experts	Review of material, interview, questionnaire
4. Impact	Was the Project effective?	4.1 Contribution to the Overall Goal		Statistics	Project reports, document of NTP, CPs, Experts, Donors	Review of material, interview, questionnaire
	Is there other impact or ripple effect?	4.2 Unexpected Impact/ripple effect			Project reports, document of NTP, CPs, Experts, Donors	Review of material, interview, questionnaire
		4.3 Unexpected Impact			Project reports, document of NTP, CPs, Experts, Donors	Review of material, interview, questionnaire
	External conditions' influence	4.4 External condition's influence		Monitoring result of external conditions	Project reports, document of NTP, CPs, Experts, Donors	Review of material, interview, questionnaire
5. Sustainability	Do the projects achievement continue after project completion?	5.1 Policy Environment	Situation of Government policy	NTP policy	NTP, CPs, Experts	Review of material, interview, questionnaire
		5.2 Financial aspects	Financial situation of DOH, NTRL, RHU, LGU etc.	Financial situation of DOH, NTRL and LGU.	Budget allocation document of DOH, NTRL, LGU, RHUs. CPs, Experts	Review of material, interview, questionnaire
		5.3 Technical Aspects	DOTS, Sputum smear test	Technical transferring and utilization. Prevalence system of them.	Project reports, CPs, Experts, Donors	Review of material, interview, questionnaire
	Others for securing sustainability	5.4 Others			Project reports, document of NTP, CPs, Experts, Donors	Review of material, interview, questionnaire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