

FINAL CONSOLIDATED REPORT

STRATEGIC & ACTION PLAN

Philippine Coalition Against Tuberculosis (PhilCAT)



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PART I. EXTERNAL ANALYSIS

TB CONTROL AND PREVENTION in the PHILIPPINES

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Documentation of Proceedings

Strategic Planning Workshop

Philippine Coalition Against Tuberculosis PhilCAT

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PART I. EXTERNAL ANALYSIS TB CONTROL AND PREVENTION in the PHILIPPINES

INTRODUCTION

Tuberculosis (TB) kills approximately 2 million people each year. The global epidemic is growing and becoming more dangerous. The breakdown in health services, the spread of HIV/AIDS virus and the emergence of multidrug-resistant TB are contributing to the worsening impact of this disease.

In 1993, the World Health Organization (WHO) took an unprecedented step and declared tuberculosis a global emergency, so great was the concern about the modern TB epidemic.

It is estimated that between the years 2002 and 2020, approximately 1,000 million people will be newly infected, over 150 million people will get sick and 36 million will die of TB, if control is not further strengthened.

1.0 NATURE OF TUBERCULOSIS

Infection and Transmission

Tuberculosis is usually caused by an infection with the *bacillus Mycobacterium tuberculosis*. It normally affects the lungs –this is normally called pulmonary TB. Sometimes the TB bacilli enter the bloodstream and spread to other organs of the body–this is called extra pulmonary TB. Pulmonary TB is much more common than extra pulmonary TB.

When a person is exposed to TB germs and becomes infected, he or she is said to have TB infection or latent TB. Sometimes the infection progresses to TB disease (tuberculosis or active disease).

Once infected with TB, a person remains infected for the rest of his or her life. But most people do not become ill with TB disease or become infectious to others. A healthy immune system can stop the germs from multiplying enough to cause illness. On the other hand, if a person is in poor health or has HIV infection, the TB germs may continue to multiply and destroy the lung tissues, leading to active TB disease.

Active pulmonary TB is the only form of disease which is infectious, spreading from person to person via the air. The lungs of a person with active disease develop cavities (spaces) which become full of TB germs. When the person coughs or sneezes, large numbers of TB germs from the lungs are sprayed into the air in tiny droplets. Persons who have close contact with one who has infectious TB are at greatest risk. TB spreads most easily in overcrowded and badly ventilated places.

The symptoms of pulmonary TB disease are coughing for more than three weeks sometimes with bloody sputum, and chest pain. Exhaustion, night sweats, fever and

weight loss are symptoms of both pulmonary and extra pulmonary TB. Sputum smear tests are used to find out if a person has active TB and is infectious. A positive smear test means that a person is coughing up TB germs and should be treated at once.

People can only spread TB to others when they have the TB disease. The key to TB care and prevention is to identify people who are infectious and to provide prompt and effective treatment to cure and make them non-infectious.

Definitions of tuberculosis cases

CASE OF TUBERCULOSIS – A patient in whom tuberculosis has been bacteriologically confirmed, or has been diagnosed by a clinician. Note: any person given treatment for tuberculosis should be recorded.

DEFINITE CASE – Patient with positive culture for the Mycobacterium tuberculosis complex. In countries where culture is not routinely available a patient with two sputum smears positive for acid-fast bacilli (AFB+) is also considered a definite case.

SMEAR-POSITIVE PULMONARY CASE – At least two initial sputum smear examinations (direct smear microscopy) AFB+; or one sputum examination AFB+ and radiographic abnormalities consistent with active pulmonary tuberculosis as determined by the treating medical officer; or one sputum specimen AFB+ and culture positive for M. tuberculosis.

SMEAR-NEGATIVE PULMONARY CASE – Pulmonary tuberculosis not meeting the above criteria for smear-positive disease. Diagnostic criteria should include: at least three sputum smear examinations negative for AFB; and radiographic abnormalities consistent with active pulmonary TB; and no response to a course of broad-spectrum antibiotics; and decision by a clinician to treat the patient with a full course of anti-tuberculosis therapy; or positive culture but negative AFB sputum examinations.

EXTRAPULMONARY CASE – Patient with tuberculosis of organs other than the lungs e.g., pleura, lymph nodes, abdomen, genito-urinary tract, skin, joints and bones, meningitis. Diagnosis should be based on one culture-positive specimen, or histological or strong clinical evidence consistent with active extrapulmonary disease, followed by a decision to treat with a full course of anti-tuberculosis chemotherapy. Note: a patient diagnosed with both pulmonary and extrapulmonary tuberculosis should be classified as a case of pulmonary tuberculosis.

NEW CASE – Patient who has never had treatment for tuberculosis, or who has taken anti-tuberculosis drugs for less than one month.

RELAPSE CASE – Patient previously declared cure but with a new episode of bacteriologically positive (sputum smear or culture) tuberculosis.

RETREATMENT CASE – Patient previously treated for tuberculosis whose treatment failed, who defaulted (treatment interrupted), or who relapsed.

CHRONIC CASE – Patient who is sputum positive at the end of a retreatment regimen.

Definitions of treatment outcomes:

CURED – Initially smear-positive patient who has a negative sputum smear in the last month of treatment, and on at least one previous occasion. *

COMPLETED TREATMENT – Patient who has completed treatment but does not meet the criteria for cure or failure.

DIED – Patient who died during treatment, irrespective of cause.

FAILED – Smear-positive patient who remained smear-positive, or became smear-positive again, at least five months after the start of treatment.

INTERRUPTED TREATMENT (DEFAULTED) – Patient who did not take drugs for two months or more at any time after registration.

TRANSFERRED OUT – Patient who was transferred to another reporting unit and for whom treatment results are not known.

SUCCESSFULLY TREATED – The sum of cases that were cured and that completed treatment (expressed as a percentage of the number registered in the cohort).**

*Some European countries define cure in terms of culture conversion, rather than sputum smear conversion.

** A cohort is a group of patients diagnosed and registered for treatment during a given time period, usually one quarter of a year.

Source: *GLOBAL TUBERCULOSIS CONTROL, WHO Report 2002.*

Left untreated, each person with active TB will infect an average of 10 to 15 people every year and will likely affect most of those with weak immune system whose chances of getting sick are greater.

Case finding should prioritize identifying people with active TB because they are the most important source of infection to the community. Passive case finding means diagnosing infectious smear positive people who come to health facilities with symptoms of TB. Active case finding means trying to reach all those in a community who may have infectious TB disease. It is important to check children under five years old in a patient's family. However, in general, active case finding is more expensive than passive case finding and studies have shown that fewer people may complete treatment under this scheme.

It is the highly infectious nature of TB that has primarily placed it among the world's biggest health concerns:

- Someone in the world is newly infected with TB every second.
- Nearly 1% of the world's population is newly infected with TB each year.
- Overall one-third of the world's population is currently infected with the TB bacillus.
- 5-10% of people who are infected with TB (but who are not infected with HIV) become sick or infectious at some time during their life.

1.1 Factors Contributing to the Rise of TB

Some of the factors that contribute to the rise of TB in the world are:

a) HIV

HIV and TB form a lethal combination, each speeding up the other's progress. HIV weakens the immune system. Someone who is HIV positive and infected with TB is many times more likely to become sick with TB than someone infected with TB who is HIV negative. TB is a leading cause of deaths among people who are HIV-positive. It accounts for about 11% of AIDS deaths worldwide. In Africa, HIV has

been the single most important factor determining the increased incidence of TB in the past 10 years.

b) Movement of People

Global trade and the number of people traveling to other parts of the world have increased dramatically over the past 40 years. In many industrialized countries, at least one-half of TB cases are among foreign-born people. In the United States, nearly 40% of TB cases are among foreign-born people.

The number of refugees and displaced people in the world is also increasing. Untreated TB spreads quickly in crowded refugee camps and shelters. It is difficult to treat mobile populations, as treatment takes at least six months and should ideally be supervised. As many as 50% of the world's refugees could be infected with TB. As they move, they may spread TB.

c) Drug-resistant TB

Poorly managed TB programs are threatening to make TB incurable. Until 50 years ago, there were no drugs to cure TB. Now, strains that are resistant to a single drug have been documented in every country surveyed and strains of TB which are resistant to all major anti-TB drugs have emerged. Drug –resistant TB is caused by inconsistent or partial treatment, when patients do not take the prescribed dosage of drugs regularly for the period required because they start to feel better, when doctors and health workers prescribe the wrong treatment regimens or when the drug supply is unreliable.

A particularly dangerous form of drug-resistant TB is multidrug-resistant TB (MDR-TB), which is defined as the disease due to the two most powerful bacilli resistant to at least isonized and rifampicin anti-TB drugs. Rates of MDR-TB are high in some countries, especially in the former Soviet Union, and threaten TB control efforts.

From a public health perspective, poorly supervised or incomplete treatment of TB is worse than no treatment at all. When people fail to complete or are given the wrong standard treatment regimens, they may remain infectious. The bacilli in their lungs may develop resistance to anti-TB drugs and people they infect will have the same drug-resistant strain.

While drug-resistant TB is treatable, it requires extensive chemotherapy (up to two years of treatment) that is often prohibitively expensive (often more than 100 times more expensive than treatment of drug-susceptible TB) and is also more toxic to patients.

d) Risk factors for tuberculosis

One of the reasons for the persistent burden of tuberculosis is a failure to address the principal risk factors: a) the process of infection, b) progression to disease, and c) the outcome of a disease episode.

Environmental factors that govern exposure to infecting bacilli include crowding, hospitalization, imprisonment, ventilation and the ambient prevalence of infectious

(mostly sputum smear-positive) disease. Among factors that influence the progression to disease following infection are HIV co-infection; others are age, sex, diabetes, tobacco, alcohol, TB strain virulence and malnutrition. Factors that affect the outcome of a disease include where treatment is given (e.g. public or private sector), whether treatment is interrupted and drug resistance (*The World Health Report 2002, Reducing Risks, Promoting Healthy Life*)

2.0 DETECTION AND DIAGNOSIS

Health workers should suspect TB if patients have the following symptoms and history.

Adults

- Cough for more than three weeks
- Blood in the sputum
- Chest pain for more than one month
- Increasing weakness and loss of weight
- Had TB in the past or previously treated for cough

Children

- Close contact with smear positive case
- Positive tuberculin test
- Wasting – decrease in weight with no obvious reason
- Two or more episodes of fever with no obvious cause such as Malaria

TB treatment should not be started on the basis of clinical symptoms alone (unless non-pulmonary disease is suspected when immediate referral and treatment are very important).

2.1 Diagnostic Tools

The main diagnostic tools are: sputum smear microscopy, culture of bacteria, tuberculin skin testing and chest radiography (x-ray)

a. Sputum smear microscopy

Sputum smear microscopy is the most useful diagnostic tool in low income countries. Sputum examination is cheaper, easier and more reliable than taking x-rays, more reliable than tuberculin testing, and cheaper and easier than culturing. It is possible to detect most smear positive cases of pulmonary TB using sputum smear microscopic examination.

The method of collection of the sputum is important. It should be produced away from other people, placed in a tightly covered labeled container and delivered to the laboratory as soon as possible. If TB is suspected, ideally three sputum specimens should be collected within 24 hours: during the first consultation; by the person at home the next morning; and at the second consultation.

- Two positive sputum smears are enough to confirm the diagnosis of TB.
- If the first smear is positive and the second is negative (or vice versa), a third smear needs to be examined.
- If the first smear is positive and the person does not return for the second consultation they need to be followed up and encouraged to return. Without treatment they will infect others and their own condition will get worse.
- Health workers in areas without smear facilities need to look for clinical symptoms and history suggesting TB and refer the person to a healthy facility for screening.
- One negative smear result is not enough to exclude a diagnosis of TB.

Smear microscopy requires well-trained laboratory workers and well-maintained equipment. Poorly trained staff or inadequate equipment can lead to over-diagnosis of smear negative and under-diagnosis of smear positive cases. Sputum smear microscopy is also used to check cure, which is based on smear conversion from positive to negative.

b. Culturing

A specimen of sputum is sent to a specialized laboratory where TB bacilli, if they are present, can be “grown” or cultured. Culturing is more sensitive than sputum smear microscopy but in many countries, facilities and personnel are not available. It is also expensive and the results can take several weeks to complete. This delays confirmation of the diagnosis and start of treatment. Culturing is therefore often inappropriate as a diagnostic tool but is used to test TB bacilli for drug resistance and sensitivity in cases where a patient is not responding to treatment. Culturing is also used for sputum smear negative cases where active TB is suspected.

c. Tuberculin skin testing

Tuberculin skin testing, which measures the body’s response to TB, is also less useful in clinical diagnosis, except in children. Individuals can have positive tuberculin test results if they are infected with TB or have been vaccinated with BCG. The tuberculin test cannot reliably differentiate between TB infection and TB disease. The test may also give a “false negative” result if someone is infected with both TB and HIV.

d. Chest radiography

Chest radiography or x-ray is expensive and is usually available only in hospitals. It is not the most reliable way of diagnosing TB, although it can be a useful supportive tool to help medical officers diagnose smear negative TB. Chest abnormalities which show up on x-ray may be due to other conditions or previous TB disease. Relying on x-ray results can lead to over-diagnosis of TB and unnecessary drug treatment. But chest radiography may not detect the early stages of TB disease, and the signs of pulmonary TB (such as cavitations) usually seen on x-ray are less common in people with HIV (Source: AIDS Action, Asia Pacific Edition, January – March 1996).

3.0 TREATMENT AND SUPERVISION

Anti-tuberculosis drug treatment is 95 percent effective only when it is used correctly, so it is most important that TB patients complete their treatment. The treatment is based on a combination of drugs taken for at least six months, in two phases: an initial phase and a continuation phase. The combination of drugs varies as does the length of treatment.

People may find it difficult to take anti-tuberculosis drugs for a long period of time. But they can be helped by a well supervised program and use of DOTS (directly observed therapy) which means watching the patient take their drugs. It is especially important that patients take their treatment during the initial phase to make them non-infectious.

3.1 BCG Vaccination

BCG (Bacillus Calmette-Guerin) vaccine is named after the two French scientists who developed the vaccine nearly 100 years ago. The BCG contains a very weak form of the bacteria that causes TB. Because it is weak, the vaccine does not cause TB but helps the body start building protection against the disease.

BCG vaccine protects children against the most severe and life-threatening forms of TB disease in childhood, such as tuberculosis meningitis. BCG does not reduce the risk of being infected with TB, and its impact on preventing pulmonary disease is limited. So BCG has a very restricted role in TB control because it does not prevent transmission of infection in the community.

BCG vaccination should be given to young children as early in life as possible, preferably immediately after birth. The only exception is if the mother is sputum smear positive when the baby is born. In this situation, the infant should be given preventive therapy for six months. At six months, a tuberculin test should be done. If it is negative, BCG vaccination should be given.

Giving BCG vaccine to HIV-positive infants may increase complications or disseminated BCG disease (illness caused by the vaccine itself) in infants with severe immunodeficiency. However, the benefits of BCG vaccination outweigh the possible risks to HIV positive infants. Therefore, BCG vaccine should be given to all infants, including those who may be HIV positive and only withheld from infants with symptomatic HIV disease.

3.2 Preventive Chemotherapy

Preventive therapy (or chemoprophylaxis) means giving anti-tuberculosis drugs to an individual with TB infection (or at very high risk of being infected) to prevent progression to active disease. In developing countries, preventive therapy is only usually recommended for young infants whose mothers have active pulmonary TB, and children under five who are living with a person with infectious TB.

Chemoprophylaxis is also beneficial for individuals with HIV and TB infections, to prevent them from developing active TB disease. However, there are still many unanswered questions and providing preventive therapy is not a feasible option for most national TB programmes.

4.0 TB CONTROL AND PREVENTION STRATEGIES, TREATMENTS

4.1 Chemotherapy and TB Drugs

The Global Alliance for TB Drug Development has noted that there has been no major breakthrough in drug development for the last 30 years. The history of tuberculosis drug R&D has often been characterized by “one step forward, two steps back”. Often the push for improving an existing solution was thwarted by prevailing conventional wisdom that the current therapy would serve as the “magic pill”.

Streptomycin which was discovered in the 1940’s was hailed as the wonder drug for tuberculosis. Its initial benefits, however, were almost abolished by the development of drug resistance. In the same manner, BCG discovered in 1908 and introduced in 1923, was thought to be the vaccine for tuberculosis but is now rarely used (*Global Alliance for TB Drug Development*).

The first real medical breakthrough – chemotherapy using the single antibiotic drug streptomycin to treat active TB – was introduced in 1944, setting the stage for multiple drug chemotherapy in the 1950s. Viewed against the backdrop of TB’s 10,000-year dominion, this first treatment success was truly historic. It proved that the much-feared bacillus was not invincible.

The discovery of a drug cure for TB changed the course of human history. The list of luminaries in this long and arduous battle begins with Dr. Robert Koch and includes others, such as the German scientist Dr. Paul Ehrlich, who, along with Sir Alexander Fleming, first hit upon the idea of treating infections with drugs; Dr. Gerhard Domagk, discoverer of the first week anti-TB drug Prontosil; Dr. Selman Waksman, a Russian emigrant researcher who coined the phrase “antibiotic drugs;” and Dr. George Merck, the owner and director of Merck & Co., who supported Waksman’s antibiotic research and first produced the TB treatment drug, streptomycin.

In 1952, the Nobel Prize was awarded to Selman Waksman for his work on the development of new anti-TB “wonder drugs,” reflecting the importance of these ground-breaking discoveries. The introduction of chemotherapy radically changed many of the long-entrenched concepts of treatment and prognosis for TB. But even early on, it became clear that combined chemotherapy using more than one substance would be needed to prevent drug resistance.

4.2 Four Drug Combination

Since the introduction of an effective chemotherapy, the required treatment duration has been halved and treatment simplified through fixed dose combinations. This standard four and two-drug dosage must still be taken for six months to nine months. This combination addresses the three separate properties of TB for effective treatment: antibacterial activity, resistance and persisting organisms (Table 1). With the exception of rifampin which was introduced in the 1960’s, however, most of the basic science behind these medicines is half a century old.

Table 1. TB Drugs Used in Four Drug Combination

TB Drug	Date	Anti-Bacterial	Inhibits resistance	Effective against persistors
Isontazid	1952	●	●	
Rifampin	1963	●	●	
Ethambutol	1962		●	
Pyrazinamide	1954			●

Source: Global Alliance for TB Drug Development, 2002

Using TB drugs effectively has proved no simple matter. True to the Darwinian dictum of “survival of the fittest,” the age-old TB bacillus has continued to adapt through mutation, producing multi-drug-resistant strains. Medical science must keep ahead of the game, adapting the strategy to meet new challenges.

4.3 Management Strategies

Historically speaking, over the past 50 years, the choice of strategy for optimal TB control has swung back and forth like a pendulum between “vertical” and “horizontal” approaches. The vertical approach also promoted by WHO from its founding in 1948 to 1963, which worked well in developed countries, was inadequate in resource-poor settings, largely due to lack of access to resources and drugs. From 1964 to 1988, the pendulum swung towards horizontal integration – first in service delivery and later in management. But “mainstreaming” approaches in the 1980s meant that TB became a neglected, all-but-invisible public health concern. The result was a return to specialized management from 1989 to 1998.

WHO introduced a new strategy in 1991 that was incorporated in 1994 into a more comprehensive framework for effective TB control. This five-pronged strategy was officially named “DOTS” in 1995. After this point, TB began to move back into the public health and political limelight. With the 1988 launch of the Stop TB Global Partnership, a truly multisectoral approach – incorporating advocacy and social mobilization, community and private sector involvement – has emerged as the best way towards a TB-free future.

Today’s thinking is that the future of TB control should be based on:

- A pragmatic approach combining specialized, well-defined management systems with fully integrated service delivery; and
- A multisectoral approach building on global and national partnerships (Source: Towards a TB-Free Future)

5.0 DOTS STRATEGY

The WHO-recommended treatment strategy for detection and cure of TB is DOTS. DOTS combines five elements: political commitment, microscopy services, drug supplies, surveillance and monitoring systems and use of highly efficacious regimes with direct observation of treatment.

Once patients with infectious TB (bacilli visible in a sputum smear) have been identified using microscopy services, health and community workers and trained volunteers

observe patients swallowing the full course of the correct dosage of anti-TB medicines (treatment lasts six to eight months). The most common anti-TB drugs are isoniazid, rifampicin, pyrazinamide, streptomycin and ethambutol.

Sputum smear testing is repeated after two months, to check progress, and again at the end of treatment. A recording and reporting system documents the patients' progress throughout, and the final outcome of treatment.

Since DOTS was introduced on a global scale in 1991, about 10 million patients have received DOTS treatment. In half of China, cure rates among new cases stood at 96%. In Peru, widespread use of DOTS for more than five years has led to the successful treatment of 91 %of cases and a decline in incidence.

By the end of 2000, all 22 of the highest burden countries which bear 80% of the world's estimated incident cases had adopted DOTS. Fifty-five percent of the global population had access to DOTS, double the fraction reported in 1995. In the same year, 27% of estimated TB patients received treatment under DOTS, two and a half times the fraction reported in 1995.

- DOTS produces cure rates of up to 95% even in the poorest countries.
- DOTS prevents new infections by curing infectious patients.
- DOTS prevents the development of MDR-TB by ensuring the full course of treatment is followed.
- A six-month supply of drugs for DOTS costs as little as US\$ 10 per patient in some parts of the world.

The World Bank has ranked the DOTS strategy as one of the "most cost-effective of all health interventions."

WHO aims to detect 70% of new infectious TB cases and to cure 85% of those detected. Ten countries had achieved these targets in 2000. Governments, nongovernmental organizations and civil society must continue to act to improve TB control in order to attain these targets worldwide (Source: WHO Fact Sheet No 104).

The following table summarizes the DOTS components and features

Table 2. How a Non-DOTS Approach to TB Control Differs From DOTS

	Non-DOTS	DOTS
Case findings and diagnosis	Depends on unreliable, often expensive methods: <ul style="list-style-type: none"> • Excessive use of x-ray • Often ill-defined symptomatic-based diagnosis • Systematic case detection among TB suspects, in order to identify the infectious cases, usually absent 	Depends on a simple, cost-effective and reliable method: <ul style="list-style-type: none"> • Three sputum examinations for all infectious cases • Limited use of x-ray for specific cases • Tightly defined symptomatic diagnosis as a supplemental diagnosis of some cases
Patient categorization for treatment	Often weak. As a result, the following are not well determined: <ul style="list-style-type: none"> • That a patient does have TB 	Strong, ensuring the following are determined: <ul style="list-style-type: none"> • Type (pulmonary/extra-

	<ul style="list-style-type: none"> Type/degree of TB Infectiousness Treatment category 	<p>pulmonary)</p> <ul style="list-style-type: none"> SS+SS- Treatment category: new or re-treatment (relapse, failure, re-treatment, treatment interruption, chronic)
Treatment	<ul style="list-style-type: none"> Individualized, often inappropriate or inadequate regimens for each patient No directly observed treatment and little patient counseling Often centralized, specialized, TB services to which patients have limited access No structure—no flexibility or adherence to specific patient needs 	<ul style="list-style-type: none"> Standardized proven regimens for each case type Directly observed treatment by a suitable trained person; patient education/counseling Drugs may be taken daily or 3x/week Health worker can administer treatment 1x/week, trained volunteer on other days Treatment can be administered at health facility, patient's home, or community center
Progress toward cure	<ul style="list-style-type: none"> Information by individual sometimes available, but often not used or analyzed Information by cohort is almost never available 	<ul style="list-style-type: none"> Information recorded by individual Aggregate data by cohort always available; enables progress to be reliably documented
Treatment follow-up	<ul style="list-style-type: none"> Either not done at all or is unsystematic Findings not acted upon Often x-ray based, which adds to expense Main indicator is patient adherence (collection of drugs) Often no record of patient's whereabouts; follow-up contact impossible 	<ul style="list-style-type: none"> Systematic in content at fixed times Based on inexpensive sputum smear microscopy Findings acted upon to achieve or improve cure prospects Main indicator is patient outcome (cure/completion of treatment) Location of patient is kept in the register which allows health worker to follow up if patient misses treatment
Results	<ul style="list-style-type: none"> Low treatment success in most cases Unreliable outcome information Poor value for money Increasing number of chronic, uncured cases Increased infection Growing drug resistance and creation of drug-resistant cases 	<ul style="list-style-type: none"> High sputum smear conversion rate at end of initial phase High cure rates Decreased prevalence of chronic cases Decreased transmission of infection Prevention of drug resistance
Logistical Aspects		
Drug supply	<ul style="list-style-type: none"> Often irregular with no system to ensure right amount, or for exact numbers of patients Quality of drugs questionable in many circumstances 	<ul style="list-style-type: none"> Regular, reliable supply for all registered cases Simple process to forecast supply for following year Adequate stocks at higher levels Better quality assurance of drugs

Lab	<ul style="list-style-type: none"> • May or may not produce accurate results or follow safety guidelines • Lab registers often not standardized and quality of work highly variable 	Guidelines ensure: <ul style="list-style-type: none"> • Systematic, standardized practices and registries provide accurate results in a timely manner from a higher level • Quality control • Safety • training
TB register	May exist. If so, this is often held at national or provincial level, is remote from patients, and does not permit cohort analysis. The register may consist of: <ul style="list-style-type: none"> • variable patient information • unsystematic recording of information on type of case, progress and results 	Always exists, which permits systematic analysis. Includes the following: <ul style="list-style-type: none"> • people starting treatment • individual progress towards cure • consistent data • methodical monitoring at fixed times
POLITICAL ASPECTS		
Political commitment	<ul style="list-style-type: none"> • Often not addressed, since seen as outside the parameters of health agencies • Communication activities focused mainly on patients, ignoring the policy-makers 	<ul style="list-style-type: none"> • Policy of financial support seen as central to sustainable TB control services • Advocacy and social mobilization seen as core activities

Source: The DOTS Strategy

6.0 GLOBAL BURDEN OF TB

6.1 Infection Prevalence

In 1997, a total of 1.87 billion or 32% of the world population totaling 5.85 billion were infected with TB. As shown in Table 2, the biggest share of infected population were in Southeast Asia which accounted for almost 35%, followed by the Western Pacific region which registered 31.6% of the world's TB infected population. Africa registered the third highest number of people infected with TB corresponding to 1.4 percent. Infection prevalence was lowest for Europe which reported 7 percent.

Infection was also highest for Southeast Asia at 44%, followed by Western Pacific (36%) and Africa (35%). These three regions posted infection rates higher than the global average of 32%. Europe and the Americas had the two lowest infection prevalence rates of 15% and 18%, respectively.

The same table indicates that TB/HIV cases in the various regions of the world totaled 10.7 million with Africa having the bulk (68%) of these reported cases. Southeast Asia contained the second biggest share (22%) of TB/HIV cases. Africa likewise had the highest share (32%) of TB cases that were HIV positive. The largest number of coinfecting individuals, however, were in India.

The proportion of TB cases with HIV infection has been rising. The 8% estimate in 1997 is 2 to 10 times more than the 1990 estimates.

6.2 Deaths Caused by TB

In the same year, some 1.871 million reportedly died of TB. This number, however, is believed to be even higher considering that there could have been a number of unreported cases of death due to TB. More than one-third (38%) of these deaths were in Southeast Asia. Africa (28.9%) and the Western Pacific (18.9%) accounted for the next two biggest shares of TB death.

Case fatality rates (CFR) among TB cases, however, was highest in Africa at 34%, higher than the global rate of 23%. This could be attributed to the high incidence of HIV cases in the region. Southeast Asia and the Eastern Mediterranean regions had comparative rates of 24% and 23%, respectively.

6.3 Incidence and Notified Cases

For the year 1997, alone, there were an estimated 7.962 million new TB cases in the world, most of which were in Southeast Asia (37%), the Western Pacific (24.6%) and Africa (19.9%). Of this number, only 3.372 million or 42% were reported to the WHO. Notification rate was highest for the Western Pacific at 87%, followed by Europe at 80.4%. It was lowest in the Eastern Mediterranean at 21%, and Africa at 31.4%. Southeast Asia reported 44% of all estimated cases in the region.

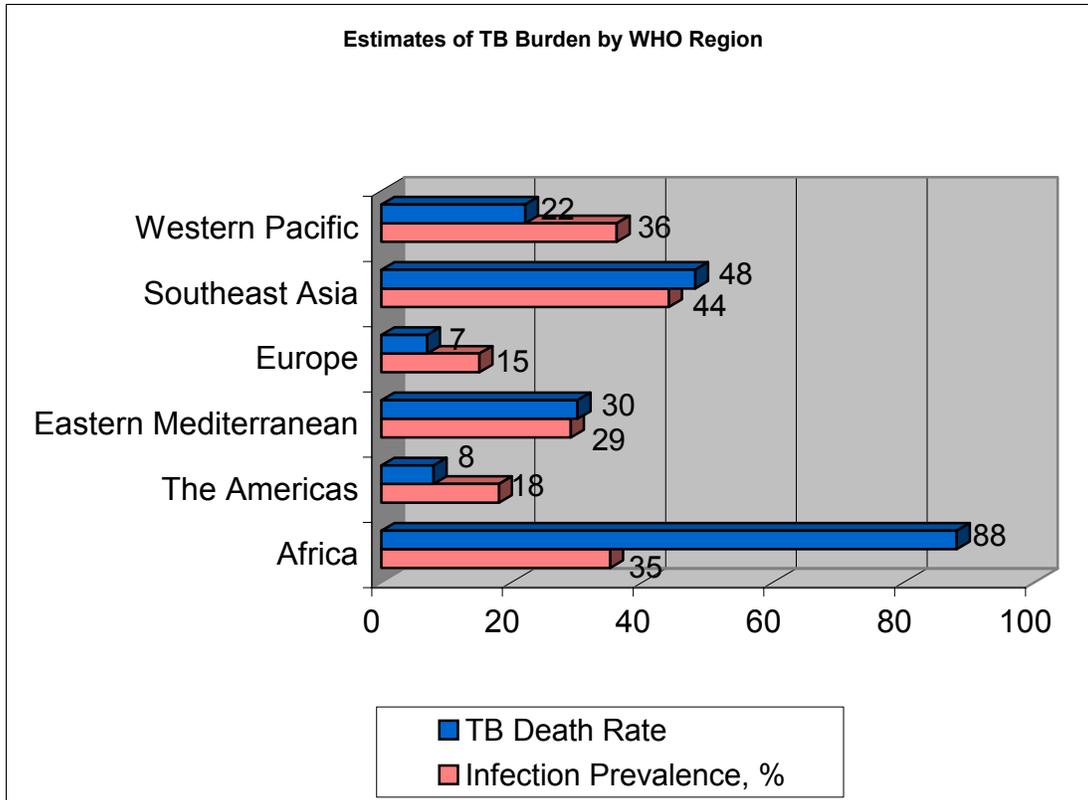
Of the estimated 7.962 million new TB cases, about 42% were found to be sputum smear positive. Southeast Asia recorded almost 45% of sputum smear positive cases out of the estimated 2.948 million new cases for the year.

Table 3. Estimates of TB Burden by WHO Region

WHO Region	Population, Thousands	Rates+										
		Incidence	SS+ Incidence	Prevalence	SS+ Prevalence	Infection Prevalence, %	TB Death Rate	CFR, %	HIV Positive Cases, %	TB/HIV	CDR All, %	CDR SS+, %
Africa	611,604	259	108	384	168	35	88	34	32	1194	31	36
The Americas	792,330	52	23	72	32	18	8	16	6	64	60	75
Eastern Mediterranean	475,415	129	58	258	115	29	30	23	3	23	21	19
Europe	870,386	51	23	73	33	15	7	14	2	10	80	57
Southeast Asia	1,458,274	202	91	524	234	44	48	24	2	162	44	28
Western Pacific	1,641,179	120	54	230	96	36	22	18	0	19	43	43
Total	5,849,188	136	60	277	121	32	32	23	8	183	42	37

WHO Region	Population, Thousands	Numbers, Thousands									
		Incidence	Notified Cases, All	SS+ Incidence	Notified Cases, SS+	Prevalence	SS+ Prevalence	Infection Prevalence	TB Death	HIV-Positive Cases	TB/HIV
Africa	611,604	1,586	499	662	241	2,351	1,027	211,318	540	515	7,302
The Americas	792,330	411	247	182	137	567	253	142,263	66	25	510
Eastern Mediterranean	475,415	615	127	276	53	1,226	547	138,010	141	16	107
Europe	870,386	440	354	197	113	632	284	130,235	64	10	84
Southeast Asia	1,458,274	2,948	1,311	1321	368	7,634	3,410	646,385	705	64	2,364
Western Pacific	1,641,179	1,962	835	882	376	3,774	1,581	587,670	355	9	307
Total	5,849,188	7,962	3,372	3521	1287	16,184	7,102	1,855,880	1,871	640	10,675

Source: WHO



Source: WHO

As of 2000, an estimated 3, 671, 973 new cases were reported globally and roughly 42% or 1,529,806 of these cases were found to be sputum positive (Table 4). Southeast Asia continued to lead in the number of new cases, accounting for 38% of the total. Western Pacific came second with a share of 22%, followed by Africa (19.8%). The EMR likewise continued to have the lowest number of cases equivalent to only around 4% of the total. It is to be noted that DOTS covered population in each of the regions reported more than half (60-68%) of the new cases as positive for the TB disease as against the relatively low (29-52%) reported by non-DOTS covered areas. This underscores the more effective manner of case detection in DOTS covered areas.

Table 4. Summary of Notifications by WHO Regions, 2000

		% OF POP*	NOTIFICATIONS		NEW SS+	% OF NEW PULM
			NUMBER	%	NOTIFICATIONS	CASES SS+*
AFR	DOTS	68	622,655	85	309,513	64
	non-DOTS	23	105,910	15	44,037	52
	no report	9.0				
	Total		728,565		353,550	
AMR	DOTS	65	123,576	53	70,327	72
	non-DOTS	31	109,980	47	59,399	64
	no report	3.8				
	Total		233,556		129,726	
EMR	DOTS	65	120,834	88	56,630	68
	non-DOTS	34	17,162	12	4,088	34
	no report	1.1				
	Total		137,996		60,718	
EUR	DOTS	17	73,860	20	22,430	40
	non-DOTS	83	296,075	80	70,497	29
	no report	0.0				
	Total		369,935		92,927	
SEAR	DOTS	49	445,296	32	235,511	62
	non-DOTS	51	952,093	68	272,640	31
	no report	0.0				
	Total		1,397,389		508,151	
WPR	DOTS	67	598,218	74	326,993	60
	non-DOTS	33	206,314	26	57,741	31
	no report	0.0				
	Total		804,532		384,734	
GLOBAL	DOTS	55	1,984,439	54	1,021,404	62
	non-DOTS	43	1,687,534	46	508,402	34
	no report	1.6				
	Total		3,671,973		1,529,806	

Source: WHO

7.0 22 HIGHEST INCIDENCE COUNTRIES

As of 1997, the WHO has identified the 22 highest incidence countries in the world in terms of the number of cases and the number of new cases. These 22 countries with a total population of 3.657 billion made up nearly 63 percent of the world's population of 5.849 billion. More than a third (38.6%) or 1.412 billion of the population of these countries were TB infected.

Of the 22 countries in the list, five were in Southeast Asia: India, Indonesia, Bangladesh, Thailand and Myanmar. Four others which were classified as belonging to the Western Pacific Region likewise made it to the list: China, Philippines, Vietnam and Cambodia. (Table 5).

In 2000, the countries considered as high burden countries remained the same with the exclusion of Peru which graduated from the list and was replaced by Mozambique. As seen

in the same Table, there had been some movements in the ranking of these countries although India, China and Indonesia continued to be the highest ranking among the 22 countries cited. Cambodia which used to rank number 22 in 1997, went up two notches higher while Afghanistan which ranked number 18 in 1997 ranked number 22 in 2000. Other countries which improved their ranking included Bangladesh, Pakistan, South Africa, Russian Federation, Vietnam and Brazil. The Philippines, however, continued to rank number 7 in both years.

Table 5. 22 Highest Incidence Countries: 2000

Rank	Country (1997)	WHO Region	Country (2000)
1	India	SEAR	India
2	China	WPR	China
3	Indonesia	SEAR	Indonesia
4	Bangladesh	SEAR	Nigeria
5	Pakistan	EMR	Bangladesh
6	Nigeria	AFR	Ethjopia
7	Philippines	WPR	Philippines
8	South Africa	AFR	Pakistan
9	Russian Federation	WPR	South Africa
10	Ethiopia	AFR	Russian Federation
11	Vietnam	WPR	DR Congo
12	Democratic Republic of Congo	AFR	Kenya
13	Brazil	AMR	Vietnam
14	Tanzania	AFR	UR Tanzania
15	Kenya	AFR	Brazil
16	Thailand	SEAR	Thailand
17	Myanmar	SEAR	Uganda
18	Afghanistan	EMR	Myanmar
19	Uganda	AFR	Mozambique
20	Peru	AMR	Cambodia
21	Zimbabwe	AFR	Zimbabwe
22	Cambodia	WPR	Afghanistan

Source: WHO,2000

7.1 Incidence, Infection Prevalence, TB Deaths

As seen in Table 6, the biggest number of TB cases could be found in India and China where the number of cases reached 422.569 and 445.0 million, respectively. Infection prevalence rate or the percentage of the population infected with MTB was highest for Zimbabwe (64%). This was followed by eight other countries which had infection rates of 40% to 47%. Among them were Indonesia (49%). Philippines (47%), Bangladesh (46%).

Deaths due to TB affected 1.506 million in these countries (80% of all TB deaths in the world), with South Africa registering the highest TB death rate of 166 per 100,000 persons. It also had one of the highest CFR or case fatality rate among TB cases at 42%, next only to Zimbabwe (53%) and Uganda (46%).

The 22 countries likewise accounted for 421 HIV positive cases or 68% of the total HIV positive cases in the world. This was more prevalent in South Africa, India and Ethiopia. TB/HIV cases totaled 7.791 million or 73% of all reported cases globally. India and South Africa led the other countries in this category (Table 6).

Table 6. Estimate of TB Burden in the 22 Highest-Incidence Countries, 1997

			Numbers, Thousands									
			Incidence	Notified Cases, All	SS+ Incidence	Notified Cases, SS+	Prevalence	SS+ Prevalence	Infection Prevalence	TB Death	HIV-Positive Cases	TB/HIV
1	India	SEAR	960,178	1,136	805	274	4,854	2,182	422,569	437	45	1,804
2	China	WPR	1,243,738	419	630	189	2,721	1,132	445,343	258	5	143
3	Indonesia	SEAR	204,323	22	262	19	1,606	715	99,920	140	6	25
4	Bangladesh	SEAR	122,013	63	135	33	620	270	56,260	68	1	10
5	Pakistan	EMR	143,831	0	117	0	583	259	57,110	64	3	25
6	Nigeria	AFR	118,369	17	110	11	454	197	42,773	69	35	831
7	Philippines	WPR	70,724	208	100	83	490	219	33,523	48	1	11
8	South Africa	AFR	43,336	105	69	55	262	114	16,449	72	76	1,101
9	Russian Federation	EUR	147,708	121	70	42	241	108	26,587	26	1	7
10	Ethiopia	AFR	60,148	59	66	16	221	97	21,471	49	47	928
11	Vietnam	WPR	76,548	85	65	54	221	78	33,592	20	1	39
12	Democratic Republic of Congo	AFR	48,040	0	55	0	191	84	17,140	39	32	339
13	Brazil	AMR	163,132	83	54	43	188	83	41,382	19	6	149
14	Tanzania	AFR	31,507	46	40	22	125	54	7,277	31	36	323
15	Kenya	AFR	28,414	40	35	19	106	46	10,156	28	34	572
16	Thailand	SEAR	59,159	30	37	13	180	80	25,175	17	8	332
17	Myanmar	SEAR	46,765	17	36	10	163	68	19,074	19	4	179
18	Afghanistan	EMR	22,132	1	33	1	167	76	7,431	23	4	0
19	Uganda	AFR	20,791	28	27	17	94	41	7,120	30	33	318
20	Peru	AMR	24,367	42	29	27	70	32	10,795	7	1	32
21	Zimbabwe	AFR	11,682	44	24	15	73	31	4,188	33	41	538
22	Cambodia	WPR	10,516	16	25	13	101	45	6,738	9	2	83
	Total		3,657,421	2,583	2,824	956	13,728	6,011	1,412,074	1,506	421	7,791

Source: WHO

7.2 Incidence, Notified Cases

In 1997, there were 6.367 million new cases in the 22 countries or 80 percent of all the new cases in the world. Of this number, around 41% were notified cases, 37 % of which were found to be sputum positive. India ranked first among the countries both in the number of new cases and the number of notified cases.

As of the year 2000, the estimated number of all cases in the high burden countries had risen to 6.910 million, up by around 8% from the 1997 level. Smear positive cases numbered 3.033 million or almost 44 percent of all cases. This translated to an 80% rate per 100,000 population, higher than the global rate of 63%. Cumulative incidence in the 22 countries was 79% (Table 7).

Table 7. Estimated Incidence of TB: High-Burden Countries, 2000

COUNTRY	POPULATION (1000S)	NUMBER ESTIMATED				CUMULATIVE INCIDENCE (%)
		ALL CASES		SMEAR-POSITIVE CASES		
		THOUSANDS	RATE PER 100 000 POP	THOUSANDS	RATE PER 100 000 POP	
1 India	1,008,937	1,856	184	831	82	21
2 China	1,275,133	1,365	107	588	46	37
3 Indonesia	212,092	595	280	267	126	44
4 Nigeria	113,862	347	305	150	132	48
5 Bangladesh	137,439	332	242	149	109	51
6 Ethiopia	62,908	249	397	105	166	54
7 Philippines	75,653	249	330	112	148	57
8 Pakistan	141,256	247	175	111	78	60
9 South Africa	43,309	228	526	93	214	63
10 Russian Federation	145,491	193	132	87	59	65
11 DR Congo	50,948	163	320	70	138	67
12 Kenya	30,669	149	484	62	201	68
13 Viet Nam	78,137	148	189	66	85	70
14 UR Tanzania	35,119	126	359	54	153	72
15 Brazil	170,406	116	68	52	30	73
16 Thailand	62,806	88	140	39	62	74
17 Uganda	23,300	82	351	35	149	75
18 Myanmar	47,749	80	168	36	76	76
19 Mozambique	18,292	79	433	33	180	77
20 Cambodia	13,104	75	572	33	256	77
21 Zimbabwe	12,627	74	584	30	234	78
22 Afghanistan	21,765	70	321	31	144	79
Total, high-burden countries	3,781,004	6,910	183	3033	80	79
Global total	6,053,531	8,735	144	3836	63	100

Source: WHO

7.3 Case Findings and Detection

In the same year, there had been a slight rise equivalent to 8.6% in the number of notified cases which totaled 2.770 million for the high-burden countries. The number of cases comprised 75 percent of the global total of 3.671 million. Some 62% of all notified cases proved to be smear positive (Table 8).

Table 8. Case Notifications: High- Burden Countries, 2000

	NUMBER NOTIFIED				% OF NEW PULMONARY	
	ALL CASES		SMEAR-POSITIVE		CASES SMEAR POSITIVE*	
	DOTS	NON-DOTS	DOTS	NON-DOTS	DOTS	NON-DOTS
1 India	211,751	903,967	95,012	254,362	56	31
2 China	348,436	114,937	191,280	22,486	58	20
3 Indonesia	67,949		50,633		77	
4 Nigeria	25,821		17,423		73	
5 Bangladesh	59,669	15,689	35,644	2,641	66	20
6 Ethiopia	91,101		30,510		50	
7 Philippines	96,371	32,124	49,991	17,065	56	56
8 Pakistan	11,050		3,285		37	
9 South Africa	87,836	23,433	62,399	14,992	84	77
10 Russian Federation	8,288	129,309	2,330	23,793	32	20
11 DR Congo	60,627		36,123		82	
12 Kenya	58,067	6,092	26,162	2,611	54	55
13 Viet Nam	89,792		53,169		75	
14 UR Tanzania	54,442		24,049		58	
15 Brazil	2,420	76,831	416	40,666	21	62
16 Thailand	34,187		17,754		59	
17 Uganda	30,372		17,246		66	
18 Myanmar	30,840		17,254		67	
19 Mozambique	21,158		13,257		77	
20 Cambodia	18,891		14,822		93	
21 Zimbabwe	51,918		15,455		36	
22 Afghanistan	7,107		2,892		55	
Total, high-burden countries	1,468,093	1,302,382	777,106	378,616	62	32
Global total	1,984,439	1,687,534	1,021,404	508,402	62	34

Source: WHO

Case detection rate of smear positive cases stood at 38 percent for the high-burden countries, which was slightly lower than the global average of 40%. Areas covered by the DOTS program registered a 26% detection rate with Vietnam posting the highest detection rate of 80%, followed by Zimbabwe (52%) and Congo (51). India, which ranked number 1, posted one of the lowest rates of 11%. The Philippines had one of the highest rates at 45%, just like Tanzania and Thailand with 46%.

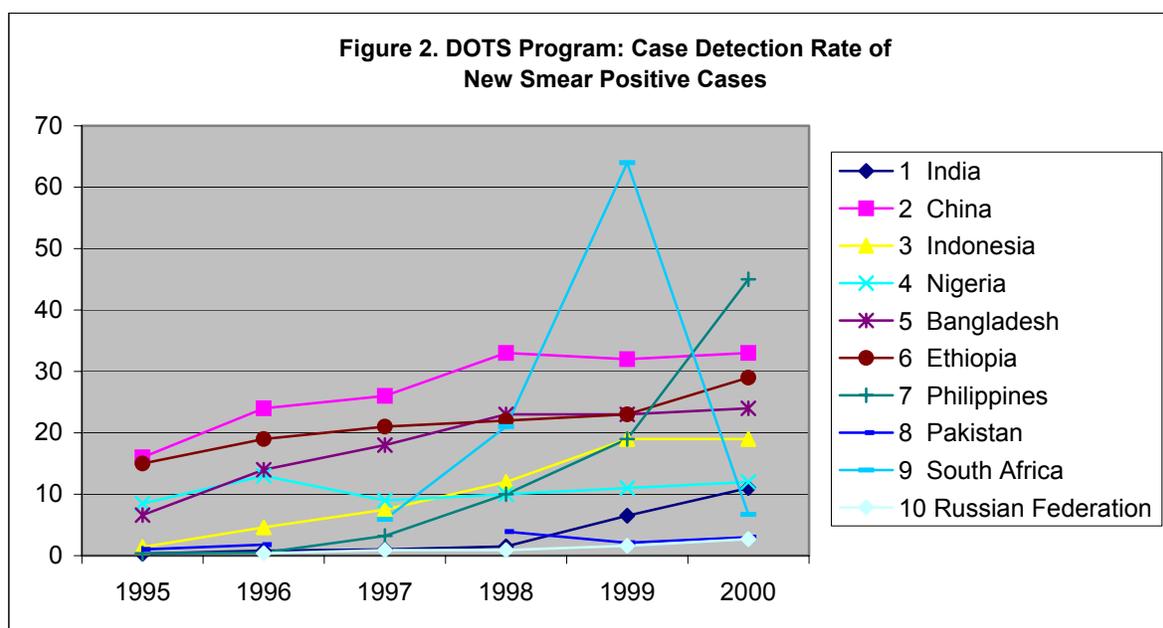
Case detection in DOTS covered areas rose by 19.67% from 1995 to 2000, globally. This was significantly higher than the 2.71 growth posted by the various countries.

As a whole, the 22 countries reflected higher growth rates in case detection rates of DOTS programs (25.65%) as seen in Table 9.

Table 9. Case Detection Rate of New Smear-Positive Cases (%): High-Burden Countries: 1995-2000

	DOTS PROGRAMMES							Growth Rate	WHOLE COUNTRY						Growth Rate
	1995	1996	1997	1998	1999	2000	1995		1996	1997	1998	1999	2000		
1 India	0.3	0.8	1.0	1.5	6.5	11	105.52	34	37	34	34	42	42	4.32	
2 China	16	24	26	33	32	33	15.58	24	30	33	37	36	36	8.45	
3 Indonesia	1.4	4.6	7.5	12	19	19	68.47	12	*	*	*	*	*		
4 Nigeria	8.5	13	9.0	10	11	12	7.14	*	*	*	*	*	*		
5 Bangladesh	6.6	14	18	23	23	24	29.46	15	21	23	26	26	26	11.63	
6 Ethiopia	15	19	21	22	23	29	14.09	*	*	*	*	23	*		
7 Philippines	0.4	0.5	3.2	10	19	45	157.18	101	89	80	67	68	60	-9.89	
8 Pakistan	1.0	1.8		3.9	2.1	3.0	24.57	3	*	--	14	6	*		
9 South Africa			5.9	21	64	6.7		40	66	77	86	85	84	16.00	
10 Russian Federation		0.4	0.9	0.9	1.6	2.7		62	65	60	56	27	30	-13.51	
11 DR Congo	46	52	49	59	55	51	2.09	50	*	48	*	*	*		
12 Kenya	59	59	55	57	53	43	-6.13	*	*	*	*	*	47		
13 Viet Nam	30	60	78	82	82	80	21.67	61	78	*	85	82	*		
14 UR Tanzania	61	59	55	54	50	45	-5.90	*	*	*	*	*	*		
15 Brazil				4.1	4.0	0.8		81	80	80	81	79	80	-0.25	
16 Thailand		0.3	5.0	21	39	46		55	45	35	*	*	*		
17 Uganda			62	61	56	50		56	59	61	*	57	*		
18 Myanmar		25	26	28	32	48		25	28	28	*	*	*		
19 Mozambique	53	48	45	45		40	-5.47	*	*	*	*	43	*		
20 Cambodia	42	35	44	45	49	44	0.93	*	44	*	*	*	*		
21 Zimbabwe				57	52	52		44	54	61	*	*	*		
22 Afghanistan			2.0	6.0	5.4	9.2		--	--	*	*	*	*		
All high-burden countries	8.3	12	15	19	22	26	25.65	31	34	35	37	38	38	4.16	
Global	11	15	16	21	23	27	19.67	35	38	38	40	40	40	2.71	

Source: WHO



Source: WHO

8.0 TREATMENT OUTCOMES

As a whole, 19% of all estimated cases were successfully treated under DOTS in 1999. Success rates among countries varied widely among the high-burden countries; only Vietnam registered successful treatment rate of more than 50% of all estimated cases under DOTS.

Treatment outcomes for new smear-positive cases which had been registered had a success rate of 80% in all countries and 81% in high-burden countries. The proportion of those who were cured averaged 72% globally and 75% in high-burden countries. Those who completed treatment averaged 8.2%. Deaths comprised 4.4% globally and was slightly lower at 4.1 percent in the 22 countries (Table 10).

Table 10. Treatment Outcomes for New Smear Positive Cases:
High Burden Countries: DOTS Strategy, 1999 cohort

	TREATMENT OUTCOMES%											
	NOTIFIED	REGISTERED*	REGST'D (%)	CURED	COMPLETED TREATMENT*	DIED	FAILED	DEFAULTED	TRANSFERRED	NOT EVAL'D	TREATMENT SUCCESS (%)	% EST* CASES SUCCESSFULLY TREATED UNDER DOTS
1 India	53,034	53,086	100	80	2.1	4.5	3.0	9.3	0.8	0.1	82	5.3
2 China	188,525	188,112	100	96		1.1	1.0	0.7	0.3	0.5	96+	31
3 Indonesia	49,172	46,187	94	42	8.2	1.4	1.2	1.6	0.5	45	50	8.7
4 Nigeria	15,903	14,868	93	60	15	6.0	2.7	13	2.6	0.0	75	7.9
5 Bangladesh	34,047	34,047	100	78	3.5	4.6	0.8	7.8	2.9	2.7	81	19
6 Ethiopia	21,457	15,980	74	60	16	6.8	1.0	9.7	4.0	2.6	76	13
7 Philippines	20,477	36,913	180	70	17	2.7	1.5	5.8	3.1	0.0	87+	30
8 Pakistan	2,269	2,967	131	56	14	4.4	0.7	21	3.6	0.3	70	1.9
9 South Africa	54,404	63,304	116	52	7.9	7.0	1.3	13	17	2.2	60	45
10 Russian Federation	1,274	1,542	121	63	2.7	9.4	9.3	6.3	7.5	2.1	65	1.3
11 DR Congo	34,923	34,923	100	59	9.7	5.4	0.9	7.4	8.8	8.7	69	38
12 Kenya	27,197	24,670	91	64	14	6.0	0.3	9.5	6.2	0.0	78	38
13 Viet Nam	53,561	53,227	99	90	2.1	2.9	1.2	2.0	1.2	0.4	92+	75
14 UR Tanzania	24,125	23,994	99	71	6.2	9.8	0.4	6.7	5.7	0.0	78	38
15 Brazil	2,108			10	0.9	0.6	0.1	0.6		88	11	0.4
16 Thailand	14,934	13,650	91	73	4.1	11	1.9	8.2	2.2	0.0	77	27
17 Uganda	18,149	14,250	79	30	31	7.8	0.3	16	5.1	9.1	61	27
18 Myanmar	11,458	11,641	102	70	11	5.4	1.7	10	1.9	0.0	81	26
19 Mozambique		11,791		69	2.3	11	1.3	12	2.6	1.5	71	28
20 Cambodia	15,744	15,744	100	91	2.8	2.6	0.4	3.0	0.5	0.0	93+	46
21 Zimbabwe	14,414	12,791	89	59	14	10	0.1	6.6	11	0.0	73	34
22 Afghanistan	1,669			80	6.4	4.3	2.1	5.0	2.0	0.0	87+	5.0
High-burden countries	658,844	673,687	102	75	6.1	4.1	1.2	5.8	3.7	4.6	81	19
Global (non-DOTS)	869,480	876,284	101	72	8.2	4.4	1.4	6.2	3.7	4.1	80	19

Source: WHO

Treatment outcomes in the global fight against TB, non-DOTS strategy yielded a cure rate of 22% of those who registered. A small proportion of them (6.1%) completed treatment; 7.2% defaulted; 1.3% failed while 1.5% died. Over-all treatment success was 28%.

In high-burden countries, non-DOTS strategy recorded slightly lower rates than the global averages, resulting in an over-all treatment success rate of 22% (Table 11).

Table 11. Treatment Outcomes for Smear Positive Cases: High Burden Countries: Non-DOTS Strategy, 1999 cohort

	NOTIFIED	REGISTERED*	REGST'D (%)	TREATMENT OUTCOMES (%)*							TREATMENT SUCCESS (%)
				CURED	COMPLETED TREATMENT*	DIED	FAILED	DEFAULTED	TRANSFERRED	NOT EVAL'D	
1 India	296,736	291,932	98	7.0	3.3	0.2	0.2	5.2	1.9	82	10
2 China	23,901	19,878	83	84		1.4	8.1	3.7	1.5	1.1	84
3 Indonesia											
4 Nigeria											
5 Bangladesh	3,774	3,774	100	44	12	0.5	0.4	25	5.6	13	56
6 Ethiopia		4,531		28	39	3.9	0.8	18	4.8	4.5	68
7 Philippines	52,896										
8 Pakistan	3,979										
9 South Africa	23,667	18,191	77	33	16	6.3	1.4	19	23	1.2	49
10 Russian Federation	20,470										
11 DR Congo											
12 Kenya		2,747		82	6.0	5.1	1.5	4.0	1.4	0.0	
13 Viet Nam	244	46	19	85	8.7	4.3	0.0	2.2	0.0	0.0	88+
14 UR Tanzania											93+
15 Brazil	39,326			53		4.0	0.2	8.2	2.5	32.2	53
16 Thailand											
17 Uganda											
18 Myanmar											
19 Mozambique											
20 Cambodia											
21 Zimbabwe											
22 Afghanistan		252		54	30	2.4	2.8	9.5	1.2	0.0	84
High-burden countries	464,993	341,099	73	18	3.9	1.1	0.7	6.5	3.0	67	22
Global (non-DOTS)	619,954	394,361	64	22	6.1	1.5	1.3	7.2	3.4	59	28

Source: WHO

8.1 Treatment Success

In 1999, the world enjoyed a treatment success rate of 63% in its fight against TB. This was one percentage lower than the 1998 rate of 64% and still far behind the 75% success rate posted in 1994. As seen in the yearly rates from the period 1994 to 1999, however, the treatment success rate had been erratic, dipping to its lowest level of 54% in 1996. In contrast, DOTS programs resulted in a global treatment success rate of 80 percent. The 6-year period exhibited a generally increasing trend in success rate ranging from 77% to 81%.

High-burden countries registered an over-all treatment success rate of 60 percent in spite of the notable performance of China (95%) and Vietnam (92%) in 1999. DOTS programs in these countries, however, reported a significantly high success rate of 83%, 2 percent higher than the global rate in the same year. The DOTS program posted the highest success rates in China (96%), Vietnam (92%) and Cambodia (93%). The same program yielded treatment success rate of 87%.

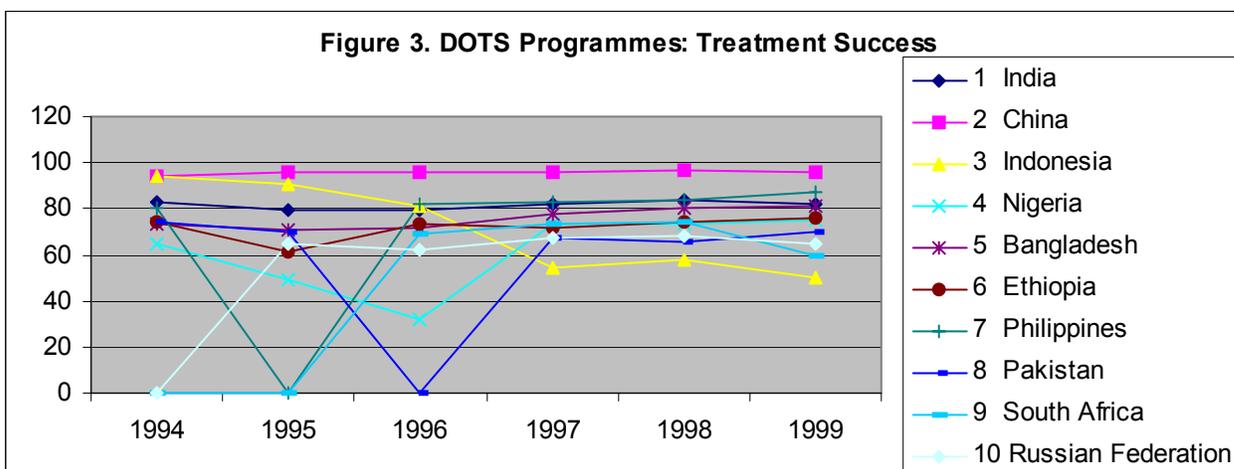
On the other hand, the DOTS program's treatment success rate was a low 11percent in Brazil (Table 12).

Table 12. Treatment Success for Smear Positive Cases, High – Burden Countries, 1994-1999

	DOTS PROGRAMMES						WHOLE COUNTRY						Growth rate	
	1994	1995	1996	1997	1998	1999	1994	1995	1996	1997	1998	1999		
1 India	83	79	79	82	84	82	-0.24	*	25	21	18	27	21	
2 China	94	96	96	96	97	96	0.42	91	93	94	95	95	95	0.86
3 Indonesia	94	91	81	54	58	50	-11.86	*	*	*	*	*	*	
4 Nigeria	65	49	32	73	73	75	2.90	*	*	*	*	*	*	
5 Bangladesh	73	71	72	78	80	81	2.10	*	*	63	73	77	79	
6 Ethiopia	74	61	73	72	74	76	0.53	*	*	71	*	*	74	
7 Philippines	80	--	82	83	84	87	1.69	88	60	35	78	71	*	
8 Pakistan	74	70	--	67	66	70	-1.11	69	*	--	*	23	*	
9 South Africa	--	--	69	73	74	60		78	58	61	68	72	57	-6.08
10 Russian Federation	--	65	62	67	68	65		--	*	57	*	*	*	
11 DR Congo	71	80	48	64	70	69	-0.57	72	74	48	64	*	*	
12 Kenya	73	75	77	65	70	78	1.33	*	*	*	*	*	79	
13 Viet Nam	91	91	90	85	93	92	0.22	*	89	89	85	92	92	
14 UR Tanzania	80	73	76	77	76	78	-0.51	*	*	*	*	*	*	
15 Brazil	--	--	--	--	91	11		70	17	20	27	40	51	-6.14
16 Thailand	--	--	78	62	68	77		58	64	*	58	*	*	
17 Uganda	--	--	33	40	62	61		--	44	*	*	*	*	
18 Myanmar	--	66	79	82	82	81		77	67	79	*	*	*	
19 Mozambique	67	39	54	67	--	71	1.17	*	*	55	65	--	*	
20 Cambodia	84	91	94	91	91	93	2.06	*	*	*	*	*	*	
21 Zimbabwe	--	--	--	--	70	73		52	53	32	59	*	*	
22 Afghanistan	--	--	--	45	33	87		--	--	--	*	*	86	
High burden countries	87	83	78	81	83	81	-1.42	83	53	50	56	62	60	-6.28
Global	77	79	77	78	81	80	0.77	75	57	54	59	64	63	-3.43

Cohort: see notes for Tables 11a. -- not available; *no additional data beyond DOTS report

Source: WHO



Source: WHO

8.2 Retreatment Outcomes

Retreatment outcomes of the DOTS program likewise recorded a high retreatment rate of 74% in all countries and slightly higher rate of 76% in high-burden countries. This was primarily made up of the proportion of retreatment cases that were cured averaging 64% globally as against the 67% noted in high-burden countries. In addition, 10% of the retreatment cases (global) completed treatment. In high-burden countries, they made up 8%. Deaths, however, still made up a little over 5%.

Table 13 shows that among the high-burden countries, it was China and Cambodia which had the highest retreatment success rates of 96% and 91%, respectively. On the other hand, death rates were highest in Zimbabwe, Thailand, Mozambique and Uganda and lowest in China (1.6%) and Pakistan (1.2%).

Table 13. Retreatment Outcomes in DOTS programs, high-burden countries, 1999 cohort

	TREATMENT OUTCOMES (%)*								
	REGISTRED	CURED	COMPLETED TREATMENT*	DIED	FAILED	DEFAULTED	TRANSFERRED	NOT EVAL'D	TREATMENT SUCCESS (%)
1 India	23,204	54	16	7.0	5.4	17	1.2	0.2	69
2 China	43,638	93	2.5	1.6	1.5	0.8	0.2	0.0	96+
3 Indonesia	1,374	46	24	2.8	2.8	4.4	2.3	17	70
4 Nigeria	1,639	61	13	7.6	5.1	9.0	3.8	0.0	74
5 Bangladesh	1,459	75	4.8	3.7	2.2	9.8	4.2	0.0	80
6 Ethiopia	846	59	15	8.6	3.0	10	4.1	0.0	74
7 Philippines									
8 Pakistan	1,093	19	56	1.2	2.0	20	1.9	0.0	75
9 South Africa	21,125	40	7.3	8.4	3.6	20	20	1.1	47
10 Russian Federation	1,578	21	23	7.9	15	13	10	9.1	45
11 DR Congo	2,608	60	7.5	7.0	1.8	7.3	11	5.7	67
12 Kenya	1,545	62	11	11	0.6	10	4.9	0.0	73
13 Viet Nam	5,283	83	3.7	4.6	4.3	2.0	2.5	0.0	87+
14 UR Tanzania	1,737	70	4.9	13	0.9	6.4	5.0	0.0	75
15 Brazil									
16 Thailand	716	60	7.4	13	5.6	10	3.6	0.0	68
17 Uganda	1,111	28	20	11	1.0	11	5.5	2.4	48
18 Myanmar	2,292	61	10	7.1	3.9	14	3.8	0.0	71
19 Mozambique	1,371	69	2.4	12	2.0	11	3.6	0.0	71
20 Cambodia	792	88	3.2	3.7	1.2	2.8	1.0	0.0	91+
21 Zimbabwe	943	50	17	16	0.8	7.8	9.2	0.0	66
22 Afghanistan		72	11	3.9	4.6	3.9	3.9	0.0	84
High-burden countries	114,354	67	8.6	5.3	3.1	9.4	5.0	1.2	76
Global	1,448,865	64	10	5.7	3.6	9.6	4.8	2.4	74

Source: WHO

9.0 DOTS Implementation

As of 2000, the DOTS program covered 55% of the global population and 55% of the population of the 22 high-burden countries. At least five countries reported 100 % DOTS coverage: Kenya, Tanzania, Uganda, Mozambique and Zimbabwe. An additional three countries had nearly 100 percent coverage: Indonesia, Vietnam and Cambodia. Bangladesh likewise registered 92% coverage. Interestingly, India which ranked 1st had only 30% DOTS coverage. The Philippines percentage of coverage reached 85% in

2000. Pakistan, Brazil and Afghanistan were the only countries among the 22 high-burden countries where DOTS program coverage was minimal at less than 16 percent.

The percentage of the population covered by DOTS increased at an average rate of 20.11% from 1995 to 2000, globally and by 18.04% among the high-burden countries. Rate of increase was most significant in the Philippines (83.56), India (82.06) and Indonesia (74.83) (Table 14)

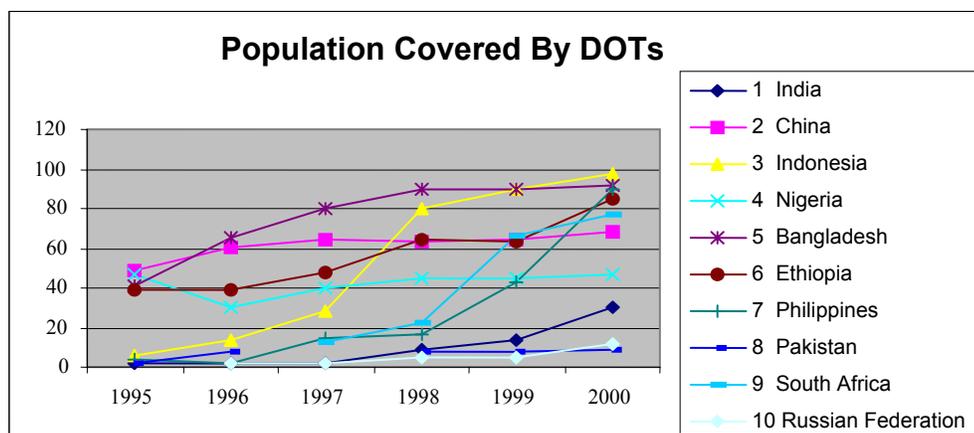
Table 14. Progress in DOTS Implementation: High Burden Countries, 1995-2000.

	PERCENT OF POPULATION COVERED BY DOTS						Growth Rate
	1995	1996	1997	1998	1999	2000	
1 India	1.5	2	2.3	9	13.5	30	82.06
2 China	49	60.4	64.2	63.9	64	68	6.77
3 Indonesia	6	13.7	28.3	80	90	98	74.83
4 Nigeria	47	30	40	45	45	47	0.00
5 Bangladesh	40.5	65	80	90	90	92	17.83
6 Ethiopia	39	39	48	64.4	63	85	16.86
7 Philippines	4.3	2	15	16.9	43	89.6	83.56
8 Pakistan	2	8		8	8	9	35.10
9 South Africa			13	22	66	77	
10 Russian Federation		2.3	2.3	5	5	12	
11 DR Congo	47	51.4	60	60	62	70	8.29
12 Kenya	15	100	100	100	100	100	46.14
13 Viet Nam	50	95	93	96	98.5	99.8	14.82
14 UR Tanzania	98	100	100	100	100	100	0.40
15 Brazil		0	0	3	7	7	
16 Thailand		1.1	4	32	59	70	
17 Uganda		0	100	100	100	100	
18 Myanmar		59	60	60.3	64	77	
19 Mozambique	97	100	84	95		100	0.61
20 Cambodia	60	80	88	100	100	99	10.53
21 Zimbabwe		0	0	100	11.6	100	
22 Afghanistan			12	11	13.5	15	
Total, high-burden countries	24	32	36	43	46	55	18.04
Global Total	22	32	36	43	46	55	20.11

Zero indicates that a report was received, but the country had not implemented DOTS

Blank indicates that no report was received.

Source: WHO



The following Table summarizes progress in DOTS implementation: high –burden countries, 1999-2000. As shown in the Table, high case detection of more than 50% was noted for Vietnam and Zimbabwe while intermediate case detection ranging from 10-49% was observed in 12 countries, including the Philippines. Low case detection was reported for Afghanistan and Pakistan.

As a whole, six countries had low treatment success of less than 70% while the remaining 16 countries had high treatment success of more than 70%.

Table 15. Progress in DOTS Implementation, High – Burden Countries, 1999-2000

NON-DOTS OR INCOMPLETE DATA	DOTS			
	LOW TREATMENT SUCCESS (<70%)	HIGH TREATMENT SUCCESS (≥70%)		
		LOW CASE DETECTION* (<10%)	INTERMEDIATE CASE DETECTION (10-49%)	HIGH CASE DETECTION (≥50%)
	Brazil	Afghanistan	Bangladesh	Myanmar
	<u>DR CONGO</u>	Pakistan	<u>Cambodia</u>	Nigeria
	Indonesia		China	Philippines
	Russian Federation		Ethiopia	Thailand
	<u>South Africa</u>		India	<u>UR Tanzania</u>
	Uganda		<u>Kenya</u>	
			Mozambique	

Source: WHO

10.0 THE PHILIPPINE SITUATION

10.1 TB as Leading Cause of Morbidity and Mortality

Tuberculosis has always been one of the leading causes of morbidity and mortality in the Philippines.

Morbidity Rate

Tuberculosis (respiratory) remained the sixth leading cause of morbidity during the two-year period 1999-2000. Incidence rate decreased by 14.5% from 193.9% in 1999 to 165.7% in 2000.

In 2000, morbidity was generally caused by diarrheal diseases, bronchitis, pneumonia, influenza, hypertension and respiratory tuberculosis. Table 16 indicates that except for hypertension and typhoid, incidence rate for all diseases decreased.

Table 16. Leading Causes of Morbidity:1999-2000 Philippines

Cause	Year				% Change
	1999		2000		
	Number	Rate	Number	Rate	
Diarrheal Diseases	908,454	1215.4	866,411	1134.8	-6.6
Bronchitis	717,214	959.5	700,105	917	-4.4
Pneumonias	693,334	927.6	632,930	829	-10.6
Influenza	514,198	687.9	502,718	658.2	-4.3
Hypertension	208,248	278.6	279,992	366.7	31.6
Tuberculosis	144,328	193.9	126,489	165.7	-14.5
Malaria	68,155	91.2	52,957	69.4	-23.9
Diseases of the Heart	63,167	84.5	50,869	66.6	-21.2
Chicken Pox	35,699	47.8	35,306	46.2	-3.3
Typhoid & Paratyphoid Fever	17,625	23.6	23,287	30.5	29.2

Source: DOH

Mortality Rate

For the period 1994-1997, the first four leading causes of mortality in the Philippines remained to be diseases of the heart, diseases of the vascular system, pneumonia and malignant neoplasm.

TB (all forms) consistently ranked as the fifth leading cause of mortality from 1994-1996. However, it dropped to number six in 1997. Mortality rate likewise declined from 39.8% in 1994 to only 36.5% 1997. This improvement subsequently reflected a negative change in mortality rate of 1.4% within the four-year period. It could likewise be noted that among the other 10 leading causes of mortality, TB was the only disease which experienced a negative growth rate, as shown in Table 17.

Table 17. Ten Leading Causes of Mortality:1994-1997, Philippines

Cause	Year								Percent Change
	1994		1995		1996		1997		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	
1. Diseases of the Heart	50,307	73.3	50,252	73.2	53,865	77	54,787	76.6	2.9
2. Diseases of the Vascular System	39,191	57.1	38,592	56.2	41,511	59.3	43,264	60.5	3.4
3. Pneumonia	28,132	41	33,637	49	33,319	47.6	32,193	45	4.6
4. Malignant Neoplasm	28,110	41	28,487	41.5	30,339	43.4	29,677	41.5	1.8
5. Accidents	14,752	21.5	15,786	23	16,554	23.7	29,375	41.1	25.8
6. Tuberculosis, all forms	27,292	39.8	27,053	39.4	27,408	39.2	26,151	36.5	-1.4
7. Chronic Obstructive Pulmonary Diseases and Allied Conditions	11,405	16.6	11,309	16.5	12,482	17.8	13,326	18.6	5.3
8. Diabetes Mellitus	6,105	8.9	6,724	9.8	7,677	11	7,783	10.9	8.4
9. Nephritis, Nephrotic Syndrome and Nephrosis			6,600	9.6	7,364	10.5	7,362	10.3	5.6
10. Other Diseases of the Respiratory System	6,383	9.3	6,747	9.8	7,333	10.5	7,340	10.3	4.8

Source: DOH

Foregone Income Due to Premature Mortality Attributed to Tuberculosis*

Premature deaths caused by TB resulted in a loss of income estimated at Php26.407 billion in 2002, using wages in 2002.

Foregone income because of premature mortality due to TB among males totaling 17,574 was estimated to reach Php18.716 billion. Foregone income was biggest among those aged 45- 64 years old who died of the disease.

Table 18. Foregone Income Due to Premature Mortality (Male)

Age Group	Population	Deaths	YLLs	YLL per 100K	Average Annual Wage	Foregone Income	Foregone Income per 100k
<1	1,007,719	27	818	81	55,702	45,575,395	4,522,629
1-4	3,890,959	63	1,896	49	58,797	111,496,387	2,865,525
5-9	4,602,469	69	2,043	44	62,255	127,210,878	2,763,970
10-14	4,192,269	105	3,038	72	65,284	198,303,957	4,730,230
15-19	3,774,185	189	5,330	141	68,347	364,314,880	9,652,809
20-24	3,359,916	303	8,323	248	70,888	589,981,898	17,559,424
25-29	2,963,907	499	13,242	447	72,647	961,953,837	32,455,601
30-34	2,585,627	648	16,478	637	72,729	1,198,404,074	46,348,683
35-39	2,220,868	851	20,578	927	73,095	1,504,131,203	67,727,177
40-44	1,858,943	1,091	24,769	1,332	72,689	1,800,463,963	96,854,178
45-49	1,523,783	1,434	30,148	1,979	71,453	2,154,185,015	141,370,852
50-54	1,206,329	1,559	29,883	2,477	69,131	2,065,840,486	171,250,172
55-59	933,795	1,909	32,604	3,492	65,406	2,132,464,124	228,365,340
60-64	706,266	2,228	32,902	4,659	62,014	2,040,399,386	288,899,563
65-69	516,101	2,109	26,005	5,039	57,378	1,492,129,119	289,115,719
70-74	354,103	2,245	22,358	6,314	56,832	1,270,636,033	358,832,326
75-79	202,345	1,283	9,955	4,920	48,234	480,168,655	237,302,464
80-84	101,172	641	3,721	3,678	36,311	135,113,491	133,547,928
85+	50,586	321	1,175	2,324	36,878	43,349,216	85,693,855
Total						18,716,121,998	2,219,858,447

Source: The Burden of Tuberculosis in the Philippines

Estimated foregone income due to premature mortality of 8,528 females amounted to Php7.687 billion which was about one-half of the foregone income of males who died of TB.

Table 19. Foregone Income Due to Premature Mortality (Female)

Age Group	Population	Deaths	YLLs	YLL per 100K	Average Annual Wage	Foregone Income	Foregone Income per 100k
<1	943,495	6	183	19	52,897	9,687,178	1,026,733
1-4	3,677,881	64	1,941	53	55,835	108,401,194	2,947,382
5-9	4,358,013	60	1,793	41	59,120	105,995,508	2,432,198
10-14	4,052,530	83	2,432	60	60,926	148,188,390	3,656,688
15-19	3,708,794	125	3,577	96	63,847	228,354,817	6,157,118
20-24	3,339,230	201	5,610	168	66,258	371,699,322	11,131,288
25-29	2,960,981	298	8,067	272	67,061	541,010,770	18,271,335
30-34	2,571,687	333	8,674	337	66,512	576,919,503	22,433,504
35-39	2,196,902	456	11,366	517	65,146	740,470,502	33,705,213
40-44	1,831,524	450	10,613	579	63,566	674,630,205	36,834,363
45-49	1,503,256	517	11,412	759	61,362	700,245,001	46,581,886
50-54	1,206,643	550	11,232	931	58,301	654,847,020	54,270,154
55-59	954,603	629	11,612	1,216	52,484	609,421,711	63,840,331
60-64	745,104	867	14,198	1,906	46,390	658,670,685	88,399,832
65-69	573,293	951	13,338	2,327	38,324	511,174,196	89,164,563
70-74	437,256	1,469	16,926	3,871	38,271	647,785,585	148,147,901
75-79	249,861	839	7,587	3,036	38,375	291,147,309	116,523,911
80-84	124,930	420	2,830	2,265	32,719	92,595,122	74,117,434
85+	62,465	210	837	1,341	19,032	15,936,941	25,513,335
Total						7,687,180,959	845,155,170

Source: The Burden of Tuberculosis in the Philippines

*Calculating Economic Burden of Premature Mortality Due to Tuberculosis

The study developed a measure of foregone income to estimate the economic burden of premature mortality due to TB. This measure reflects the cumulative amount of earnings lost due to premature mortality and is defined as the product of years of life lost (YLL) times the weighted average annual wage.

To compute for the weighted average annual wage, daily wage rates across age groups are derived using the 1998 APIS. These daily wage rates reflect weighted daily wage rates across occupation groups. To present the daily wage rates in 2002 prices, a 1998-2002 inflation of 22% is calculated using the general CPI (national). The daily wage rates calculated cannot be used in the computations of foregone income since wage rates are expected to vary through time because of changes in productivity and inflation. A number of assumptions have to be made.

The first is that wages are expected to change at the same rate as inflation. Without this assumption, wage inflation differentials need to be calculated through time. The second assumption is that the daily wage rate profile across age groups reflect the productivity time path i.e., initially wages are increasing until an age threshold level where wages tend to decrease.

If these assumptions hold, an average daily wage rate can be calculated as the average of the prospective wages in the remaining life of a person.

To calculate the average annual wage, the study assumes that a person is productive 260 days a year. The number of working days in a year is specified as a constant since productivity loss due

to aging is already incorporated in the weighted daily wage rate. To calculate foregone income accruing to premature mortality, the average annual wage is multiplied by the YLL's.

Source: The Burden of Tuberculosis in the Philippines

10.2 Extent of TB Prevalence

By Region, By Industry

In 1998, some 45% of the population of the Philippines were afflicted with TB. Western Visayas (86%), the Bicol region (79%), the NCR (55%) had the highest prevalence rates in the country. Prevalence rates were less than 50% in the other regions with the Mindanano regions, CARAGA and ARMM posting the lowest TB prevalence rates of less than 14%.

Table 20. Reported TB Prevalence by Region: 1998

Region	Reported Prevalence (%)
Ilocos	0.33
Cagayan Valley	0.44
Central Luzon	0.43
Southern Luzon	0.55
Bicol Region	0.79
Western Visayas	0.86
Central Visayas	0.32
Eastern Visayas	0.33
Western Mindanao	0.32
Northern Mindanao	0.27
Southern Mindanao	0.37
Central Mindanao	0.32
NCR	0.61
CAR	0.24
ARMM	0.14
CARAGA	0.11
Philippines	0.45

Source: 1998 APIS

As of 2000, however, records of the WHO placed the Philippines number 7 in the list of high-burden countries with a prevalence rate of more than 50%.

In 1998, reported TB prevalence by industry indicated the highest prevalence rate of 2.78 in the sanitary services, followed by agriculture (0.61) and in the private education services (0.60). It must be noted that compared to private education services, the public education services posted significantly lower TB prevalence rate of only 0.29 (Table 21).

Table 21. Reported TB Prevalence by Industry

Industry	Reported Prevalence (%)
Agriculture	0.61
Mining	0.34
Manufacturing	0.41
Power and Water	0.25
Construction	0.32
Wholesale and Retail Trade	0.37
Transportation and Telecommunication	0.35
Banking and Finance	0.00
Public Administration And Defense	0.37
Sanitary Services	2.78
Public Education Services	0.29
Private Education Services	0.60
Public Health Services	0.26
Private Health Services	0.00
Other Personal Services	0.42
Total	0.45

Source: 1998 APIS

By Economic Class, Employment Status, Educational Attainment

The 1998 APIS survey indicated TB prevalence appeared to be highest among the poorest segment of the population which recorded an average prevalence rate of 0.66. As seen in Table, in general, the prevalence rate was observed to be indirectly proportional to households' economic class; the prevalence rate went down as the economic class rose. A notable exception, however, was the lower prevalence rate (0.39) among households in the 3rd income quintile, compared to those in the 4th quintile which registered prevalence rate of 0.44.

Table 22. Reported Prevalence by Age, by Economic Class

Age Group	Reported TB Prevalence (%)				
	Economic Class - Household Income Quintile				
	Poorest	2nd	3rd	4th	Highest
0-4	0.35	0.39	0.29	0.50	0.19
5-14	0.10	0.15	0.16	0.24	0.24
15-29	0.30	0.21	0.16	0.18	0.15
30-44	0.49	0.47	0.29	0.35	0.13
45-59	1.09	1.35	0.89	0.73	0.57
60-69	2.41	2.72	1.88	2.34	1.14
70-79	3.68	2.43	3.33	2.16	0.80
>80	3.59	1.26	1.23	1.18	2.43
All	0.66	0.52	0.39	0.44	0.30

Source: 1998 APIS

While TB prevalence rate was definitely higher among the unemployed at 1.00, there appeared to be no direct correlation, however, in the reported prevalence rate with the types or status of employment of those affected by TB as shown in Table 23.

In the same manner, while TB prevalence was noted to be relatively higher among those with lower educational attainment, there were also instances when higher prevalence rates were noted among those with higher educational attainment.

Table 23. Reported TB Prevalence by Employment Status

Reported TB Prevalence by Employment Status	
Employment Status (Primary Occupation)	Reported Prevalence (%)
Not Employed	1.00
Works for Private HH	0.20
Works for Private Firm	0.32
Works for Government	0.33
Self-Employed w/o Employees	0.63
Employer in Family Business	1.02
Paid Employee in Family Business	0.26
Unpaid Employee in Family Business	0.36
Total	0.63
Reported TB Prevalence by Educational Attainment	
Educational Attainment	Reported Prevalence (%)
No Grade Completed	0.44
Nursery/Prep	0.29
Grade 1	0.35
Grade 2	0.60
Grade 3	0.68
Grade 4	0.80
Grade 5	0.51
Grade 6	0.62
1st Year HS	0.25
2nd Year HS	0.34
3rd Year HS	0.30
4th Year HS	0.42
1st Year Post HS	0.23
2nd Year Post HS	0.09
3rd Year Post HS	0.69
4th Year Post HS	0.14
1st Year College	0.26
2nd Year College	0.26
3rd Year College	0.24
4th Year College	0.28
College Graduate	0.24
MA Units	0.76
MA Graduate or Higher	0.44
Total	0.45

Source: 1998 APIS

10.3 Socio-Demographic Profile of TB Cases: 1997 National TB Prevalence Survey (NTPS)

IN 1997, the Department of Health (DOH) undertook the NTPS which determined the extent or magnitude of TB prevalence in the Philippines. The results of the survey highlighted the following:

a) Age, Sex

- Out of a total 12,850 which had radiographic examination, 11.24 per thousand population were found to be culture-positive for TB; 4.28 per thousand were found to be smear positive.
- Prevalence rate of culture-positive tuberculosis was higher among males (16.41) than females (6.37). Males likewise had higher prevalence rate of smear-positive TB (6.49) than females (2.07).
- Prevalence rate for both culture-positive and smear-positive TB was highest among those belonging to the age group 40-49 years old which recorded prevalence rate of 20.65 and those aged 60 and above at 20.68 for culture positive and 8.92 and 8.89 for smear-positive cases.

Table 24. Observed Prevalence Of Bacteriologically Confirmed Tuberculosis, According To Age And Sex, 1997 NTPS

Age group (years)	No. of subjects with radiographic examination			Prevalence of bacteriologically confirmed tuberculosis (per thousand)					
				Culture-positive			Smear-positive		
	M	F	Total	M	F	Total	M	F	Total
10-19	2,154	2,076	4,230	4.90	2.13	3.67	1.63	0.72	1.22
20-29	1,238	1,194	2,432	10.03	4.89	7.50	5.02	0.92	3.02
30-39	1,067	1,207	2,274	26.23	9.99	17.50	5.92	2.99	4.38
40-49	783	874	1,657	32.92	9.22	20.65	15.68	2.59	8.92
50-59	434	550	984	25.97	4.11	13.78	15.63	0.00	6.96
≥60	553	720	1,273	27.74	14.19	20.28	9.94	8.01	8.83
Total	6,229	6,621	12,850	16.41	6.37	11.24	6.49	2.07	4.28

b) Urban/Rural

- Both urban and rural areas exhibited comparative prevalence rates of 11.09 and 11.36, respectively for culture-positive cases. Prevalence rates of smear-positive cases, however, were slightly higher in urban areas at 5.04 than in rural areas (3.78). Metro Manila alone registered a lower prevalence rate of smear-positive cases of 3.29 as against the 5.81 posted by other urban areas.

Table 25. Observed Prevalence of Bacteriologically Confirmed Tuberculosis, According To Age And Area, 1997 NTPS

Age group (years)	No. of subjects with radiographic examination				Prevalence (per thousand) of bacteriologically confirmed tuberculosis							
					Culture-positive				Smear-positive			
	Metro Manila	Other urban	Total Urban	Rural	Metro Manila	Other urban	Total Urban	Rural	Metro Manila	Other urban	Total Urban	Rural
<30	934	1,850	2,784	3,878	10.25	5.42	6.61	3.98	5.12	2.02	2.84	1.22
30-49	503	1,052	1,555	2,376	5.81	18.99	15.09	20.61	2.98	8.32	6.78	6.06
>50	214	607	821	1,436	5.51	24.39	19.67	16.06	0.00	13.10	9.66	6.80
ALL ages	1,651	3,509	5,160	7,650	7.42	12.56	11.09	11.36	3.29	5.81	5.04	3.78

Source: NTPS

c) Estimated Prevalence

Given the results of the survey, TB prevalence in the country was estimated to reach 13.15 for males and 4.50 females of culture-positive cases in urban areas and 7.04 for males and 1.44 for females for smear positive cases.

Table 26. Adjusted And Estimated Prevalence Of Bacteriologically Confirmed Tuberculosis According To Sex, Age And Area, 1997 NTPS

Age group (years)	Culture-positive				Smear-positive			
	Total Urban		Rural		Total Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	Female
10-29	7.48	3.86	5.46	2.09	3.09	1.46	2.12	0.11
30-49	21.82	5.05	27.64	10.88	11.89	1.38	7.96	3.76
>50	27.78	7.35	22.00	11.25	19.22	2.16	8.16	5.17
All ages	15.11	4.85	15.04	6.70	7.86	1.56	4.93	2.28

Estimated prevalence

Age group (years)	Total Urban		Rural		Total Urban		Rural	
	Male	Female	Male	Female	Male	Female	Male	Female
	10-29	6.56	3.58	4.93	1.97	2.77	1.34	1.91
30-49	19.69	4.68	24.91	10.36	9.93	1.29	7.17	3.58
>50	27.72	6.83	21.23	10.87	17.92	2.01	7.87	5.00
All ages	13.15	4.50	13.81	6.37	7.04	1.44	4.53	2.12

Source: NTPS

d) Comparative Status

As shown in Table 27, some indicators of the prevalence of radiographic abnormalities suggestive of tuberculosis show the slight improvement attained in 1997, compared to the status in 1981-1983.

- For instance, moderate or far advanced disease went down from 1.70% in 1983 to 0.71 percent in 1997. Cavitated disease likewise plunged to 0.26% from 0.47%.

- Prevalence of smear-positive bacteriologically confirmed tuberculosis, went down by more than 100 percent from 6.6 to 3.1. Rates of culture positive cases, however, registered only slight improvement of about 0.5 in 1997. As a whole, the adjusted rates resulted in a 25% reduction in smear-positive cases and a 37% reduction in culture-positive cases between 1981-83 to 1997.
- For both periods, however, the prevalence rates were identical in males at 5.3% but was slightly lower in females at 3.1% in 1997 as against the 3.8% rate in 1981-83
- TB prevalence of subjects with BCG scar likewise rose from 40% to 66% while those with no BCG scar demonstrated slightly higher prevalence rates of 63.4%, compared to 54.5% in 1983. This is indicative of the relatively limited effect of BCG vaccination as a means of TB prevention.
- Annual risk of infection among children went down slightly from 2.5% to 2.3%.

Table 27. Comparison Of Outcome Measures In the 1997 NTPS And The 1981-83 NTPS

Outcome Measures	1997	1981-83
Prevalence of radiographic abnormalities suggestive of tuberculosis (ages ≥ 10 years)		
Total	4.20%	4.20%
Minimal lesions	3.49%	2.50%
Moderate or far-advanced disease	0.71%	1.70%
Cavitated disease	0.26%	0.47%
Prevalence of bacteriologically confirmed tuberculosis (per 1,000 population)		
Smear-positive	3.1 (4.3)⁺	6.6 (9.5)
Culture-positive	8.1 (11.2)	8.6 (12.5)
Proportion of subjects with BCG scar	66%	40%
Among those with no BCG scar, prevalence of tuberculosis infection	63.40%	54.50%
Annual risk of infection (ARI) (based on children aged 5-9 years)	2.30%	2.50%

Source: NTPS, Final Report: 1997

10.4 Health-Seeking Behavior and Characteristics of TB Cases

Perceived Best Remedy

Drinking medicine was the perceived best remedy for TB by a little more than half (51.7%) of those surveyed. Having regular check-ups at the health center was the next best remedy for TB as perceived by about 22 percent. Eating the proper diet and going for regular check-ups from private doctors were the preferred modes of remedy by comparative shares (7%) of those surveyed. Table 28 shows that submitting oneself to chest x-ray was perceived to be the best remedy by barely one percent while sputum examination was identified by a slightly higher proportion of 1.72 percent.

Table 28. Distribution of Perceived Best Remedy for TB

Distribution of Perceived Best Remedy for TB		
	Number	Percent
Drink Medicine Every Day	1139	51.66
Get Sputum Examined	38	1.72
Get Chess X-ray	18	0.82
Eat the Proper Diet	169	7.66
Take a leave from work	72	3.27
Have Regular Check-ups at Health Center	476	21.59
Have Regular Check-ups from Private MD	155	7.03
Others	136	6.17
Don't Know	2	0.09
Total	2205	100

Source: NTPS, Final Report:1997

Drug Intake

- Taking anti-TB drugs appeared to be the means of recourse of 15.8 percent of TB symptomatics and 6.0 percent of non-TB symptomatics. Those within the age groups of 50-70 years and above had the bigger proportionate share of those who were into anti-TB drugs intake. This ranged from 22.6 percent to 27.5 percent for TB symptomatics and 9.7% to 11.2 % for non-TB symptomatics.
- There appeared to be no significant difference in the drug intake behavior of TB symptomatics in other urban areas and the rural areas in terms of their intake of anti-TB drugs. Metro Manila, however, had a much higher proportion of TB cases who resorted to anti-TB drugs.
- On the other hand, there was a slightly higher proportion of non-TB symptomatics in rural areas who took anti-TB drugs.

Table 29 History Of Intake Of Anti-TB Drugs Among Tuberculous Symptomatics By Sex, Urban/Rural Population, 1997 NTPS

Characteristics		TB symptomatic		Non-TB symptomatic	
		No. Of subjects	% with anti TB Treatment	No. Of subjects	% with anti TB Treatment
Sex	Male	962	16.6	3533	6.2
	Female	843	15.0	4488	5.9
Age group (years)	20-29	346	5.5	2552	2.9
	30-39	392	10.2	2257	4.8
	40-49	373	13.9	1433	7.8
	50-59	266	22.6	815	9.7
	60-69	246	26.4	571	11.6
	≥70	182	27.5	393	11.2
Areas	Metro Manila	163	23.9	1203	6.9
	Other Urban Areas	531	15.4	2139	5.2
	Rural Areas	1111	14.9	4679	6.2
Total		1805	15.8	8021	6.0

Source: NTPS, Final Report:1997

Treatment Provider of Choice

The bigger number of TB symptomatics (at least 35%) with confirmed TB was observed to have done nothing while 22 percent self-medicated. Some 16 percent went to health centers and another 9.8 percent went to public hospitals or a total of almost 32 percent seeking treatment from government facilities. About 10 percent consulted private doctors and 2.3 percent went to private hospitals, resulting in almost 13 percent seeking help from private doctors and facilities. Traditional healers were the chosen treatment providers of at least 3.4 percent.

Table 30. Observed TB Treatment Provider of Choice

Action taken by TB symptomatics w/ bacteriologically confirmed TB	Percent
None	34.50
Self-medication	22.40
Family Member	1.70
Traditional Healer	3.40
Health Center	15.50
Public Hospital	9.81
Private MD	10.40
Private Hospital	2.29
Total	100.00

Source: NTPS Final Report:1997

In the UNHP survey done in 2000, TB symptomatics were asked as to where they sought TB treatment. The bigger number (44.14%) reportedly went to the health center while 21.17% reportedly went to government hospitals. Some 26.58% claimed that they went to private clinics and almost 5 percent went to private hospitals.

The health center in the area was also the most popular choice as the prospective provider of TB treatment, as reported by almost 59 percent of the respondents. Private clinic was the choice of the second biggest share (19%) of TB symptomatics, followed closely by government hospitals which was identified by 15 percent. This brought the proportionate share of those who would opt to go to government-run treatment centers to almost 75 percent. On the other hand, private run facilities such as private clinic and hospitals were the preferred options of about a quarter (24.9%) of those with TB.

The cost of treatment appeared to be the biggest factor affecting the choice of provider by TB symptomatics as cited by a third (31.8%) of the survey respondents. Proximity to the house was another important factor reported by about 28 percent. A competent doctor and good services were the two other important factors taken into consideration by TB symptomatics in choosing a provider.

Prospective Provider of TB Treatment	
Where would you go for TB Treatment	Percent
Health Center in our Area	58.96
Health Center in Other Areas	0.73
Government Hospital	15.01
Private Clinic	19.00
Private Hospital	5.94
Traditional Healer	0.09
Others	0.27
Total	100
Observed TB Treatment Provider of Choice	
Action taken by TB symptomatics w/ bacteriologically confirmed TB	Percent
None	34.50
Self-medication	22.40
Family Member	1.70
Traditional Healer	3.40
Health Center	15.50
Public Hospital	9.81
Private MD	10.40
Private Hospital	2.29
Total	100.00
Chosen Provider of TB Treatment	
Where did you seek TB Treatment	Percent
Health Center in our Area	44.14
Health Center in Other Areas	3.15
Government Hospital	21.17
Private Clinic	26.58
Private Hospital	4.95
Total	100

Reason for Choosing Provider	
Why did you choose this Provider	Percent
Proximity to House	27.93
Services are Free or Cheap	31.08
Service is Good	13.51
MD is Competent	14.86
Habit	4.5
Has all Needed Drugs	0.9
Has all Needed Equipment	4.95
Know How to Take Care of Illness	2.25

Source: 2001 UHNP Evaluation Survey

Degree of Infectiousness

The 2001 UHNP Evaluation survey gave indications of the highly infectious nature of TB. Out of a total of 2,205 TB symptomatics surveyed, 137 or 6.21 percent admitted to having TB infected household members. The same survey likewise revealed that 13.29% or 293 of the total number of people surveyed admitted to having TB infected relatives or neighbors (Table 31).

Table 31. Distribution of People with TB Infected HH Members and TB infected Relatives/Neighbors

Distribution of People with TB Infected HH Members		
No	2068	93.79
Yes	137	6.21
Total	2205	100
Distribution of People with TB Infected Relatives/Neighbors		
No	1912	86.71
Yes	293	13.29
Total	2205	100

Source: 2001 UHNP Evaluation Survey

10.5 Trends in TB Prevalence and Indicators

Notifiable TB Cases, Deaths

TB has been classified as one of the communicable diseases which must be reported to the public health authorities. This is provided for in Republic Act No. 3573 Section 2 which specifically states that: *Notice to the Philippine Health Service about communicable diseases. Every physician, director, superintendent or person in-charge of hospital institution or dispensary having knowledge of, or any householder, tenant or occupant of any building, or director of college, convent; diseases shall immediately notify the nearest station either by telephone, by messenger or by written notice specifying the disease and the name and address of the person affected.*

The notifiable disease statistics are based on the information submitted by the Rural Health Units (RHUs), City Health Office (CHOs). All field officers by means of

established reporting mechanism, through Memorandum Order No. 51-a.s.1960 submit through Provincial and City Health Officers collective morbidity reports (WI-a, WI-b) weekly to the National Epidemiology Center where such data are edited, classified, compiled, analyzed and interpreted.

Table 32 shows the notifiable reported cases and deaths for TB in the Philippines per 100,000 population from 1987 to 1997. Average growth rate for the 10-year period was computed at 2% while death rates showed a declining trend at -3.2%.

**Table 32. Notifiable (TB) Diseases: Reported Cases and Deaths
1987-1997 per 100,000 population : Philippines**

Year	Cases		Deaths	
	Number	Rate	Number	Rate
1997	240,509	336.1	26,151	36.5
1996	165,453	244.6	27,368	39.1
1995	19,186	187.3	26,673	38.9
1994	167,763	244.5	24,580	35.8
1993	159,049	231.8	20,132	30.1
1992	136,981	204.5	22,814	34.9
1991	123,281	188.7	24,307	38.2
1990	152,688	240	26,300	42.4
1989	206,508	332.8	27,020	45
1988	183,113	304.7	28,697	48.9
1987	163,740	278.8	30,604	53.4

Source: DOH

The yearly report of notifiable respiratory TB diseases from 1998 to 2000 by region shown in Table 33, indicated that the incidence rate of notifiable respiratory TB declined by 3.9%. The highest decline was posted by ARMM, followed by Region 11 (1999-2000), Region 1, and CAR. Regions 8 and 5, however exhibited increases in the rates of notifiable cases at 32. (%) and 26.5%, respectively. Region 4 (11.2) and CARAGA (14.2) likewise experienced a rise in rates of notifiable TB cases. Sources say that the rise in notifiable cases could be attributed to intensified government programs on TB detection and prevention and would not automatically mean a higher prevalence rate in the areas affected compared to other regions.

Table 33. Notifiable Respiratory TB Diseases: 1998-2000

Region	Year						Growth Rate
	1998		1999		2000		
	Number	Rate	Number	Rate	Number	Rate	
Philippines	131,456	179.6	144,932	193.9	126,489	165.7	-3.9
NCR	31,040	296.4	25,125	246.1	24,937	239.7	-10.1
CAR	2,098	158.6	1,729	126	1,337	95.3	-22.5
Region 1	9,107	230.5	6,149	150.9	5,030	121.3	-27.5
Region 2	3,582	134.9	4,243	154.8	3,331	119	-6.1
Region 3	10,827	146.8	12,082	160.3	11,699	152	1.8
Region 4	12,982	117.4	15,482	140.2	16,428	145.1	11.2
Region 5	7,929	173	11,659	249.9	13,170	277	26.5
Region 6	14,441	240.2	18,607	299.4	14,691	232.1	-1.7
Region 7	4,304	81.6	6,027	110.9	4,417	79.7	-1.2
Region 8	2,975	96.8	5,029	137.1	6,404	170.9	32.9
Region 9	4,918	163.6	5,724	185.9	4,885	154.9	-2.7
Region 10	4,075	153.1	5,214	193	4,245	153	0.0
Region 11			7,961	155.9	5,322	101.6	-34.8
Region 12	5,299	206.4	4,660	179.3	4,262	160.2	-11.9
ARMM	15,385	721.1	12,463	579.4	2,871	131.3	-57.3
CARAGA	2,494	121.4	2,752	128.9	3,460	158.4	14.2

Source: DOH

TB Case Finding

Table 34 shows the case finding indicators of the National Tuberculosis Program (NTP). In the period covered, 2000 to 2002, the positivity rate (total smear-positive over number examined) has increased by 11.5%.

The number of smear-positive TB cases and TB case notification rates declined by 28% and 18%. Case detection rate likewise dropped by 28%. These decreases could be attributed to any of the following factors:

- 1) decrease in false positive readings due to improvement of laboratory performance
- 2) prioritizing the provision of medicines to smear-positive cases,
- 3) decrease of over-diagnosis through chest X-ray (CXR)
- 4) active case finding
- 5) insufficient drug supply.

(Source: Joint Tuberculosis Programme Review in the Philippines 2002)

Table 34. Case Finding Indicators: 2000-2002

Case finding Indicators	Year			Growth
	2000	2001	2002	Rate
1. Estimated national population	76.3 million	77.8 million	79.5 million	2.1
2. Number examined	614,332	449,460	257,157	(35.3)
3. Total number of smear (+)cases [No. new Sm(+) + No. Old Sm (+)]	75,634	64,720	39,374	(27.8)
4. Positivity Rate (Tot. Sm+/Number examined)	12.31	14	15.3	11.5
5. Case Detection Rate (Tot. pop. X 145/100,000)	62.3	53	32	(28.3)
5. Proportion of Sp(+) to total cases (Tot.Sm+ /Total TB cases)	58.9	60.4	54.2	(4.1)
6. TB case notification rate	168.3	137.6		(18.2)

Source: NTP Accomplishment Report DOH

In 2001, the new sputum initiated cases (x 100,000) in the Philippines was pegged at 81%. Regional statistics showed that CARAGA recorded the highest new sputum initiated rate at 130.2. This was followed by Region 11 at 103.6, while Regions 5 and 6 had comparative rates of 100.5 and 101.4. CAR (52.3) reflected the lowest rate in new sputum initiated cases, as can be gleaned from Table 35.

The country experienced a decline of 5% in the growth rate of new sputum initiated cases during the period 1998-2001. Comparative statistics indicate that Region 3 had the biggest negative growth rate at 21.2%, followed by NCR (16.3) and Region 11 (14.3).

Among the regions which experienced a positive growth in new sputum initiated cases were Region 8, ranked first (118%), Region 11 (14.3) and Region 9 (11.8). Other regions with positive growth rates were Caraga and Region 6.

Table 35. New Sputum Initiated Cases (Rate), By Region:1998-2001

CHDs	Year/Rate				Growth
	1998	1999	2000	2001	Rate
Philippines	95.3	98.6	87.5	81	-5.3
NCR	117.4	74.2	76.2	68.8	-16.3
CAR	72		57.3	52.3	-10.1
Region 1	103.8	66.1	65.3	62.2	-15.7
Region 2	108.8	100.9	89.4	79.2	-10.0
Region 3	134.2	110	93.6	65.7	-21.2
Region 4	59.1	134.7	74.7	63.5	2.4
Region 5	112.8	105.7	91.7	101	-3.6
Region 6	82.6	107.1	110.2	101	6.9
Region 7	87.7	91.3	74.9	87.6	0.0
Region 8	8.4	124.8	114.5	86.9	117.9
Region 9	65	101.5	95.2	90.9	11.8
Region 10	126	110.8	99.2	94.3	-9.2
Region 11	69.7	89.1	82.6	104	14.3
Region 12	116.1	115.3	101.3	77.1	-12.8
ARMM	101.2	96.4	81	83.2	-6.3
CARAGA	96.4	125.4	132.7	130.2	10.5

Source: DOH

TB Cases and Rates

Total TB cases comprise the combined new and old sputum initiated treatment and the x-ray initiated treatment. In 2001, the national statistics for TB cases recorded a rate of 153.7. Regions showing the highest rates of TB cases included CARAGA (219.2), Region 5(199.9) and NCR (193.7). Lowest rate was posted by Region 12 at 96.0

TB case rates in the country dropped by 10.5% during the period 1998-2001. This decline was due to the negative trend in almost all the regions during this period, except for CARAGA and Region 5, as shown in Table 36.

Table 36. TB Cases (Rate), By Region:1998-2001

CHDs	Year/Rate				Growth
	1998	1999	2000	2001	Rate
Philippines	214.2	193.2	169.8	153.7	-10.5
NCR	287.9	185.3	196.1	193.7	-12.4
CAR	188.6		157.1	114.3	-15.4
Region 1	271.3	179.4	165.2	142	-19.4
Region 2	216.7	222.8	139	136	-14.4
Region 3	247	214.1	185.6	129.8	-19.3
Region 4	171.1	240.9	162.1	116.3	-12.1
Region 5	196.9	174.4	162.8	199.9	0.5
Region 6	201.8	202	196.7	189.1	-2.1
Region 7	137	121.8	101.9	127.7	-2.3
Region 8	154.4	219.7	188.3	147.9	-1.4
Region 9	186	211.7	177.3	183.5	-0.5
Region 10	253.1	177.5	153.6	147.5	-16.5
Region 11	214	181.9	143.8	158.7	-9.5
Region 12	245.4	228.9	176.5	96	-26.9
ARMM	219.4	195.2	143.9	145.5	-12.8
CARAGA	178.2	185.8	252.2	219.2	7.1

Source: Field Health Information System, DOH

Rate of Smear Positive Cases

In 2002, smear-positive cases turned out to be more than half or 54.2% of the total TB cases handled. Regions 7 and Region 10 reflected the highest proportion of smear-positive cases at 80 and 79 percent, respectively. NCR had the lowest smear-positive proportion at only 37%.

Average growth rate in the proportion of smear positive cases to total cases declined by 4% within the period 2000-2002. Regions that showed the biggest decline were CAR (16.2) and Region 9 (14.4). The only regions which indicated positive growth rates were Region 10 (17.1), Region 3 (4.6), Region 12 (2.6), CARAGA (2.5) and Region 6 (2.0).

Table 37. Proportion of Smear+ to Total Cases By Region:2000-2002

Area	Year			Growth Rate
	2000	2001	2002	
Philippines	58.9	60.4	54.2	-4.1
NCR	39.8	50	37.1	-3.5
CAR	62.3	59	43.8	-16.2
Region 1	53.2	44.8	47.5	-5.5
Region 2	68.4	62.1	62.2	-4.6
Region 3	53.7	60.2	58.8	4.6
Region 4	58.3	63.1	56.7	-1.4
Region 5	68.3	51.1	56.7	-8.9
Region 6	62.8	80.9	65.3	2.0
Region 7	88.5	73.7	80.2	-4.8
Region 8	65.3	57.5	64.5	-0.6
Region 9	58.9	55.3	43.2	-14.4
Region 10	57.7	66.4	79.1	17.1
Region 11	60	62.8	54.9	-4.3
Region 12	64.7	82	68.1	2.6
CARAGA	72.4	71.7	76.1	2.5
ARMM	65.3	62.4	63.1	-1.7

Source: Infectious Diseases Office, DOH

Treatment Outcome

In 2001, there were a total of 44,838 new sputum smear positive diagnosed patients in the Philippines. The number of patients who have been cured totaled 33,914, accounting for 76% of the total new SM(+) patients, indicating a high treatment success rate. Patients who have completed treatment totaled 5,629 in the same year and they included any of the following: 1) those who have completed treatment without follow-up sputum examinations during the treatment, or with only one negative sputum examination during treatment, or without sputum examination in the last month of treatment; 2) sputum smear-negative patients who have completed treatment.

Those who experienced treatment failure numbered 625 or 11% of those who have been treated. They were either found to be smear positive, five months after treatment or later during the treatment or were smear negative before treatment who became smear positive during treatment. Patients who died for any reason during the treatment numbered 1,005 (17.9).

Table 39 shows that during the period 1999-2001, the number of cured cases grew by almost 17%. The cure rate of diagnosed patients increased by 4.8%. However, completion rate declined by 5.6%.

Table 38. Treatment Outcome by Year, Philippines:1999-2001

	1999	2000	2001	Growth %
New SM(+) evaluated	35,842	50,196	44,838	11.8
Number cured	24,821	36,459	33,914	16.9
Cure rate	69	73	76	4.8
Number completed	6,319	7,606	5,629	-5.6
Completion rate	18	15	13	
No. of Tx Failure	554	620	625	6.2
No. of transferred-out	1,140	1,402	1,160	0.9
No. of lost	2,091	2,960	2,590	11.3
Number died	958	1,149	1,005	2.4

Source: DOH

The regions which registered the highest cure rate were Regions 1 and 10 with 89% each, followed by Region 7 and CARAGA (88%). It is noted that CAR experienced the lowest cure rate but this could be attributed to the incomplete report submitted by the region to the national office. However, in terms of completion rate (not classified as cure or failure), the region experienced the highest at 45.1%.

As shown in Table 39, Region 7 exhibited the biggest share of failure treatment at 54%. This was followed by CARAGA and ARMM with comparative shares of 29% and 27%, respectively. On the other hand, NCR (3.5) and Bicol (3.4) enjoyed the least share of failed treatment outcome. Number of deaths due to TB was highest for Regions 4 and 5 which reported 132 and 130 deaths, respectively.

Table 39. Treatment Outcome-NTP, By Region: 2001

CHD	New SM(+)	Number	Cure	Number	Completion	No of Tx	No. of	No. of	Number
	evaluated	Cured	Rate	Completed	rate	Failure	Transfer-out	lost	died
Philippine			76	5629	12.5	625	1160	259	1005
NCR			70	430	24	15	30	56	17
CAR			37.3	23	45	1	1	4	3
Region 1			89	113	4.4	23	29	72	45
Region 2			69.9	314	22.7	42	37	60	36
Region 3			68.9	953	21.6	64	74	209	73
Region 4			67.9	750	15.4	119	112	449	132
Region 5			72	835	17	28	79	318	130
Region 6			83	269	7.1	28	79	178	90
Region 7			87.9	81	2.2	44	62	177	91
Region 8			61.4	411	23	61	40	118	61
Region 9			77	170	13	13	59	28	32
Region			89.5	56	9.5	4	31	21	19
Region			69	493	18	41	68	192	52
Region			74.4	239	11.1	7	75	123	73
ARMM			75	356	7	96	329	485	97
CARAGA			88	136	4.4	39	65	90	50

Source: DOH

Targets

Data from the Infectious Diseases Office reveal the targeted number of New Sputum(+) cases and TB Case Detection Rate for 2003 using a 20% increase from actual data in 2001. The TB Control Program targetted 83,611 new sputum(+) for 2003 or a 24,270 increase from 2001 actual cases. CDR is projected to increase to 73.8 (2003) from 53 in 2001. Table 40 lists the aforesaid targeted figures for 2003.

**Table 40. CDR & No. of New Sputum(+) Cases, By Region:
2001,2003**

	Population	2001		2003	
		No. of new Sputum(+) cases	CDR %	No. of new sputum(+) at 20% inc.*	CDR %
CHDs	2001				
Philippines	77,865,927	59,341	53	83,611	73.8
NCR	10,573,733	7,833	55	10,681	75
CAR	1,435,013	576	30.9	960	50.9
Region 1	4,215,590	2,537	45	3,690	65
Region 2	2,853,617	2,262	58	3,042	68
Region 3	7,847,167	4,953	46	7,154	66
Region 4	11,631,562	7,004	42	9,806	62
Region 5	4,836,216	5,065	72	6,398	92
Region 6	6,440,957	4,295	51.1	5,979	71.1
Region 7	5,650,625	4,964	62	6,565	82
Region 8	3,824,326	3,291	63	4,335	83
Region 9	3,228,409	2,896	66	6,379	86
Region 10	2,834,485	2,673	68	3,671	88
Region 11	5,311,390	4,179	57	6,378	77
Region 12	2,723,455	2,026	54	2,699	74
ARMM	2,236,601	1,850	63	2,937	83
CARAGA	2,222,781	2,937	91	2,937	91

*Targetted no. of new sputum(+) cases is by 20% of 2001 new sputum (+) cases

Formula used:

Estimated new sputum(+) cases=145/100,000 X Total population

CDR= New sputum positive cases found x100

Estimated new sputum (+) cases

Source: Infectious Diseases Offices, DOH

11.0 History of Tuberculosis Control in the Philippines

Tuberculosis has always been a universal scourge. In the Philippines, TB control efforts have become an essential part of the country's health history. Thus, the breakthroughs and advancements in this diseases, in all its aspects have led to the following milestones in the country's battle against the disease during the past 90 years.

1910 – 1930

- In 1910, TB affected a significant number of Filipinos. Mortality rate was at 487 per 100,000
- Philippine Islands Anti-Tuberculosis Society – the first private organization founded on July 29, 1910 led by Gov. Cameron Forbes and Mrs. Eleanor Franklin Egan who became its first president and Hon. Sergio Osmena as its first vice president. In 1911, the Society opened the San Juan del Monte Sanatorium with 14 nipa-hut cottages that admitted the initial cases.
- On Dec. 14, 1918, Santol Sanatorium was built in Balik-Balik. Medical doctors were provided orientation on TB patient care. No specific treatment regimen was available then, except providing fresh air. Sunshine, nutritious foods, bed rests and isolation.
- In 1926, x-ray services were opened. Fluoroscopy for case finding was extensively used until miniature or screening radiography was developed.

1930 – 1950

- In 1933, the powers and duties of the TB Commission were transferred to the Bureau of Health.
- For a few years, horse-race benefits were held to support the TB patients of the Anti-Tuberculosis Society. In 1934, the Sweepstakes Law (RA 4130) established the Philippine Charity Sweepstakes Office (PCSO) to fund the Society's operations. The name of the Society was later changed to Philippine Tuberculosis Society, Inc. or PTSI.
- On February 21, 1938, the Santol Sanatorium was renamed Quezon Institute in recognition of the support given by Pres. Manuel Luis Quezon. Treatment modalities at the QI included: pneumothorax, pneumoperitoneum, thoracoplasty, Calcium injections, rest and good nutrition.
- In 1944, Streptomycin injection was first used as part of the treatment for TB.
- In 1946, the Philippine Public Health Rehabilitation Act established a joint program between the Bureau of Health and the US Public Health Service with 27 physicians and 12 phthysiologists from the Bureau doing TB work.
- In 1947, pneumotherapy, thoracoplasty and prolonged hospitalization were still mainstays in the management at the Quezon Institute.
- In 1948, the Quezon Institute was completely rehabilitated. At the same time, the TB Commission was placed under the Public Health Laboratories.

1950 – 1970

- In 1950, the TB Commission emerged as the Division of Tuberculosis under the Secretary of Health. The division established the TB Center at the DOH compound and collaborated with the TB Ward of San Lazaro Hospital. Services included chest x-ray sputum and bronchial washing examinations and case holding. Treatment consisted of Streptomycin injection plus with PAS tablets.
- PTSI extended its delivery through the establishment of several Chest Clinics between 1950 – 1960 in the provinces and cities outside Manila. Mobile x-ray units and static chest clinics were put up in some areas of Luzon, Visayas and Mindanao to make TB services accessible throughout the country.
- The first pneumonectomy at the Quezon Institute was done in 1949 on a far-advanced TB case.
- Between 1951 and 1952, the BCG vaccination program, assisted by UNICEF was introduced in the country as a preventive measure against TB.
- In 1954, Congress passed the Tuberculosis Law (R.A. 1136) which became the basis for the creation of the Division of Tuberculosis under an appointed director and the National Tuberculosis Center of the Philippines at the DOH Compound. It also mandated the provision of funds to support the operations of the National TB Control Program.
- In 1954, the triple drug therapy was also implemented. It consisted of the anti-tuberculosis drugs: Isoniazid (INH), Para-Amino Salicylate (PAS) and Streptomycin. UNICEF assisted the program with drugs. The combination was given for both confined and dispensary patients. INH and SM were given free during confinement.
- In the reorganization per E.O. dated February 20, 1958 and implemented on March 6, 1959, the Bureau of Disease Control was established and the Division of Tuberculosis was placed under it.
- 1964 marked the conduct of the Minglanilla Prevalence Survey in Cebu Province that showed the prevalence of smear positive case at 4/1000. During this period, Quezon Institute was operating at its largest bed capacity of 1, 350.
- In 1968, the National TB Program accelerated and expanded the control activities to the RHUs that were then established under R.A. 1086. Treatment was reformulated to INH-SM combination for 12 months. PAS was withdrawn from the therapy due to its undesirable effects.

1970 –1990

- The mid 70s created a more active partnership between the DOH and PTS. The new thrust emphasized on: importance of BCG vaccination, case finding through sputum in microscopy and case holding/ treatment through domiciliary means.

- The partnership also fostered the establishment of the National Institute of Tuberculosis (NIT) in 1976 in cooperation with WHO and UNICEF.
- In 1973, the PTS home program or domiciliary care was launched which led to the reduction of beds at Quezon Institute to 700. The Philippine College of Chest Physicians (PCCP), a medical society, was formed and accredited by the Philippine Medical Association (PMA), with TB as one of its initial concerns. The new TB Control Program was implemented in all RHUs and admissions at Quezon Institute were limited to emergency and seriously-ill cases.
- In 1974, PTS was using the 18-month INH-SM-EMB regimen for treatment. EMB replaced the oral PAS tablets in the formerly used combination.
- In 1981 to 1983, the first National TB Prevalence Survey was carried out by NIT through WHO and UNICEF.
- During this time, the Lung Center of the Philippines was established as a tertiary hospital for non-TB and cancer cases and as a referral center for complicated or surgical TB cases. The transfer of many senior staff members from QI to LCP depleted the staff of the Institute and adversely affected its operation.
- Based on the result of the 1981–83 prevalence study, initial researches conducted at QI and the NIT pilot study in Pampanga, a new treatment regimen, already being used in many TB centers in the world was introduced for the National TB Control Program in 1984. This is the Short-Course Chemotherapy or SCC that highlighted Rifampicin, a potent bactericidal drug for the acid-fast bacilli that, used together with PZA, made treatment shorter for patients with active TB.
- At this time also, a fourth drug for the Intensive Phase, Streptomycin or Ethambutol was being used at the QI for some confined patients.
- In 1985, the Sisters of Mary Congregation took over the care and management of 150 patients at the Quezon Institute. The congregation rehabilitated the charity wards of the Institute in 1986 as more charity cases (450) were handled by them.
- After People Power revolution in 1986, the Ministry of Health was renamed Department of Health and reorganized per E.O. 119. The TB Control Service (TBCS) was created under the Office for Public Health Services with 40 plantilla positions.
- In 1988, a revised manual of procedures of NTP was formulated providing SCC treatment for sputum (+) and cavitary cases and standard regimen or SR for initiative cases. DOH subsidy to PTS reached its peak to P25 million a year.

1990 to Present

- In 1990, the NTP got a big boost with the financial and technical support from the Italian Govt. and WB under the Philippine Health Development Project for five years. The former focused in improving TB control efforts in the Regions 5, 8 and 10 while WB provided case finding packages to cities and selected provinces.
- The Japanese International Development Agency (JICA) provided technical and financial support for a TB control in Cebu.
- The era of the 90s saw active interactions of various sectors fighting TB. In 1994, PhilCAT (Philippine Coalition Against TB) was organized with PCCP, DOH and PSMID, PTSI, Cure TB and ACCP.
- In 1995, the TB Clinic of the University of Santo Tomas initiated the use of directly observed treatment in managing its out-patient TB cases.
- In 1996, DOH piloted the Directly Observed Treatment Short Course (DOTS) strategy in Batangas, Antique and Iloilo City with technical and financial support from WHO. DOTS was subsequently replicated in other areas and expectedly, 65% of the total population shall have access to DOTS strategy by June 2000.
- The expansion was facilitated by the active participation of LGUs, utilization of barangay health workers as treatment partners and support from various international agencies such as the WHO, World Bank, JICA, World Vision-Canadian International Development Agency, Italian Cooperation for Development, Australian Aid and Medicos del Mundo.
- In 1997, another division of PTS, the National Research and Training Center or NRTC was built.
- The mid-1990s was a period of intensified national campaign to increase awareness about the disease and mobilize support. In 1996, the Philippine President proclaimed August 19 of every year as the National TB Day (Proclamation No. 840). That year registered the highest notification rate at 403.5/100,000.
- In 1998, a national communication plan was formulated by DOH with other stakeholders and this led to the launching of TB alert as a communication strategy.
- PhilCAT spearheaded the observance of World TB Day which had been set yearly every March 24 and started its annual conventions on TB. The Philippine Pediatric Society presented the second consensus on childhood TB during the 1997 annual PhilCAT convention.
- In 1997, DOH subcontracted the conduct of the Second National TB Prevalence Survey with the Tropical Disease Foundation. The survey showed that the prevalence of sputum positives was 3.1 per 1000 population and

annual risk of infection was 2.3%. During this year, bioavailability problem on Rifampicin was detected that led to the Department to purchase anti-TB drugs through WHO.

- In 1999, a new consensus on TB diagnosis, treatment and control was formulated through a consultative process coordinated by the Philippine Society of Microbiology and Infectious Disease (PSMID), PCCP and DOH under the auspices of PhilCAT.
- In September 1998, the National TB Control Program became one of the flagships of the DOH. This enabled the issuance of Memorandum Circular No. 98-155 by the President.
- PTISI with its 52 branches across the country, underwent intensive reorganization and capacity building to be in consonance with the trends in TB control. It embarked on a project on DOTS in all its branches, funded by JICA with technical support from DOH.
- In March 2001, PTISI, being the member organization in the country, hosted the 21st Eastern Region IUATLD Conference with the PCCP Annual Convention (*Source: History of Tuberculosis in the Philippines*).

12.0 POLICY ENVIRONMENT FOR TUBERCULOSIS

The Philippine Government made TB Control and Prevention as one of the top national priorities. TB control and prevention derives impetus from the following government policies and agenda:

- TB has been classified as one of the communicable diseases that must be reported to the public health authorities. This is provided for in Republic Act. No. 3573 Section 2 which specifically states: *“Notice to the Philippine Health Service about communicable diseases. Every physician, director, superintendent or person in-charge of hospital institution or dispensary having knowledge of, or any householder, tenant or occupant of any building, or director of college convent; diseases shall immediately notify the nearest station either by telephone, by messenger or by written notice specifying the disease and the name and address of the person affected.”*
- The TB Commission 1932 through Act No. 3743 under the Philippine Health Services was created. Later in 1933, the powers and duties of the TB Commission were transferred to the Bureau of Health.
- In 1934, the Sweepstakes Law (RA 4130) established the Philippine Charity Sweepstakes Office (PCSO) primarily to fund the Philippine Islands Anti-Tuberculosis Society (a private organization, founded in 1910 and initially supported by private donations).
- In 1946, the Philippine Public Health Rehabilitation Act established a joint program between the Bureau of Health and the US Public Health Service with 27 physicians

and 12 phthisiologists from the Bureau doing TB work. Also in this year, the TB Commission was placed under the Public Health Laboratories.

- In 1950, the TB Commission emerged as the Division of Tuberculosis under the Secretary of Health.
- In 1954, Congress passed the Tuberculosis Law (R.A. 1136) assigning the primary responsibility for TB control to the Department of Health. It became the basis for the creation of the Division of Tuberculosis under an appointed director and the National Tuberculosis Center of the Philippines at the DOH Compound. The Division consisted of 5 sections: 1)Administrative, Clinics and Therapeutics, 2) Prevention and Immunization, 3) X-Ray Operations, 4) Laboratory and 5) Research. It also mandated the provision of funds to support the operations of the National TB Control Program.
- The 1956 reorganization of the Bureau of Health created eight regional health offices, each headed by a Regional Health Director, authorized and delegated to manage/supervise health activities in the respective region. Curative and preventive services were placed under their management though policy still emanated from the Central level.
- In the reorganization per E.O. dated February 20, 1958 and implemented on March 6, 1959, the Bureau of Disease Control was established and the Division of Tuberculosis was placed under it.
- In 1968, the National TB Program accelerated and expanded the control activities to the RHUs that were then established under R.A. 1086. RHU personnel were trained to conduct case finding through direct sputum microscopy and case holding. Cases at the RHUs needing chest x-ray were referred to the nearest static chest center. Treatment was reformulated to INH-SM combination for 12 months. PAS was withdrawn from the therapy due to its undesirable effects.
- In 1976, a Presidential Decree was issued for compulsory BCG vaccination that became a prime component of the Expanded Program for Immunization or EPI.
- After People Power revolution in 1986, the Ministry of Health was renamed Department of Health as reorganized per E.O. 119. The TB Control Service (TBCS) was created under the Office for Public Health Services with 40 plantilla positions. Its mandate, as stipulated in Sec. 11. (b) read as follows: *“The Tuberculosis Control Service shall formulate plans, policies, standards and techniques relative to the control of morbidity and mortality from tuberculosis; provide consultative, training and advisory services to implementing agencies; and conduct studies and research related to tuberculosis.”*
- The Local Government Code of 1991 changed the mandate of the DOH with health services devolved to the autonomous Local Government Units. This gave the latter an opportunity to manage the TB Program and deliver its activities to their constituents. The LGUs, thru the RHUs and BHSs, served as implementors while DOH was confined to policy development regulation and provision of technical and financial assistance.

- In 1995, the TBCS issued the revised policies and guidelines on the diagnosis and management of TB as contained in Administrative Order No. 1-A s., 1995 which mainly adopted the WHO recommended policies. The thrust adopted by NTP was to improve case holding activities.
- The mid-1990s was a period of intensified national campaign to increase awareness about the disease and mobilize support. In 1996, the Philippine President proclaimed August 19 of every year as the National TB Day (Proclamation No. 840). That year registered the highest notification rate at 403.5/100,000.
- Also in 1996, DOH piloted the DOTS strategy. The project showed improved treatment outcome, hence DOTS strategy was officially adopted by NTP as a strategy with issuance of Administrative Order No. 24 s., 1996.
- In 1998, a national communication plan was formulated by DOH with other stakeholders and this led to the launching of TB alert as a communication strategy.
- In September 1998, the National TB Control Program became one of the flagships of the DOH. This enabled the issuance of Memorandum Circular No. 98-155 by the President, then the concurrent Secretary of the Department of Interior and Local Government, that pronounced the TB Control Program as the no. 1 priority health program of the LGUs and prescribed the DOTS strategy. The NTP is a priority under the public health area of the Health Sector Reform Agenda formulated in 1999. Procurement of anti-TB drugs was transferred to the Regional Health Offices (*Sources: History of Tuberculosis in the Philippines; Towards Improved Health Policy and Systems Research (HPSR Monograph Series 1998)*)

13.0 FUNDING RESOURCES FOR TB CONTROL AND PREVENTION

TB Budget

In the Philippines, one major reason for the successful expansion exercise that is progressing according to plan is the strong political support behind it. This political backing is concretely exemplified by budgetary resources that the national and local governments provide to the National TB Program (NTP). The budget for TB control is explicitly provided in the General Appropriations Act passed by the Philippines legislative body each year. This enables the NTP to buy anti-drugs and laboratory supplies and fund other related activities such as training, monitoring, advocacy and policy development, as well as granting assistance to national NGOs working on TB.

The Department of Health (DOH) has been implementing a National TB Control Program since 1978. In 1997, the government invested P162.0 million to strengthen it. Short Course Chemotherapy drugs for TB patients were procured in bulk and distributed by DOH. For the last five years, there were about 160,000 to 280,000 TB cases discovered annually.

The Government budget reflected as TB Budget refers to the fixed cost of TB drugs and supplies like reagents. There are other costs for TB Control for training, monitoring, etc... but these are variable and are sourced out from other regular government funds or from outside donors/partners.

There is an increasing budget for TB drugs and supplies as shown in the graph. These are absolute figures based on targeted number of cases. Cases are targeted based on previous accomplishments and goals of program. The final amount reflected are those charged to government funds excluding assistance from other sources.

In 2001, for example, cost of drugs for 10,000 cases in the National Capital Region was provided by World Bank through the Urban Health and Nutrition and Program.

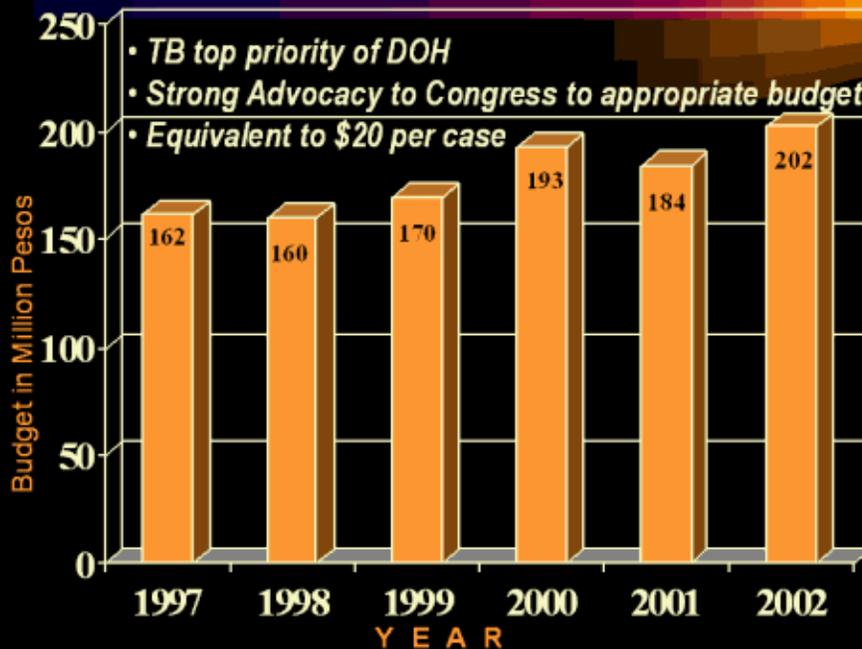
The final number of patients provided free drugs from DOH would slightly deviate from target based on prevailing prices of drugs.

Increase in TB budget was made possible because of the political commitment of the DOH leadership to support TB. This was highlighted in 1999 when DOH embarked on a Health Sector Reform Agenda to improve health services. In the Health Sector Reform Agenda prepared in 1999 by the Philippine Department of Health, NTP is included as a priority for multi-year budgeting, a proposal which will be submitted to Congress.

The annual NTP budget of about US\$3 million includes drug regimens for about 150,000 TB patients notified yearly. For the year 2001, the budget was increased by 25% over the previous year. Part of this amount will be used to manage children with TB, a segment of the population that was not included in the past.

There is also a World Bank loan, part of which has been used to buy anti-TB drugs that enabled big urban areas to build a buffer stock of anti-TB drugs and laboratory supplies. The Philippine Government is also studying the possibility of using the social health insurance to finance TB services.

TB Drug Budget 1997 - 2002



Records of the Department of Budget and Management show that in 2002, a total of Php 37,112,000 was appropriated for tuberculosis prevention and control. This amount was to be spent mainly for tuberculosis and control (59.6%) and for assistance to the Philippine Tuberculosis Society. The bulk of this amount was to be spent for maintenance and other appropriations which made up 97 percent of the total.

As seen in Table 41, tuberculosis prevention and control was accorded 4.8 percent of the total budget allocated to Disease Prevention and Control amounting to Php763,138,000 for the year 2002.

Table 41. Budget Appropriations for TB Control and Prevention (FY2002)

	Personal Services	Maintenance & Other Operating Expenses	Total
2. Disease Prevention and Control	18,301,000	792,203,000	810,504,000
a. Formulation of health policies and support mechanics for disease prevention and control	1,302,000	1,200,000	2,502,000
b. Tuberculosis prevention and control	1,105,000	36,007,000	37,112,000
1. Tuberculosis control	1,105,000	21,007,000	22,112,000
2. Assistance to Philippine Tuberculosis Society (PTS)		15,000,000	15,000,000
c. Malaria prevention and control		4,560,000	4,560,000
d. Schistosomiasis prevention and control		3,192,000	3,192,000
e. Vaccine preventable disease control		425,299,000	425,299,000
1. Expanded program on immunization		388,960,000	388,960,000
2. Vaccine self-sufficiency		36,339,000	36,339,000
f. Prevention and control of other infections diseases including dengue, leprosy, filariasis, rabies, food and water-borne diseases, soil transmitted helminthiasis, acute respiratory infections, CDD, STD/AIDS and other infectious diseases		50,000,000	50,000,000
g. Operation of the Philippine National AIDS Council (PMAC) including its secretariat	1,959,000	12,000,000	13,959,000
h. Degenerative diseases prevention and control programs including cardio-vascular diseases, cancer, diabetes, asthma, kidney diseases and other emerging degenerative and non-communicable diseases	4,716,000	25,980,000	30,696,000
i. Family health and primary health care	5,701,000	222,084,000	227,785,000
j. Environmental and occupational health care programs, including operations of the inter-agency committee on environmental health	3,518,000	8,600,000	12,118,000
k. Provision of support mechanics for population policy Initiatives		3,281,000	3,281,000
Total	16,999,000	747,244,000	763,138,000

Source: Department of Budget and Management

In addition to the general appropriations for TB control and prevention lodged with the DOH Central Office, each of the 15 regions in the Philippines was also provided varying amounts for health operations, *including TB control operations*. This totaled to some Php20,347,000 in the 15 regions (Table 42). Although the fund appropriations did not specify the exact amount that was to be spent exclusively for TB control and operations, the funds nevertheless represented a potential source of resources for TB control and prevention.

**Table 42. Budget Appropriations for Health Operations, including TB Control & Prevention,
By Region: FY2002**

	Personal Services	Maintenance & Other Operating Expenses	Total
1. Center for Health Development for Metro Manila b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	77,757,000	110,486,000	188,243,000
		44,584,000	44,584,000
2. Center for Health Development for Ilocos b. Health operations, including TB control operations, disease prevention and control, health promotion and other health operations	166,013,000	146,541,000	312,554,000
		28,210,000	28,210,000
3. Center for Health Development for Cordillera b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	153,734,000	110,001,000	263,735,000
		12,400,000	12,400,000
4. Center for Health Development for Cagayan Valley b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	139,231,000	126,877,000	266,108,000
		13,128,000	13,128,000
5. Center for Health Development for Central Luzon b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	192,694,000	223,396,000	416,090,000
		42,491,000	42,491,000
6. Center for Health Development for Southern Tagalog b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	169,719,000	207,680,000	377,399,000
		51,424,000	51,424,000
7. Center for Health Development for Bicol b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	180,702,000	163,916,000	344,618,000
		27,310,000	27,310,000
8. Center for Health Development for Western Visayas b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	178,659,000	176,282,000	356,941,000
		12,747,000	12,747,000
9. Center for Health Development for Central Visayas b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	242,230,000	175,739,000	417,969,000
		28,528,000	28,528,000
10. Center for Health Development for Eastern Visayas b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	86,082,000	77,362,000	163,444,000
		9,679,000	9,679,000
operations, disease prevention and control, health promotion and other health operations		30,350,000	30,350,000

11. Center for Health Development for Western Mindanao b. Health operations, Including TB control	128,861,000	144,415,000	273,276,000
12. Center for Health Development for Northern Mindanao b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	137,810,000	162,990,000 22,655,000	300,800,000 22,655,000
13. Center for Health Development for Southern Mindanao b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	192,420,000	172,914,000 34,586,000	365,334,000 34,586,000
14. Center for Health Development for Central Mindanao b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	83,706,000	107,169,000 16,965,000	190,875,000 16,965,000
15. Center for Health Development for Caraga b. Health operations, Including TB control operations, disease prevention and control, health promotion and other health operations	63,100,000	80,788,000 20,347,000	143,888,000 20,347,000

Source: Department of Budget and Management

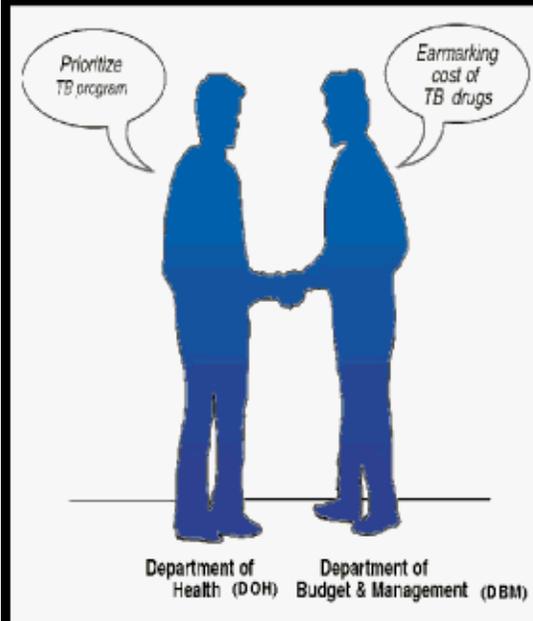
Health and Finance Dynamics

Under the Reform Agenda, TB was targeted for elimination together with four (4) other diseases to drastically reduce the burden of the disease. To achieve the goals of disease elimination, DOH proposed a multi-year budget so that the five (5) priority public health programs will be insulated from the uncertainties of the annual budgetary process. The scheme was supposed to allow for wider latitude in the implementation of public health programs with access to funds based on performance benchmarks and level of utilization. This scheme was not possible with the usual yearly government appropriations. However, legislative action was required to enact this scheme.

Because of strong advocacy with the Department of Budget and Management (DBM), it agreed to “earmark” cost of TB drugs and supplies in lieu of the multi-year budget. It realized that indeed the TB program was a priority as propounded by DOH.

What is the dynamics involved? Under the Health Sector Reform Agenda, a line item in the budget called Health Operations, including TB Control Operations, Disease Prevention and Control, Health Promotion and other Health Operations was proposed and approved by DBM starting 2000. The DOH then proposed a baseline budget for TB Control. DBM earmarks the budget for TB meaning it agrees to approve the budget proposed for TB (if it cannot raise it further) and endorses it to Congress for appropriation. Earmarking guaranteed that the budget proposed and approved for cost of TB drugs was not affected by any budgetary cuts before and after approval of the budget.

Health and Finance Dynamics



- ▶ Line item in the budget called Health Operation, including TB Control Operations, Disease Prevention and Control was created
- ▶ Baseline budget for TB Control Program proposed by DOH
- ▶ DBM earmarks cost of TB drugs and supplies in the DOH budget

SOURCE: www.doh.gov.ph

14.0 PERSPECTIVES IN PRIVATE SECTOR PARTICIPATION IN THE NATIONAL TUBERCULOSIS PROGRAM: OPPORTUNITIES AND CHALLENGES

The conditions surrounding the initiative of the Philippine Coalition Against Tuberculosis (PhilCAT) to integrate private sector participation in the National Tuberculosis Program (NTP) are generally supportive but inclined to being cautious. On one hand, institutions such as the World Health Organization (WHO), the Japan International Cooperation Agency (JICA), and the Center for Disease Control and Prevention (CDC) extol the PhilCAT as one of the more, if not most active and promising non-government organizations involved in the campaign against TB among developing countries. However, there is also a certain level of reservation as to private physician participation having the sustained, wide impact - of public health proportions - seen needed in fighting TB in the Philippines.

In preparation for the PhilCAT evaluation and planning exercise scheduled in February 2003, interviews with leading participants and key informants in the National TB Program were conducted over the course of two weeks. These interviews complemented the review of current literature and served to deepen insights and bring up-to-date some views on private sector participation in the anti-TB campaign. PhilCAT pre-selected the respondents for these interviews.

Among the interviews successfully conducted were with the Ms. Sheri-Nouane Johnson, MPH, and Dr. Vivian Sanchez-Lofranco of the Center for Disease Control and Prevention (CDC) Infectious Disease Surveillance and Control Project; Dr. Seiya Kato of the JICA Quality TB Control Program; Dr. Dongil Ahn of the WHO Stop Tuberculosis and Leprosy Elimination Program, and Dr. Alberto “Quasi” Romualdez, President of the Friendly Care Foundation and former Philippine Secretary of Health. An interview was scheduled with the Quality Assurance and Research division of the Philippine Health Insurance Corporation (PhilHealth) but was unsuccessful.

A Framework for Analysis

The purpose of this external analysis is to extend to participants of the PhilCAT evaluation and planning exercise a general view of the conditions surrounding the coalition’s initiatives for private physicians’/ sector’s involvement in the campaign against TB.

The principal approach is to explore the prospective areas of intervention – or in this case, areas of involvement or integration of the private sector – in the operations of the NTP. Independent activities of the PhilCAT beyond the NTP were not within the scope of this study, although some of its pilot initiatives (e.g., Family DOTS, DOTS in the Workplace) were actually sounded off to the respondents in order to acquire their opinions.

The premise of this approach is that the public policies and programs, including operating guidelines have to a great extent, been defined and are currently being implemented. They are already a result of consensus on the domestic front, and are aligned with international agreements. It would be important for PhilCAT to consider these as established operating frameworks, particularly in the initiative to extend the scope of DOTS (Directly Observed Therapy – Short Course) among the private sector.

In brief, this study explores the possible involvement of the private sector in the following:

- Case Finding
- Diagnostic Regimen
- Treatment Regimen
- Monitoring and Quality Assurance

Respondents’ views in any or all of these areas were acquired. These opinions were subsequently organized, along with findings from the review of literature, to develop the possible opportunities and challenges presented to the private sector in involving itself in the NTP.

14.1 Issues and Challenges

a. Case Finding

The clearest indication that the private sector might have a critical role in addressing the TB problem is the result of the 1997 National TB Prevalence Study (NTPS) that showed 36.2% of TB symptomatics consulted private physicians. This evidence was supported by both the WHO and JICA.

Subsequent issues arising from this finding however cloud the validity of the actual extent. These include:

- The discrepancy of reports between the national TB program office at DOH and sample validation from municipal health offices, which indicated that there might have been an over-reporting of incidents.
- Sample validation of patients presenting and initially diagnosed as TB subsequently being ruled out on sputum microscopy.

Evidently, the issues of case finding are intimately related to two other processes: reporting and diagnostics.

In the public sector program, TB case finding operating guidelines have been set. The WHO-prescribed basic program unit of one in every 100,000 population is followed, translated into the rural health unit. Implementing units are seen at the provincial, city, or municipal levels.

The JICA-funded Quality TB Program, implemented in coordination with the Department of Health (DOH) and local governments provides support for case finding through a training, equipment, and quality-assurance for microscopic examination of sputum samples.

Its current program is focused on:

- 1) Ensuring quality through capacity building and strengthening program monitoring, supervision and control. The main strategy for quality assurance is the establishment of core laboratories;
- 2) Networking of TB laboratories at all levels, including those operated or funded by other agencies;
- 3) Conducting operational research, including feasibility studies for TB laboratories, assistance in the national drug resistance survey, and discussions with the TB diagnostics committee.

The extent of the JICA program covers its original pilot site in Cebu, subsequently expanded to cover Bohol, Eastern Samar, and Negros, and in Luzon, Laguna, Rizal, Bulacan, and Nueva Ecija. It will network with Region 10 (Northern Mindanao) and 5 (Bicol), as well as with USAID supported programs in Regions 8, 12 and the Cordilleras. These are all geared towards the public TB programs.

In the private sector, there is no clear counterpart organization for case finding. Ostensibly, the consultation of the patient is the first encounter with the case. And it is likewise unclear how the case is reported or monitored by the public health system.

The extent of participation of the private physicians in case finding is constrained by the level of efficiencies that can be achieved. WHO references recommend that a laboratory should be able to study fifteen specimens per week. And, in the case that private physician administered patients account for only one third of the caseload, it might not be economical to train and equip laboratories dedicated to this segment. Mass surveys – as a jump-off point for TB management plans - are not advised as they too had been demonstrated as inefficient.

b. Diagnostic Regimen

The constraining factors for good case finding are also intimately related to the predominantly preferred x-ray diagnosis of PTB among private physicians.

Various papers and even the WHO admit that the practice of relying on x-ray readings is unfavorable as it is highly sensitive to diagnosis. Sputum microscopy is the preferred and recommended approach to diagnosis as it can account for an accuracy of 98%. JICA validation studies have concluded that a significant proportion of x-ray diagnosed TB had been shown to be false-positive when subjected to sputum microscopy. The repercussion is a foreseen higher incidence of drug-resistance.

The lack of consensus, and its predecessor, information, on this preferred diagnostic regimen among private physicians is seen as a big concern in achieving quality in the control of TB, and in mainstreaming private sector participation in the NTP. Except for larger hospitals where laboratories are integrated, private physicians usually refer patients to external laboratories for work-up. At the moment only the public programs have capability for the preferred modalities of TB diagnosis, i.e., smear microscopy, bacterial culture, and drug sensitivity, and even these facilities are insufficient.

As indicated in the previous section, support for private laboratories is not seen as efficient. Quality assurance guidelines, for example, of JICA-trained microscopists/medical technologists are rigorous, requiring two independent verifications before a TB-positive finding is reached, among others, e.g., proper sputum sample acquisition, proper specimen preparation, even the type of microscope used. These are conducted regularly and will usually require a number of weeks to complete. These exclude spot checks for quality assurance. Suggested approaches to the private sector include referral to public TB microscopy centers, for which there is as yet, no clear, established system.

c. Treatment Regimen

Efficiency and sustainability have also been raised as regards treatment. In every 100,000 population, the typical TB caseload would be around 145 cases, of which around 110 would be detected. The ratio between public and privately treated patients is approximately 2:1. And while the public availment will usually be through the rural health units, treatment loads in the private sector is dispersed among so many units, e.g., private hospitals, individual clinics, and in urban areas, even in workplace clinics. Then the same situation of discrepancies in treatment regimens among private physicians has also been noted, with some doctors allegedly experimenting with the treatment of TB patients. The problem of disparities in treatment is however, not seen as large as the case of diagnostics and case finding.

In a larger setting, among the considerations in the treatment stage of TB are primarily the availability of drugs and ensuring compliance by the patients. The short-course therapy requires multiple doses of a combination of isoniazid, rifampicin, pyrazinamide, and streptomycin or ethambutol over the course of six months. According to Dr. Kochi of WHO, "the primary cause of failed treatment is interruption, which can be caused as easily by a supply failure as by patient non-compliance."¹

In previous TB programs (e.g., 1992-1997), the supply of drugs was seen as one of the principal problems in the treatment of TB. Recently however, the Global Drug Facility (GDF) was launched as a complementing component of the expansion of DOTS. As the literature on the GDF states: "By securing the timely supply of quality TB drugs, the GDF will complement other activities designed to increase access to quality drugs within effective TB control programs." The GDF will ensure an initial three-year supply of TB drugs. Governments and NGOs, through the respective Ministries of Health, will be able to access this facility.

However, the review of Dr. Torres-Tan also cited instances of drug supply being highly uneven among dispensing health units, both in terms of absolute supply and in relative levels along the course of treatment. And the cited studies focused on public dispensaries. How absolute and relative drug supply will be affected if and when private physicians access the GDF or publicly procured drugs is uncertain, and is a critical operational concern that remains largely unaddressed. There is presently no logistical plan for distributing GDF-drugs to the private sector.

Another salient issue in drug availability is the quality of the drugs, i.e., bioavailability/effectiveness. While drugs from the GDF undergo prior testing and approval, other supply sources are not as strictly monitored.

The compliance of the patient to treatment regimen is not only a function of the availability of drugs, but also includes factors as location, price, and the inclination of the patient to stop medication once symptoms have subsided.

- **Location:** The entire DOTS philosophy is attuned to ensuring patient compliance through directly observed treatment. The context of the direct observation has been largely resolved in the public program with the recruitment of barangay health workers who have most access to the patients. In the private sector however, the questions remain: Is the physician or nurse the appropriate treatment partner? Will the patient be referred to the public program? While simple, these have far reaching implications: Would the private patient have to carry the additional burden of repeated consultancy fees while undergoing treatment? Is the public DOTS center accessible?

- **Price:** According to Dr. Romualdez, current prescriptions for TB in the public sector will usually require PHP800 for each patient throughout the course of treatment. In the private sector, this could reach PHP4,000. The per capita income in Philippines Private sector participation in the GDF or in government-procured drugs may help make treatment more viable.

- **Inclination to stop treatment:** The first two are expected to resolve most of the issues that lead to non-compliance. Under the DOTS strategy, patients have as their goal the completion of the treatment with the support and supervision of a treatment partner. Cultural issues, such as the concept of "hiyang" (broadly defined as the suitability between medication and the person), and self-termination of medication following subsiding symptoms, however persist. These are critical concerns especially when the minimum strategy of supervising only the first two months of treatment is practiced. Possible relapse or drug resistance may result from the continuation of these practices.

d. Monitoring and Quality Assurance

The JICA program has an established system of monitoring of case finding and assuring sputum smear microscopy quality. WHO has defined specific reporting content and formats. These are integrated with the general DOH monitoring and quality assurance system, and goes as specific as municipal health units.

The recording and reporting protocol to systematically evaluate patient outcome and treatment has been established by WHOⁱⁱ. It consists of: “a) a laboratory register that contains a log of all patients who have had a smear test done; b) patient treatment cards that detail the regular intake of medication and follow-up sputum examinations; and c) the TB Register, which lists patients starting treatment and monitors their individual and collective progress towards cure.” The system allows for the aggregation of information from the level of the health care worker in a specified administrative area up to the district or municipal level, and then so forth to the national TB register.

There is much to be desired however. Ms. Johnson of CDC has identified the lack of manpower and unclear delineation of roles and responsibilities as hampering the progress of the TB program. The decentralization of health services has likewise affected monitoring, evaluation, and quality assurance. “Nobody knows who is doing that,” she lamented.

As indicated by aforementioned processes, there is apparently no operational monitoring, supervision, and quality control system being practiced on a national scale on the TB cases handled by private physicians. The sector is predominantly involved in the medical aspect of tuberculosis and usually led by professional organizations headed by top-notch people. Information for health policy and planning is derived from public sources, mainly government statistics and international policy studies.

Dr. Lofranco of CDC characterized the situation as such: “The private sector does not follow the guidelines of the DOH, and even the private practitioners have their own way.”

14.2 Challenges and Opportunities to Private Sector Participation in the NTP

The public health model of DOTS reveals several important features that have contributed to its success and global adoption.

- **An established organization and network of trained workers with a defined operating framework.** In the public sector, this is administered on three major levels: Policies and guidelines emanate from the national organization, particularly the Department of Health. Local health units undertake the implementation and provide feedback. Intermediate units at the provincial or regional levels can enact certain adjustments in order to address particular conditions. The logical sequence and the broad scale allows for efficiencies and economies in the system.
- **Demonstrable political and organizational commitment leading to substantive logistical and technical support.** With the grave incidence of TB in the Philippines, it would be easy to justify needed support. But international development agencies and NGOs have actively participated in the campaign because they gained the commitment of both national and local agencies. JICA is generally focused on providing support for

case finding and quality assurance, particularly in training and equipment for sputum smear microscopy. It involves itself at the national level with the DOH through the TB Reference Laboratory down to training the medical technologists who conduct the microscopy at the local levels, i.e., implementing units who are committed staff of the local governments. WHO takes its role in ensuring TB management policies and programs are adequately coordinated through the DOH. It provides venues for discussion and information dissemination, as well as facilitating a dependable supply of quality drugs through the GDF. Other stakeholders that include CDC and USAID commit both technical and financial support to programs in areas previously not covered or underserved. The DOH, with the commitment of local governments, can conveniently provide the unifying thread for the coordinated activities of these supporters. All international respondents have mentioned, in varying degrees, the importance in gaining commitments from the national and local branches of government as a necessary precursor for securing and sustaining support.

- **A scientifically supported case in a large scale.** It took a number of years for DOTS to be fully accepted as the more effective approach to managing tuberculosis. Internationally, the case for DOTS had to be made in a large scale, almost always on a national level. Pilot areas were carefully selected and in many instances, had to represent the conditions that a national program would have to meet.

The energies mentioned may be summed up into three C's:

- Case-establishment
- Commitment of stakeholders
- Coordination among implementers

The simplified hypothesis is that should PhilCAT be able to harness these energies then it will be successful in mobilizing the private sector, as well as gain resource support, in its program against tuberculosis.

Case-establishment

The great opportunity presented to PhilCAT today is that it is highly regarded by organizations that were interviewed. That it is composed of highly capable and respected people is a given among the respondents. However, the subsequent need for support of PhilCAT for its initiatives will necessitate precisely making the case for the significance of private physician participation in the campaign against TB. The predominant view distilled from the interviews is that while private sector participation is novel and honorable, it might not result in the large, sustainable impact that is envisioned in the public programs. The views ranged from the perceived actual extent of TB management among private physicians, to the economics of supporting a private sector program, to conceptual differences.

One respondent pointed out that the vast majority of TB cases occurred in the E, D, and broad C income classes. Private physicians, on the other hand, catered to mostly the top-tier income classes. It was also noted that while TB symptomatics may go to a private physician for initial consultation and diagnosis, the treatment usually ends up in public health centers.

Another noted the absence of any real studies or cases where the wide-scale, sustainable impact of private-sector led TB control may be validly demonstrated. The few that have been put forward were infused with substantive resources (e.g., recruitment of full-time nurse for a relatively small client base) that could not be expected if the scope of operations were increased to approximate the general setting, and are therefore saddled with questions of scalability and replicability. The suggestion was to undertake a nation-wide pilot program that would ensure representation of at least one area per region with each attending to 20 to 40 patients under a public-private mix (PPM) regimen. This will also provide room for flexibility in examining alternative operating structures and systems that could be the basis of model-building among the provinces.

When views on two pilot programs, namely the Family DOTS and DOTS in the Workplace were solicited, different opinions emerged. One pointed out that the Family DOTS was the last option among a number of models considering the Asian culture permeated by patriarchy. It was argued that a head of a family diagnosed with TB would rather be supervised by a recognized health worker than a member of his family. DOTS in the Workplace is also faced with the cultural stigma of TB as a repulsive disease. The negative effect of other workers knowing that a co-worker is a TB patient should be considered. It was also pointed that generally, when a worker is diagnosed with TB in the Philippines, he/she is either summarily terminated or deemed unfit for work.

Making the case for private sector participation is thus not only a matter of establishing its operational feasibility (i.e., that it can be done), but convincing its audiences of its relevance and suitability to existing conditions, its cost-effectiveness, and its magnitude of impact.

Commitment of Stakeholders

PhilCAT should do well in gaining the commitment and support of its identified constituency – the private sector – and subsequently the local government units (LGUs). WHO Advisor Dr. Ahn sees the organization, along with DOH, as a principal partner in the PPM.

Largely seen as fragmented sector, resource providers view private practitioners with much reservation. They view their existing engagements with government organizations as a huge challenge in itself. Most would not operate in a specific area without a Memorandum of Agreement with the national and more significantly, LGUs. JICA in particular measures the level of commitment of LGUs with the appointment of staff for the local implementing unit prior to extending technical and logistical support. The commitment is an indicator of future sustainability.

Dr. Kato mentions a number of challenges to private sector participation. One is how to convince clinicians on the DOTS. PhilCAT will have to gain the agreement and consensus of the chiefs of hospitals in participating in surveys, problem identification, and the hospital owners on the need for training. He noted that, having been a clinician himself, hospitals experience high turnovers of resident physicians, which might necessitate constant re-training. There is also a lack of materials for training; who will provide the resources for these? Then, private physicians generally do not like to be supervised and might be frustrated with DOTS when it requires them to strictly follow diagnostic and treatment regimens.

Dr. Romualdez agrees with the last point, surmising that private physicians would have to give up this autonomy if they were to be integrated into the program. The foreseen trade-off for private hospitals and clinics would be the government's ability to negotiate for better terms with suppliers and financiers that will ultimately redound to comfortable, attractive propositions for their patients.

The interface with PhilHealth becomes significant at this point. Private physicians operate in the market context. Financing private sector participation in the TB program eventually becomes a main concern. In order to provide access to quality, affordable healthcare, subsidies to privately-managed patients may have to be considered. PhilHealth has the authority and mandate to enact such policies and allocate such resources. PhilCAT may see in this an opportunity to become a bargaining entity to study and facilitate such systems.

Aside from financing, the commitment of the DOH and private professional and commercial entities will likewise be necessary in establishing mechanisms for logistics (e.g., for drugs), manpower, and ensuring quality of services and reports.

Finally, the LGU intersect becomes valuable for PhilCAT as it examines its role in the implementation of DOTS. Having pointed out that case finding and diagnostics was seen more cost-effective if public systems were used, private physicians should have defined mechanisms and procedures, and these would have to be established with LGU agreement and commitment. Dr. Ahn suggests that these LGU partnerships be done at the provincial level. It has been noted that the geographic distribution of private physicians may not exactly approximate the RHU scope, and may intersperse with other jurisdictions.

Coordination among implementers

In defining its scope of engagement as private practitioners, PhilCAT will have to examine its operating structure and manpower. Chief among the concerns of some respondents was the coalition's ability to reflect a defined and coherent implementing structure. They agreed that PhilCAT may have a significant role in defining policies and programs at the national level, but were uncertain when it came to implementing, with one agency calling attention to the discrete lack of full-time manpower of the coalition.

Apparently, what are being sought are clear private counterpart structures to the existing public system. In the case of sputum smear microscopy for example, would private hospitals agree to the TB diagnostic regimen in their laboratories? Would the reporting protocol be adopted? What entities will ensure this from the private sector? What is the appropriate flow of supply of government-procured drugs to private physicians?

In sum, these are intimately related to operational strategies, and the subsequent systems, structures, and staffing that will be needed. Is PhilCAT willing and capable to begin examining and addressing these?

PART II. INTERNAL ANALYSIS
OF THE
PHILIPPINE COALITION AGAINST TUBERCULOSIS

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PART II. INTERNAL ANALYSIS OF THE PHILIPPINE COALITION AGAINST TUBERCULOSIS

1.0 THE PHILIPPINE COALITION AGAINST TUBERCULOSIS (PHILCAT)

1.1 Organizational Profile

History

Since its establishment in June 24, 1994, the Philippine Coalition Against Tuberculosis or PhilCAT has been at the forefront of tuberculosis control and prevention initiatives enjoining the government and the private sector in its campaign. A Memorandum of Agreement (MOA) signed by its seven founding members gave birth to PhilCAT. The seven founding members include Philippine College of Chest Physicians (PCCP), Philippine Society of Microbiology and Infectious Disease (PSMID), RITM-TB Study Group, UP-PGH TB Study Group, Cure TB Foundation (Glaxo Wellcome), Ciba-Geigy (now Novartis) and DOH-TBCS.

This initial meeting and eventual signing of the seven founding member organizations was one of the milestones in the history of anti-TB initiatives. It took several months of hard work and coordination among the founding members before the coalition was brought to life. Prior to its establishment, the country has experienced transformations in 1992 brought about by the devolution of authority to the local government units (LGUs) for majority of the social programs including health and TB control. Spurred by the situation, several organizations started to mobilize and took turns in making a difference in the area of anti-TB advocacy. Because of the fragmented efforts exerted by these organizations, vital resources and supporting activities proved to be ineffective in combating TB in the country. This was where PhilCAT's role as a unifier came to being.

The year 1996 witnessed rapid and significant expansion of TB control with the adoption of the Directly Observed Treatment Strategies (DOTS) that activated the involvement of the private sector. It was also a momentous year for PhilCAT being tasked by the World Health Organization (WHO) to host the World TB Day through the Department of Health (DOH). This gave the organization its first surge of energy to continue the fight against TB.

In 2002, another milestone for the PhilCAT was achieved, which marked the start of the National TB Summit. A Memorandum of Agreement (MOA) was signed by the government and private sectors creating the ground works for the Development of a Comprehensive Policy for TB Control in the Philippines. At the same time, PhilCAT's Achievement Award was given to Dr. Rod Romulo who was cited for his tireless efforts in making PhilCAT's presence felt both locally and abroad. He was also recognized for his works towards elevating PhilCAT into one of the few working models of private-public partnership for TB control.

Continuous motivation, dedication, and sacrifice proved important to the members of PhilCAT's core group that does the daily grind on a purely voluntary basis. This pure volunteerism eventually became the lifeblood of the organization.

Mandate

After three years since its birth, PhilCAT felt the need to redefine its role by creating a vision and mission statement, which will identify the key strategies that it has to take. Measurable plans of action must be undertaken so as to enable the organization to gauge itself in terms of its impact as against the incidence of TB in the country.

PhilCAT's vision of TB control through unified action has played a very crucial role in achieving the ultimate objective of tuberculosis control and prevention in the Philippines. As part of the government's TB control and prevention program through the Department of Health (DOH), PhilCAT is tasked to assist in the mobilization of support and resources for TB control, including the development of policies for diagnosis, treatment, and control strategies.

Membership/ Partnerships

As of the writing of this study, PhilCAT's membership has grown to fifty-one with the latest addition of Friendly Care. The group is composed of professional groups, NGOs, government organizations, corporate members, and international partners. *See Exhibit I.*

Over the last six years, PhilCAT's membership has increased six-fold. Volunteerism counts as one of the key success factors of PhilCAT's continuous growth in terms of membership.

However, PhilCAT's membership saw a significant change in August 24, 2000 when the constitution was amended during the General Assembly at the Quezon Institute. The amendment included the acceptance of individuals as members of PhilCAT because previously, only organizations were allowed to become members. This change hopes to bring a leap in terms of PhilCAT's membership.

Through active public awareness campaigns directed to the general public and political leaders, more stakeholders will be identified and eventually become members of the coalition. This also hopes to direct public funds towards TB-control activities.

Organizational set-up and management

PhilCAT is governed by its board of directors led by the chairman. Directly reporting under the BoD are the different committees and the Executive Director. The Executive Director oversees the operations of the Administrative and Training Units as well as the National PPM-DOTS Coordinating Committee. The committees are divided into two groups: Standing and Adhoc committees. The Standing Committees include Membership, Constitution and Legislation, Nomination and Election, and Publication. All the major projects of PhilCAT are directly under the Adhoc Committee's turf. These include the administration of the different PhilCAT Chapters, Advocacy, Policy and Implementation, TB in Children, Education and Training, Research, Annual Convention, Ways and Means, and DOTS Center Accreditation. *(See page 2 of Exhibit II for PhilCAT's new organizational chart.)*

Prior to the above organizational set-up, the National PPM-DOTS Coordinating Committee used to be the link between the PhilCAT Secretariat and DOH as indicated by the dotted line in the first organizational chart shown in *Exhibit II page 1*. Under the National PPM-DOTS, there used to be four separate agencies working namely, USAID, CDC, GFATM, and GDF. Only two agencies were left in the present set-up, the USAID and CDC. Unlike the before, the National PPM-DOTS Coordinating Committee now reports directly to the Executive Director.

During the General Assembly in 2000, two of the three amendments effected changes in the status of Board of Directors and officers. The first was the increase in the number of seats on the Board of Directors from seven to eleven in order to increase representation of the membership. The second was the extension of the term of officers from one to two years. (See *Exhibit II*)

Presence/ area of coverage

PhilCAT's presence is felt as far as San Diego, California. Dr. Antonino Catanzaro of the University of California in San Diego volunteered to organize the more than 80,000 Filipinos in San Diego to contribute to the cause. The organization has already achieved a national identity since it has been tasked by DOH to take the lead in its fight against TB. Through its member and partner organizations, PhilCAT was able to tap the local communities' participation and mobilize their resources towards anti-TB related initiatives.

The existence of PhilCAT indicates a larger potential for local resource mobilization and sustainability. Social mobilization at the community level played a major role in further expanding PhilCAT's reach. As such, the creation of Public-Private Mix (PPM) coalitions in TB control is cited as one of the perfect examples of community-based initiatives. Several communities expressed their intention of adopting this scheme, which will, in turn, intensify the presence of PhilCAT in these areas. Some of these communities include Capiz, Batangas, Cavite, Iloilo, Laguna, Cebu, Palawan, Pangasinan, and Davao. PhilCAT's presence was also felt even in the most depressed areas of Payatas, Tondo, and Cagayan Province through the commemoration of the World TB Day in 2001.

True to its mission, PhilCAT's member organizations hold separate activities, which are more dispersed in terms of coverage. In the case of the Committee of German Doctors for Developing Countries projects, it already covers thirteen areas in the National Capital Region (NCR) and Mindanao. The Medicos del Mundo is presently involved in the Northern Luzon provinces of Mt. Province, Abra, Benguet, Kalinga-Apayao, Ilocos Sure and La Union. These and a number of organizations and collaborators of PhilCAT instantaneously became bearers of the organization's battlecry against TB.

PhilCAT has not only touched various groups on a nationwide scale but international as well. There was a growing recognition of PhilCAT in the international arena. Apart from its usual role of organizing the World TB Day in coordination with World Health Organization, PhilCAT has been consistently invited into various international gatherings and fora.

One of the well-cited written accounts of the Philippine experience was the paper written by Camilo C. Roa, Jr. and Rodrigo L. C. Romulo entitled "Coalition Building for

Tuberculosis Control: The Philippine Experience.” The paper was included in the book “Tuberculosis: A Comprehensive International Approach” edited by Lee B. Reichman and Earl S. Hershfield published by Marcel-Dekker in 2000. The Philippine experience was recognized as one of the few functioning models of a working, successful, multi-sectoral collaboration for TB control.

Members of PhilCAT’s board continue to be invited as speakers in major conventions such as those organized by the WHO held in Japan, Geneva, and Atlanta, Georgia. (See *Exhibit III List of potential partners in TB Control indicating area coverage*)

Sources of funding

During its infancy, PhilCAT had to draw a significant amount of funding from its corporate members consisted mostly of pharmaceutical companies. Other sources of initial funding came from membership fees, donations, and fund-raising activities.

At the onset of PhilCAT’s operations, the membership fees became invaluable because it provided for the organization’s steady source of fund while its operations was supported through fund-raising activities. The fees were assessed based on the member organization’s capacity to pay and the size of its membership. For instance, the pharmaceutical and other corporate members pay the maximum fee while for non-profit organizations and other medical specialty groups, fees were based on the size of membership. Since government participation is essential in the coalition’s unifying efforts, government organizations were not required to pay membership dues.

Funding for PhilCAT’s various programs and projects come from its supporting international agencies such as WHO, USAID, and CIDA. Recently, PhilCAT was tapped to support USAID’s 4-year 10 million-dollar project “Involving the Private Sector in TB Control.”

Laying the ground works for the implementation of the DOTS project was made possible by a \$68,000 grant from the Center for Disease Control in Atlanta. The project’s main objective was to develop models for the application of DOTS in various private health sector settings in the Philippines.

1.2 Programs and Plans

Past Activities

For the past nine years, PhilCAT’s annual convention provided the main venue for all anti-TB groups to communicate and exchange views about TB-related issues and concerns. The preparation for the convention was a yearly run up for the World TB Day held every 24th of March. Every year, PhilCAT enjoins a member organization to co-sponsor the event. The first annual convention was co-sponsored by the Department of Health on August 1994 with the theme “TB: A Shared Responsibility.” This first step was subsequently followed by other member organizations in helping out develop camaraderie among the various groups and work towards maintaining the enthusiasm of its members. See *Exhibit IV (list of PhilCAT programs and activities throughout the years)*

PhilCAT is also actively involved in the consensus and guidelines development and various research projects related to TB. In 1995, a multisectoral workshop on national TB policies was organized by DOH and majority of the participants was PhilCAT members. This gave way to the revision of the guidelines for the national program of DOH to be adopted by health units. PhilCAT's involvement in consensus development began in 1997 in collaboration with various organizations such as the Philippine Pediatric Society and DOH (for the Consensus on Childhood TB); the Department of Education, Culture and Sports (for the Consensus on TB in the Home, in the School and in the Community); and the Philippine College of Occupational Medicine (for the TB Consensus in the Workplace).

One of the most notable projects of PhilCAT was the development of the National Consensus on Tuberculosis for 1998, which served as the National Guidelines for Diagnosis and Management of Tuberculosis in the Philippines. This project was made possible through the joint efforts of the Philippine Society for Microbiology and Infectious Diseases, the Philippine College of Chest Physicians, and the Tuberculosis Control Service of the DOH. Part of the success was also attributed to the generous support and assistance given by the Philippine Council for Health Research and Development of the Department of Science and Technology.

The final "TB Consensus" came in 2000 whose manifestation as the Clinical Practice Guidelines for the Diagnosis, Treatment and Control of Tuberculosis has raised PhilCAT's vision into a higher level of actualization. This "consensus" must be disseminated conjointly with the policies and guidelines of the National Tuberculosis Program (NTP). NTP's guidelines are broader in scope and currently being used by the public health system.

Pilot projects are being undertaken by PhilCAT in its development and implementation of the Directly Observed Treatment Strategy (DOTS) in the Philippines. Under this project, five models are being set up. These are:

1. Private Physician-Government Medical Insurance Model (PhilHealth) – is a partnership between the private medical doctors (PMDs) and government through PhilHealth. The PMDs organize a DOTS service for their own private patients and PhilHealth will pay for diagnostics and medications.
2. Private Physicians – Government Health Center DOTS Partnership Model – this particular model can be applied in areas whose consulting PMDs are not covered generally by insurance and usually cannot afford the cost of the full anti-TB drugs, patients will be referred to local health center for free drugs and direct observation of treatment.
3. Industry Sponsored DOTS Model – is particularly designed for patients who prefer to pay for the services of private for-profit physicians rather than avail of the services of local health center. It utilizes the resources of private institutions such as pharmaceutical companies to organize DOTS centers.
4. DOTS in the Workplace Model – this applies to large and medium-scale industries where the existing infrastructure could be adapted to apply DOTS to those employees diagnosed with TB.

5. DOTS in the Family Model – this applies on a per situation basis, where requiring patients to come to a DOTS facility is highly impractical, the family provides the only logical and practical partner in ensuring compliance of medication intake.

Following the same DOTS framework, separate pilot testings are being conducted by PhilCAT's member organizations. The Philippine Tuberculosis Society, Inc. (PTSI) and GlaxoSmithKline Foundation in collaboration with PhilCAT have adopted the DOTS in the Family Model. The project is working under two strategies: 1) DOT at the house of the TB patient using a family member as treatment partner and 2) DOT at the health center using a health worker as the treatment partner. There were eight selected participating PTSI branches. The project's objective is to determine the effectiveness of utilizing a family member as the treatment partner while ensuring the treatment's success.

Another pilot project adopting the DOTS approach was the Tuberculosis in Children. This project was jointly undertaken by the Center for TB in Children Philippines and the DOH Task Force in TB in Children. The latter was the same organization sponsored by PhilCAT during its inauguration in Quezon City. The project was undertaken as a response to the growing problem of tuberculosis in children. Its main objective was to prepare policies for the diagnosis and treatment of TB in children, which are acceptable and affordable.

As part of PhilCAT's anti-TB campaign, media has always played an important role in information dissemination and awareness campaign. PhilCAT's media relations include radio and TV guestings, press conferences, newspaper articles, releases and editorials, and special TV features in collaboration with well-known TV public affairs program. Leaflets, brochures, and other promotional materials are also being used as a means to convey PhilCAT's message throughout the country and to the world.

Plans and Goals for the upcoming year

PhilCAT has outlined their action plan goals for the years to come. To wit,

- To provide leadership and direction in the fight against TB
- To develop an integrated system of communication and information
- To increase resources
- To increase government support
- To increase private sector support

As part of achieving these goals, PhilCAT was able to obtain the unrestricted support of the Philippine College of Chest Physicians (PCCP) and Wyeth Philippines through the signing of a MOA. The project covers six provinces and as of August 2002, a series of successful roundtable discussions and surveys involving both private and public stakeholders were conducted in Batangas and Cavite. The same activities were also conducted in Capiz and Iloilo. During the visit to Cavite, the local PhilCAT affiliate CCAT was formally established with collaboration from the World Vision while the conceptualization of SICAT in Iloilo was initiated.

Expansion of PPM-DOTS has been at the top of PhilCAT's list of priorities. After it has convinced the government to adopt the strategy, PhilCAT started to set up pilot testing of

DOTS in various scenarios. By the last quarter of 2002, the Phase I was nearing completion. At the same time, funding for the Phase II has been approved by the CDC-USAID. (See *Exhibit V Activities and Timetable for PPM-DOTS Expansion in 2003*)

In the next three years, PhilCAT hopes to secure additional drugs from the WHO Global TB Drug Facility in order to support the expanded PPM-DOTS through the National Tuberculosis Program (NTP). This initiative would benefit 70,000 TB patients. With this in mind, last July 2002, PhilCAT together with DOH and the WHO-WPRO submitted the request to WHO Global TB Drug Facility. Together with the request was a document entitled "Empowering the Private Sector in the Control of TB in the Philippines in a Strengthened National TB Program, Framework for Development and Expansion of PPM DOTS in the Philippines." As of August 2002, the proposal has already passed the technical committee.

1.3 Assessment of PhilCAT

The internal capabilities of Philcat will be assessed on the three critical areas of the role, reach and impact of the organization.

Role

According to current PhilCAT Chairman Dr. Charles Yu, the role of PhilCAT has been evolving since its inception in 1994. On the one end of the spectrum, PhilCAT can be mere umbrella association with a secretariat to coordinate common activities of members. At the other end of the spectrum, PhilCAT can be a "superbody" which organizes and implements its own TB programs. Dr. Yu defines the role of the current PhilCAT organization as somewhere in between these two roles. It can assume the function of a powerful and organized secretariat for common programs and at times assist and enable its members to organize and implement their own programs. On the other hand, it may, at times implement necessary programs on its own.

The primary role of PhilCAT is the advocacy of the DOTS program through the organization of adequate private-public sector mix. As such its major roles can be classified as follows:

- Research and development – through a funding from the Center for Disease Control, PhilCAT was able to raise funding for research on appropriate models to adopt for effective community-based programs against TB.
- Advocacy – PhilCAT is also concerned with advocating the use of DOTS to private practitioners in the rural areas. Understanding the need for participation from private practitioners, PhilCAT organizes conventions, conferences, seminars and dialogues with private practitioners to espouse the virtues of the DOTS.
- Fund raising – PhilCAT leverages its international recognition to obtain funding from international donors. Some potential sources for funding are already in the pipeline for PhilCAT or for PhilCAT members as arranged by PhilCAT.

- Acquisition and dissemination of drugs – PhilCAT also assists in the acquisition and dissemination of TB drugs. Through a collaboration with the Department of Health, it was able to develop a grant from the Global Drug Facility for a large volume of drugs for TB. While the DOH will take care of the distribution of the initial batch of drugs, PhilCAT will assist in the distribution later on.
- Continuing education and training for TB specialists – PhilCAT organizes an annual convention on TB inviting notable speakers from around the world. This facilitates continuing medical education for TB practitioners.

Reach

The reach of PhilCAT can be assessed at three levels. The first is the geographic reach. PhilCAT's geographic reach in the country has expanded significantly since its inception in 1994. PhilCAT's programs, particularly its advocacy campaign on the adoption of the DOTS, have reached most, if not all regions of the country. But more than just a passing presence, PhilCAT's geographic reach is becoming more permanent as local chapters and affiliates are created. For example the Concerned Cavitenos Coalition Against TB (CCCAT) is a concrete example of PhilCAT's growing permanent reach. Other local chapters in other provinces are expected to follow suit.

The second level of reach is the number of members that have joined the coalition. From only initial membership of seven in 1994, PhilCAT's members have ballooned to 51 (see *Exhibit*). These members have presence in all regions of the country and as far out as San Diego, California. The nature of members have also expanded to include NGOs, corporations, professional societies, local groups and international groups.

The third level of PhilCAT's reach assesses the organization's capability in terms of accessing international support. PhilCAT has been acknowledged by the international TB community as one of the few "working" models of private-public sector participation in the drive against TB. With such international recognition, PhilCAT has little by little, started to capitalize on this by accessing funding from international donors. It obtained funding from the Center for Disease Control to design, develop and pilot models for private-public sector participation in 10 hospitals. It was also instrumental in obtaining a grant in the form of drugs from the Global Drug Facility.

Impact

While there has yet to be a valid survey on the prevalence rate of TB during the existence of PhilCAT, its impact on the overall cause can still be assessed in other terms. One of the major impacts of PhilCAT is to prove both to the local and international community that private-public cooperation in the drive against TB can work.

According to Dr. Yu, this is verified by the following indicators:

1. The number of patients in DOTS centers are increasing. This shows that more patients are being served by said facilities.
2. There is also increasing awareness about public-private mix and the necessity of the cooperation between the public and the private sector in the drive against TB. This is a direct result of PhilCAT's continuous advocacy both in the domestic and international scene.

3. There is a steady increase in funders for TB related activities both for PhilCAT and for its members.
4. There has also been an increase in invitation for PhilCAT's major movers for speaking engagements around the world to discuss private-public mix and share the secrets behind PhilCAT's successes.
5. Finally, the international community is looking up to PhilCAT as a successful working model of a private-public mix for TB control.

Based on the foregoing discussion, we can make an assessment of PhilCAT's inherent strengths and weaknesses as an organization. These strengths and weaknesses are as follows:

Strengths

- International recognition as a working model of a private-public cooperation in the drive towards curbing TB incidence.
- Growing membership and expanding reach
- Presence of significant personalities as prime movers of PhilCAT
- Passionate leadership
- Neutral and non-partisan
- Spirit of volunteerism
- Increasing popularity locally and internationally
- Backed by corporate funding
- Increasing membership with dispersed geographic and sectoral reach

Weaknesses

- Moves of TB community are still fragmented
- To a certain extent only a limited number of organizations are actively participating.
- Sufficient funding support
- Volunteerism means most doctors are part-time
- Lack of financial systems and procedures (?)
- Successes of program is personality-based (to a certain extent)
- Limited resources
- Currently assessed as Manila or Luzon-based phenomenon
- More known internationally than domestically

2.0 MEMBER ORGANIZATIONS OF PHILCAT

PhilCAT's membership can be categorized into five groups according to the nature of the member organization. These members are engaged in various anti-TB-related activities independently, in collaboration with PhilCAT, or even in collaboration with other organizations.

2.1 Profile of Member Organizations

Based on the nature of their organization, PhilCAT members may be classified as:

- Professional Organizations
- Government Organizations
- Non-government Organizations
- Corporate Organizations
- Localized Groups
- International Groups

Partly because of the sheer diversity of the units involved, the task of PhilCAT to collaborate and coordinate a united effort in the fight against TB has become more difficult. Nevertheless, PhilCAT's success continue to inspire other potential member organizations to join the coalition.

The nature of each type of organization and a brief profile of the member organizations are explained below.

a) Professional Organizations

Professional organizations are organizations composed of physicians, specialists and other healthcare workers who have concerted their efforts to fight TB. These are also the academic or research institutions established to further research and development in the field of TB cure, control and prevention. These organizations may have a focused purpose on Tuberculosis, a broader focus on pulmonology, or an even broader scope to cover all infectious diseases.

Typically, since these organizations are composed of healthcare practitioners, the scope of their programs and activities are focused on research, training and education as well as actual treatment of TB.

Among the notable professional organizations that have joined PhilCAT include the Philippine College of Chest Physicians, the American College of Chest Physicians, and the Philippine Academy of Family Physicians, among others.

Philippine College of Chest Physicians (PCCP)

The PCCP is the premier society of pulmonologists of about 700 members scattered across the country. It is mainly involved in continuing medical education (CME) of its members and general practitioners and in accrediting specialists. PCCP was one of the seven founding members of PhilCAT.

The **PCCP** is an organization of chest physicians founded in 1973 with Dr Fermin Manalo as Founding President. The PCCP is committed to:

- The generation, assimilation, exchange and dissemination of knowledge in pulmonary medicine
- The establishment and maintenance of the standard of excellence in pulmonary training and practice for the promotion of health among Filipinos

- The enhancement of the members' feeling of identification and pride with the organization by promoting personal growth, camaraderie and unity among members

To date, the PCCP has 719 members from Northern Luzon, Central Visayas and Mindanao and majority from Metro Manila. The PCCP envisions that by 2005, it will be the premier specialty organization acknowledged as the authority in pulmonology in the country.

Sometime in 1993, the PCCP instituted a Council on Tuberculosis that will undertake the following specific tasks:

- As official representative of the PCCP in bodies, organizations, meetings and conferences related to TB.
- As official source of statements, information and data about TB by the PCCP
- As official body in charge of TB projects and activities related to TB.

This was also an important year since it was also the same year when PhilCAT was established.

The PCCP TB Council likewise envisions itself to be an effective and indispensable arm of the PCCP in the field of Tuberculosis. It has the following objectives:

- To serve as center for data collection and management on TB to characterize the disease, define problems and find solutions.
- To develop criteria for diagnosis and PTB treatment.
- To coordinate TB researches at different centers in the country in cooperation with the Scientific and Research Committee of the PCCP.
- To undertake publications of professional and lay information about PTB with the Committee on Publications.

The PCCP is a private, non-stock, non-profit organization. It is one of the founding societies of PhilCAT and most of the PhilCAT members are from the PCCP. The formation of PhilCAT was spearheaded by the PCCP because of the involvement of Dr. Camilo Roa, Past President of the PCCP and present PhilCAT President Dr. Charles Yu, also from PCCP.

Its role in the Coalition is to help disseminate the guidelines on the diagnosis of TB treatment in the country/TB consensus from several medical societies, expand the DOTS strategy, trainings for health providers and accreditation of the DOTS Centers.

Also, majority of the PCCP projects related to TB are coordinated with PhilCAT aside from DOH, pharmaceutical groups and NGOs. Its participation to the National TB Programs is also through PhilCAT.

Its members are recognized and respected experts who find fulfillment through their participation in the organization.

PCCP has nationwide coverage and is affiliated with the following accredited hospitals:

- Chinese General Hospital (Pulmonary Section)
- DLSU Medical Center (Pulmonary Section)
- Lung Center of the Philippines (Department of Pulmonary Medicine)
- Manila Doctors Hospital (Pulmonary Section)
- Medical Center Manila (Pulmonary Section)
- Metropolitan Hospital (Pulmonary Section)
- Philippine Heart Center (Division of Critical Care and Pulmonary Medicine)
- Quezon Institute (Pulmonary Section)
- St. Luke's Medical Center (Institute of Pulmonary Medicine)
- Sto. Tomas University Hospital (Section of Pulmonary and Critical Care Medicine)
- UP-PGH Medical Center (Pulmonary Section)
- University of Perpetual Help Rizal (Pulmonary Section)
- Veterans Memorial Medical Center (Pulmonary Section)

The TB projects of the PCCP generate funding from conventions, membership fees and support from pharmaceutical companies especially grants for researches.

The PCCP initiates and implements relevant health programs on a national scale. PCCP had 22 annual and 22 midyear conventions since 1983 to 2002. The PCCP Publications include: *Philippine Journal of Chest Diseases and the PCCP Newsletter*. It also helped organized the World Tobacco Day last year.

For specific projects related to TB, the PCCP is involved in:

- Disseminating TB consensus that includes the guidelines for TB diagnosis
- Expanding the DOTS Program
- Accrediting DOTS Centers
- Training health providers on TB control
- Conducting advocacy lectures

For 2003, the PCCP will be holding its 22nd Annual Chest Convention "Clinical Pearls and Beyond" on 4-7 March 2003.

It is the PCCP's plan to continue helping PhilCAT in stamping out TB in the country through public-private mix and for TB not to be a major public health hazard. However, the PCCP's funding for their projects remain a major concern as they seek grants from WHO and USAID.

Philippine Academy of Family Physicians (PAFP)

PAFP is a group of specialists in family medicine that includes eminent practitioners of national and international stature. It was organized on April 30, 1960. Since then, it has served as training ground for practitioners and is responsible for accreditation of programs in the discipline. The PAFP has more than 6,000 members in over 50 chapters and over 30 accredited training institutions nationwide.

The Philippine Academy of Family Physicians was founded in 1993 for the purpose of reviving the old practices of physicians where they make personal visits to the patients' houses and take care of the whole members of the family. Before it came to be the Philippine Academy of Family Physicians, it has Family Medicine to its name.

Afterwards, when the group applied for accreditation, they decided to name it based on the specialization in medicine. The organization's TB program began in 1994.

The organization envisions a 'family physician for every Filipino Family.' With regards to TB, it seeks to put in place preventive measures against TB. It is a private, non-stock, non-profit organization with members from the government and private practice. PFP has 6 000 members, with 80-85% being active. The PFP projects are funded through sponsorships from the Municipal Government and drug companies.

The PFP is a member society of PhilCAT. It co-sponsored a convention with PhilCAT. They handled the convention's scientific program that is divided into three: TB in School, TB at Home and TB in the Community. There were also workshops conducted in preparation for the convention.

PFP holds regular conferences and conventions on TB. It also held local TB-related educational programs for public school teachers from grade school and high school in San Ildefonso, Bulacan and Real, Quezon.

American College of Chest Physicians (ACCP)

The ACCP is founded in 1948 with a vision to be the leading resource for the improvement in cardiopulmonary health and critical care worldwide. Anchored in its vision is the mission to promote the prevention and treatment of diseases of the chest through leadership, research and communication. It currently has 148 members.

Bronchology Association of the Philippines (BAP)

The BAP was established on March 15, 1985 by a group of pulmonologists and thoracic surgeons. The group was originally called the Bronchoesophagology Association of the Philippines Inc. but was renamed in 1998 under the leadership of its first president Dr. Edmund Cuyco. The BAP is the certifying Board for Bronchology and gives examination once a year, both written and oral.

Cavite Association of Public Health Physicians, Inc.(CAPHPI)

The CAPHPI was formed through the rural health unit under the auspice of the provincial health office of Trece Martires City in Cavite. It has for its mission to improve the health and delivery system in the province of Cavite. CAPHPI was formally recognized as a member of PhilCAT in 2001.

De La Salle University Health Sciences Campus Research Services (DLSU HSC)

The DLSU HSC became one of the first members to join PhilCAT in 1995. It is committed to the promotion of quality research education and excellent and relevant researches geared towards the improvement of the quality of life of the Filipinos and the global community. It spearheaded the creation and at the same time, custodian of the DOST-PCHRD-funded National TB Database and Resource Center.

Pediatric Infectious Disease Society of the Philippines, Inc.(PIDSP)

PIDSP visualizes itself to be the dynamic and progressive subspecialty society that leads in the fight against children infections. It was formed in September 1993 by a group of Board Certified Pediatricians who had received further training in infectious diseases. PIDSP is composed of 81 members including 21 fellow, 14 honorary fellows, 25 diplomats, 6 associate members, and 19 affiliate members.

Philippine Academy of Pediatric Pulmonologists, Inc. (PAPP)

The PAPP is an organization of pediatric chest physicians committed to the following mission: the generation, integration and dissemination of knowledge in pediatric pulmonary medicine; the maintenance of the standard of excellence in pediatric pulmonary training and its practice in the country; the promotion of health among Filipino children; and the promotion of the member's feeling of identity and pride with the organization through the unity and camaraderie of its members.

Philippine College of Occupational Medicine, Inc. (PCOM)

PCOM was founded in 1976 by a group of company physicians which was formerly known as the Industrial Medical Association of the Philippines (IMAP) in 1966. PCOM's goal is to have a fellowship of physicians united in the common goal of acquiring the highest levels of medical knowledge and skills through continuing education and research and to promote the healing ministrations of the occupational physician in the delivery of health care industry.

Philippine College of Radiology (PCR)

The PCR was formed during the post World War II year 1948 and was then known as the Philippine Radiological Society. After the installation of a new constitution and by laws, the society was renamed on August 21, 1970 to its present name.

Philippine Society for Microbiology and Infectious Diseases (PSMID)

The PSMID was originally founded in 1970 but was formally organized on January 27, 1972 by a group of physicians who felt the need for an organization dedicated to the study of infectious diseases in the country. The 536-member organization is engaged into research and continuing medical education on microbiology and infectious diseases.

Philippine Pediatric Society (PPS)

Prior to PCR's establishment in 1948, the PPS came to being in 1947 also during the post World War II era. It was founded by 30 concerned pediatricians with a common mission to reduce infant mortality and improve the health of children. Its strategies include training, research, community outreach, administrative affairs, and group cohesiveness.

Center for Tuberculosis in Children, Philippines

The organization was founded in 1998 by a group of doctors from the Children's Medical Center as its contribution to the prevention and control of tuberculosis in children. The

group has participated in the development of the Technical Guideline on the diagnosis and treatment of TB in children and the Modules for the training of health Workers for pilot projects.

Notre Dame of Dadiangas College – Cotabato

The Notre Dame Primary Health Care Delivery Program was founded in 1985 through the collaboration of Notre Dame Dadiangas, Notre Dame Business Resource Center Foundation Inc. (NDBRCFI) and NDDC Nursing Department. It was a spin off from the College of Nursing of Notre Dame Dadiangas College in order to make the school more responsive to the needs of the community.

b) Government Organizations

Government organizations are those that are directly or indirectly owner or controlled by the government. The biggest and most influential ally in the fight against the TB is the government through the Department of Health. Any concerted effort against TB without the support of the government will probably be ineffective, as the government has the single-biggest capability of influencing and implementing effective grass-roots programs to diagnose and treat tuberculosis.

As government organizations, these institutions typically provide practically all the necessary support services in the fight against TB. These support services include logistics, training, and actual treatment of TB cases. This holds true both at the national level and the local level.

For example, the Department of Health, Central Office annually allocates a specific amount in its budget for the acquisition of drugs against TB. Once approved, the DOH proceeds to acquire these drugs from the lowest possible source around the world. Once these drugs have been delivered to the Central Office, they are then distributed to the 16 Regional Offices of the DOH.

From the regional offices, these drugs shall then be picked up by some 79 Provincial Health Offices and/or 84 City Health Offices. Once picked up by the PHOs/CHOs, the jurisdiction of the DOH over these drugs will cease. These PHOs/CHOs will then distribute these drugs to some 1,500 rural health units in their respective localities. While some of the drugs will remain with the RHUs for their respective patients, most of these drugs are delivered to some 10,000 Barangay Health Service Centers around the country. These are then administered by the Barangay Health Workers TB patients.

Aside from the logistical aspect of distributing medicine, the DOH also provides access to diagnosis facilities which have ample capability to accurately diagnose tuberculosis. As mentioned, there are some 1,500 rural centers some 95% of which are already capable of implementing the DOTS program.

Center for Disease Prevention and Control, Infectious Diseases Office (DOH)

The National Center for Disease Prevention and Control of the Department of Health was organized in 1999. It was an amalgamation of several units within the DOH among which was the Tuberculosis Control Service. Currently, TB Control is lodged with the

Infectious Disease Office – one of four offices organized for public health issues. The other offices are: the Degenerative Disease Office, the Family Health and Nutrition Office and the Environmental and Occupational Health Office.

The TB Desk of the Infectious Diseases Office coordinates all public sector programs related to TB.

Roles of the DOH

The roles of the DOH with regards to TB can be subdivided as follows:

Acquisition and Distribution of Drugs to Government Health Units – The DOH is responsible for imputing an item into the national budget for the acquisition of TB related drugs for dissemination to the various regions in the Philippines. Once the budget is approved, the DOH is responsible for looking for the best supplier in the global community. Once a supplier has been identified, the DOH imports the drugs and distributes it to the 16 regional offices. From these regional offices, the provincial and local government units obtain their respective suppliers for distribution to the rural health units.

Treatment and Medical Services Facilities – The DOH provides accessible treatment and medical services facilities to the grassroots level. The DOH operates several government hospitals while the local government units operate a combined 10,000 rural health centers around the country.

Training and Education of Government Doctors – The DOH is also responsible for providing training and education for government doctors. The DOH collaborates with the private sector to provide continuing medical education for government doctors.

Access to equipment and technologies – The DOH and the LGUs concerned also acquire treatment technologies an equipment for the hospitals and health centers.

UP-PGH Lung Study Group of the Philippines (LSG)

THE LSG was established in 1985 with the initial aim of strengthening the bond among the current and former staff and trainees of the Section of Pulmonary Medicine at the Philippine General Hospital (PGH). The group undertakes studies on how to effectively disseminate the Philippine Consensus Guidelines on the Diagnosis, Management and Prevention of Pulmonary Tuberculosis.

c) Non-Government Organizations

Non-government organizations are not-for-profit organizations created for various specific roles that may, or may not be directly related to TB. These organizations typically source funding from donor organizations and/or internally generated funds from the operation of clinics, hospital, treatment and diagnosis facilities, etc.

Because of the wide scope of capabilities of these NGOs, their roles in the treatment and control of TB vary in extent and coverage. These NGOs provide funds, provide treatment facilities, provide treatment capability, provide training for other health

practitioners and even provide access to drugs and necessary equipment for the treatment of TB.

One of the premiere NGOs established and specifically created to fight TB is the Philippine Tuberculosis Society Inc. (PTSI). Its role in the fight against TB ranges from maintaining a treatment facility (the Quezon Institute) to providing access to training for healthworkers involved in the fight against TB.

Philippine Tuberculosis Society, Inc. (PTSI)

The Philippine Tuberculosis Society, Inc. was established as early as 1910 by Ms. Eleanor Franklin Egan. Its vision is to become the premiere non-government organization working for TB control in the Philippines. Furthermore, it is striving to become a center of excellence in TB research, training, clinical management and innovative community-based approaches.

Roles of PTSI

The services of PTSI are classified into four main areas namely:

The Quezon Institute (QI) – The QI is a 200-bed tertiary pulmonary training hospital whose main mandate is to serve the poor and the under privileged Filipinos with quality health services. Initially a facility dedicated to the treatment of tuberculosis, the services of the QI has since expanded to include other branches of health services. The QI has become self-sufficient and provides some surplus funds for the PTSI's other services.

Field Operations Division (FOD) – PTSI Field Operations Division is the national implementor of the government's national Tuberculosis Control program adopting the DOTS strategy. The FOD offers community-based services on TB control, TB & primary health education, as well as training courses for DOTS implementation.

The FOD supervises some 28 chest clinics and microscopy centers strategically located nationwide (the number of such chest clinics and microscopy centers have been reduced from 52 previously due to funding constraints). The FOD also operates mobile X-ray units for mass screening in schools, factories and offices, upon request.

Research and Training Center – The PTSI has also established a research and training center which is aimed at training health personnel who are tasked specifically for the prevention and treatment of TB and the promotion of healthy lungs. PTSI collaborates with local and foreign institutions in order to keep abreast with recent advances in the delivery of health care and management of Tuberculosis. The training center also provides technical support to other units and agencies who are similarly involved in TB control.

Central Laboratory- The PTSI Central Laboratory provides the diagnostic needs of the Institute as well as the National TB Control Program. It is fitted with modern equipment and manned by staff who are specifically trained in the field of microbacteriology.

Fund Generation of PTSI

Being a private non-stock, non-profit organization, PTSI is sustained by funding from traditional donors. Aside from funds generated from operations of the Quezon Institute, PTSI receives a subsidy from the Department of Health and obtains funding from various major donors such as the Philippine Charity Sweepstakes Office, the Japan International Cooperation Agency, Medicos del Mundo and others.

However, the PTSI faced some funding challenges recently. Since 2001, it has experienced a 50% reduction in subsidies from the PCSO and a 40% cut in the subsidy from the DOH. The reduction in available funding, exacerbated by the rising cost of medical care led to some financial difficulties for PTSI. While the current activities of PTSI have not been affected, they have to limit their operations at the field level and also the hospitals. The reduction in the number of chest clinics is a manifestation of the reduction in available funding. Fortunately, PTSI is anticipating the entry of some foreign funding to more than offset the reduction in local funding.

World Vision Development Foundation

The World Vision began in the Philippines in 1957. The WVDF aims for holistic development centered in the transformation of not only the poor children but their families and communities as well. It works through child sponsorship and disaster relief and rehabilitation.

WV is an international Christian humanitarian organization present in more than 100 countries around the world. In the Philippines its reach spans across major provinces in Luzon, Visayas and Mindanao:

Luzon-Abra, Aurora, Bataan, Bulacan, Cagayan, Cavite, Isabela, Mindoro Occ., Quezon, Quezon City, Palawan, Sorsogon, Zambales

Visayas-Aklan, Antique, Biliran, Bohol, Capiz, Cebu, Iloilo, Leyte, Negros Oriental

Mindanao-Agusan del Norte, Agusan del Sur, Camiguin, South Cotabato, General Santos, Davao, Maguindanao, Misamis Occ. Misamis Oriental, Sarangani, Surigao del Norte, Surigao Sur, Zamboanga City and Zamboanga Sur.

WV is involved in micro-enterprise development, initiatives against child labor, child sponsorship, disaster relief and rehabilitation, land and housing, environment and renewable energy sources, gender, advocacy and maternal health, spiritual and transformational development, peace building and TB prevention and control program.

It works closely with the following major project partners:

- Department of Social Welfare and Development
- Department of Health
- Department of Energy
- LGUs
- US Agency for International Development
- Canadian International Development Agency
- Australian Agency for International Development

World Vision, in collaboration with various donor organizations established the Project Assistance to Control TB (PACT). Aside from World Vision, other organization that participated in PACT were JICA and CIDA. The objective of PACT is to help the Philippines reduce the overall incidence of TB. One of its major thrusts is capacity building whereby it funded training sessions for the DOTS strategy.

WV launched its TB control and prevention project in 1998. Dubbed the “Kusog Baga Project,” it aims to support the government’s efforts against TB. ‘Kusog Baga’ is a Visayan term for healthy lungs. It was initiated by WV Canada and CIDA. The WVDF is their implementing arm.

The objectives set forth for the KB Project were the following:

- Improved quality of health among Filipinos where TB is no longer a public health threat.
- Increased LGU participation as well as private stakeholders in implementing the RNTP.
- Enhanced knowledge, attitude and skills of health care givers and stakeholders in implementing the RNTP.
- Improved quality of DOTS TB services.
- Increased awareness in target areas of the causes and effects of TB and increased participation for TB prevention and treatment.
- Improved capacity to obtain and use good quality data for project management and decision-making.
- Strengthened and expanded networks for the control and eradication of TB.
- Increased access to resources and logistics for program enhancement.

The project was undertaken in collaboration with the DOH and local government units. It implemented the DOTS strategy and followed the overall objective of the Revised National TB Control Program of the DOH. The program was funded by the Canadian International Development Agency (CIDA) and was implemented in two phases:

- Phase I-This was implemented in March 1998 until March 2000. Phase I had four target areas: Capiz, Misamis Occ., Surigao del Sur and Davao. The beneficiaries were 63 municipalities and 1, 432 barangays.
- Phase 2-This was implemented after Phase 1 and conceived to benefit 10 million people. The target areas were: Cagayan, Cavite, Quezon, Occidental Mindoro, Iloilo, Sarangani, Camiguin, Agusan del Sur, Misamis Oriental and General Santos City.

PhilCAT is a venue for WV to link with different societies to help control TB since PhilCAT’s majority members are private societies. Through WV’s collaboration with Dr. Victoria Dalay of the DLSU Research Unit and President of the Coalition of Cavitenos Against TB, WV has implemented the KB Phase 2 Project, Cavite being one of its target areas. This linkage hence helped them in the formation of a diagnostic committee. Also since they want to start up the private-public mix, they collaborated with PhilCAT.

For instance, in the KB Project, the resource speakers for the provinces came from PhilCAT, also free of charge. Dr. Charles Yu of PhilCAT also helped them realize implementing KB Phase 2 in different areas.

The strategies adopted using KB were:

- Creation of a steering committee at the national, provincial and city levels
- Creation of a TB Core Team composed of Provincial/Municipal Health Officer, Nurse and Medical Technologist or trained microscopists.
- Development of community-based support/advocacy group
- Capacity building of participants

Committee of German Doctors for Developing Countries

The Committee was founded in 1983 by a Jesuit priest and works in developing countries with volunteer German physicians to primarily give assistance to poor people. Its funding comes from the German government and private German donors. It does clinical and community-based training which covers 13 areas in the National Capital Region (NCR) mostly in urban poor communities and three mini-hospitals in Mindanao (Cagayan de Oro City, Misamis Oriental, and Bukidnon).

The Committee's vision-mission is to develop "healthy, responsible and productive communities." They are committed to provide health services for the poorest of the poor based on humanitarian values towards self-reliance.

The Committee is a private, independent, non-governmental, non-stock and non-profit organization. It is based in Frankfurt, Germany. It believes that everyone has the right to life and health. Actively working in the Committee are 3 Filipino doctors, 3 German doctors, 3 nurses, 2 pharmacists, 3 medical technologists, midwives and volunteer medical professionals.

The Committee's current health projects are in Manila, Cebu and Cagayan de Oro. It also has services as far as Columbia, India and Bangladesh.

For its TB-related projects, the Committee has a DOTS-TB Program which has established satellite areas in Bagong Silang in Caloocan City, Payatas in Quezon City, Our Lady of Grace Parish Clinic, Sto. Nino Parish Clinic, Birhen ng Lourdes Parish and St. Francis Xavier Parish Clinic in Caloocan City, St. Anthony Parish Clinic in Novaliches, Sto. Nino Parish Clinic in Tondo, Canossian Sisters in Cavite and in Tondo and Our Lady of Star Nursery in Caloocan City. There are also Community Health Care Centers in Cagayan de Oro and in Bukidnon. As of late, the Committee was recognized as Best DOT Partner in the NCR level in 2002 by the DOH.

The Committee is linked with PhilCAT and the Tropical Disease Foundation for their MDR-TB cases. They have so far supported some medicines for the Infectious Disease Section of MMC. The Committee is a member of PhilCAT and they follow PhilCAT's consensus treatment for TB. In 1999, PhilCAT gave the Committee Php 10, 000 for the World TB Day activities.

Also, Marilou Ebin, the HCDC TB Coordinator is also a member of the Board of Directors of PhilCAT. She was Chair of the World TB Day in 2001. HCDC is also active in attending PhilCAT conventions.

The funds are from private donors and fund raising campaigns. Some of the projects are also supported by BMZ, the government developing aid organization of Germany and European communities. But majority of the funds are gathered through a pledging system. Examples of activities for this are telethons and magazine features. The Health Care Development Center building was constructed with the funding from the Government of Germany. The vaccines and medicines are purchased from non-profit medical suppliers who specialize on the needs of health organizations in developing countries like the International Dispensary Association in Amsterdam and UNICEF.

The Committee envisions that the 40% DOTS covered areas will develop its own paramedics for healthcare. They want to maintain their collaboration with Wyeth, Department of Health, the UST Medical Mission and Couples for Christ in implementing its TB projects. They have reduced to 80% the TB cases in Bagong Silang and they would like to be prepared in performing active case findings of TB in the entire Bagong Silang that will then be the pilot program of Wyeth. Hence, they are keen on being a concrete model of public and private collaboration on the control of TB.

Tropical Disease Foundation, Inc.(TDF)

The TDF is a private, non-profit, non-stock organization founded in 1984 by a group of physicians. It has for its main objective to undertake researches and provide training and service in the control and management of tropical infectious diseases. By 1987, the TDF moved its base to the Makati Medical Center by virtue of a Memorandum of Agreement. The Foundation was recognized by the PCHRD as “Outstanding Health Research Award (OHRA) for the year 2000.”

GlaxoSmithKline Foundation, Inc.

The GSK Foundation was part of the company’s unwavering spirit and keen sense of corporate social responsibility. Through its partnership with the different government agencies, NGOs and other civic groups, the Foundation has been involved in providing financial assistance, education programs, donations and medical missions, and grants for education.

Inner Wheel Club of Q.C.

The Inner Wheel Club of Quezon City was organized in 1960 as the female counterpart of the Rotary Club of Q.C. As early as 1967, medical missions in the various depressed barangays of Q.C. were conducted by the club. In order to carry out its works in the anti-TB campaign, it has solicited the assistance of the Quezon Institute, the DOH, and PCSO as well as numerous volunteer doctors, nurses, medical technologists, and other health workers.

The MSF is a non-governmental organization based in Switzerland and was founded in 1991. It is a medical non-profit humanitarian organization involved worldwide in emergency and development project. It started its TB work in the Philippines in 2000 and

has activities in the NCR involving school children and urban poor. It holds mobile clinics, for TB diagnosis and refers patients to the public sector.

Medicos del Mundo – Spain

The Medicos del Mundo was founded in 1990 in Spain whose main focus is in TB, HIV/AIDS control. On September 1999, the organization started its works in the Philippines made possible through the sponsorship of the Spanish Agency for International Cupertino (AECI). It became DOH's active partner in expanding DOTS and improving NTP services in the six provinces that it covers (Mt. Province, Abra, Benguet, Kalinga-Apayao, Ilocos Sur and La Union).

San Juan de Dios TB Clinic

The San Juan de Dios TB Clinic was originally organized on September 21, 1988 as the San Juan de Dios TB Care Dispensary. Its services were expanded to include other health concerns and eventually became a policlinic.

TB Clinic Foundation (UST TB Clinic)

The UST TB Clinic was created under the auspice of the Lung Institute of Sto. Tomas University Hospital in 1995. A year later, a MOA with the DOH was signed to implement the DOTS in the clinic's catchment area – North of Manila Bay (Quiapo, Tondo, Sta. Cruz, Sta. Mesa, Binondo, and Sampaloc). Its aim is to provide indigent TB patients with the highest quality medical care at the lowest possible cost; offer students and physicians-in-training at the UST Hospital opportunities to learn DOTS; and conduct researches.

Zuellig Foundation

Zuellig Foundation is a non-governmental organization committed to serve the Philippine society. Its mother country, Zuellig Group's 100 years of existence in the country has brought a good sense of corporate social responsibility and its commitment towards the social progress and development of the nation. The Foundation is involved in policy development and information banking, scientific and medical research, community health care services, and social and cultural development.

Nuestra Sra. Del Gumamela Celis Center

The Center was established on June 13, 1998 as a medical mission, which aimed to reach out to the indigent and less privileged individuals consisting of infants, children and adults for their medical needs.

Philippine Foundation for Lung Health Research and Development (PFLHRD)

The Foundation was created on September 1993 by a group of dynamic pulmonary physicians who had obtained their fellowship training in the field of pulmonology from the Philippine Heart Center Division of Pulmonary and Critical Care Medicine since 1975. The PFLHRD stands to improve the lives of patients afflicted with pulmonary disease

and to develop scientific researches that would be a basis for better medical evaluation and treatment of pulmonary diseases.

d) Corporate Members

Corporate members are typically the large pharmaceutical companies involved in the manufacture or distribution of drugs. These companies may or may not have a drug specifically aimed towards treating TB. However, the strong supporters of the cause are those with TB-related products.

Typically, the contribution of these corporate members in the fight against TB, particularly those who manufacture a specific drug against TB is the manufacture and distribution of affordable drugs for patients. These drug companies typically have extended reach in terms of their selling outlets.

Another form of contribution by corporate members are in the form of cash and non-cash resources. These large companies provide funding for specific events organized by PhilCAT or other organizations.

In terms of training, corporate members also contribute by organizing conferences and training for doctors for their continuing medical education.

Wyeth Philippines, Inc.

Wyeth Philippines was founded in 1964 by Mr. James A. Gump and Mr. Dalmacio Suaco. Since its founding, Wyeth Philippines has been true to its goal of providing quality products to meet family health and nutritional needs in partnership with the medical community while generating profits sufficient to perpetuate company growth, reward shareholders, foster mutual beneficial relationships to meet social responsibilities.

Wyeth has been a leading supporter of TB-related initiatives, particularly since it distributes one of the leading TB drugs in the market. Wyeth provides funding support to PhilCAT projects for training and advocacy of the DOTS in the provinces. By estimates, Wyeth easily spends over P1 million in TB related programs annually.

Am-Europharma Corporation

Am-Europharma Corporation has for its mission as a health care company to manufacture high quality medicines at competitive prices which are marketed in the Philippines.

Medcom International Inc.

Medcom is a sister company of Mosman Communications, publisher of *Medical Observer* founded in 1992. Its serves include production and distribution of healthcare information materials and production and publication of scientific journals, convention/ symposium proceedings.

Natrapharm, Inc.

Natrapharm Inc. was established in 1990 by Marsman, Inc. Its main reason for joining PhilCAT is to help fight TB by marketing high quality anti-TB drugs. It also conducts free clinics and medical missions.

Novartis Healthcare Philippines, Inc.

Novartis Healthcare Philippines Inc. was founded in 1996 by Marsman, Inc. As part of its mother company, Novartis' commitment, the organization likewise is committed to improve health and well-being through innovative products and services.

Pascual Laboratories

Pascual Laboratories was founded in 1946 by Mr. Isosceles Santos Pascual and Mrs. Leonora Figueroa Pascual who were both chemistry graduates from the University of the Philippines. The company joined PhilCAT to support its objective of controlling TB in the Philippines through special projects (information, dissemination and providing quality anti-TB drugs which can be made affordable to TB stricken Filipinos).

United American Pharmaceuticals, Inc.

UAP is the first marketing division of the biggest pharmaceutical company in the Philippines. For almost five years of its existence, UAP has gained the trust and confidence of many medical practitioners with its wide range of ethical specialties catering to the various health needs of the Filipino. In collaboration with Unilab, the first privately owned and managed DOTS center in the Philippines was established – the Center for Wellness and Good Health – in October 1999.

Other corporate members of PhilCAT include:

- *Astra Zeneca Pharmaceuticals Philippines, Inc.*
- *Boehringer Ingelheim Philippines, Inc*
- *Eli-Lilly Philippines, Inc.*
- *GlaxoSmithKline Philippines*
- *Medichem Pharmaceuticals*
- *Micro-Biological Laboratory, Inc*
- *Pharma Care Products, Co*
- *Respicare Enterprises*

e) Localized Groups

Realizing the need for a more grass-roots approach in curbing the incidence of tuberculosis at the community level, some physicians and local community groups are banding together to implement programs on the community level. More than at any level, the cooperation of the private and the public health practitioners should be most evident at the community level. This is because of several unique characteristics inherent to the nature of the disease, the nature of the treatment system (DOTS) as well as the nature of the community. Because of these circumstances, a close link between the private and public practitioners is necessary. For example, private practitioners should refer patients

to rural health centers for appropriate diagnosis and treatment procedures through the DOTS , as well as access to lower cost drugs from the rural health units. In order to do this, rural health units should be properly trained to ensure that treatment is done efficiently and effectively.

To encourage such participation and cooperation between the private and the public sector, local mini-versions of the PhilCAT have been established. The first of such organizations is the Concerned Cavitenos Coalition Against Tuberculosis (CCCAT).

Concerned Cavitenos Coalition Against Tuberculosis (CCCAT)

CCCAT is the first local PhilCAT affiliate in the Philippines. It is a coalition of government, private and non-government organizations who banded together to fight and control the spread of TB in Cavite.

Their concept of **coalition** refers to 'an effort to bring individual and organizations together to work for a common purpose. **Coalition building** in their organization refers to 'an action needed when one individual or organization recognizes that it alone does not have the technical capability or people power to have a real impact on an issue. Thus born the name **Coalition of Concerned Cavitenos Against Tuberculosis**.

CCCAT's reach has expanded to strategic areas in Cavite. It has formed task forces in various Cavite municipalities namely Dasmariñas, Silang, Tanza, Alfonso and Dar.

PhilCAT provided the CCCAT's initial funding of Php10 000. The Coalition is presently considering a membership fee (Php1 000) from member organizations and individual membership fee (Php 100).

DLSU has supported most of its seminars and trainings. The funding is a tripartite collaboration and tapping of logistics from the Provincial Health Office, World Vision Development Foundation and DLSU.

Wyett has sponsored the elections of the CCCAT board members and officers held on 07 November 2002. Pharmaceutical companies are identified as potential sponsors of CCCAT projects and activities. Meanwhile, they are pursuing accreditation from PhilHealth so they can get funding for additional manpower so they may accommodate 20 new patients per month.

Already, plans are underway to establish other local affiliates in Iloilo, Batangas and Palawan.

The primary goal of the CCCAT is to encourage organization participation in TB control and prevention. Its vision is to establish unified action among public and private organizations in strengthening the TB program in the country.

The specific objectives of CCAT are:

- Develop, organize and integrate efforts of both public and private sectors in the fight against TB

- Promote and increase awareness and understanding of TB and its impact on people's health and lives through information, education and communication (IEC) strategies. This includes promoting the Revised National TB Program Guidelines
- Adopt the DOTS Strategy as a framework to control TB in Cavite
- Promote and increase awareness, understanding and implementation of the DOTS Strategy within and beyond the CCCAT membership
- Share information, technical expertise and other available resources in advocating and developing the DOTS Strategy
- Collaborate with local, national, regional and international organizations to support the DOTS Strategy

CCCAT is composed of eight private and four public organization members and partners:

- Provincial government of Cavite
- Provincial Health Office (PHO)
- DOH-CHD 4
- World Health Organization (WHO)-WPRO
- CIDA-World Vision Development Foundation Inc.
- Philippine Coalition Against Tuberculosis (PhilCAT)
- De La Salle University Health Sciences Campus
- Cavite Medical Society
- Philippine Women's Medical Association-Cavite Chapter
- Philippine College of Chest Physicians-SL Chapter
- Philippine College of Occupational Medicine
- Solid Bloc of Cavite
- Philippine Academy of Family Physicians
- Cavite Association of Public Health Physicians and the

f) **International Groups**

Because of PhilCAT's international recognition as a working model for private-public cooperation in the fight against tuberculosis, international groups have started to provide their support in whatever shape or form. Two international groups, the Philippine Nurses Association of San Diego and the Philippine American Foundation have both showed support for the cause by registering as members and providing funding for some of the groups undertakings.

- *Philippine Nurses Association of San Diego*

Through the efforts of Dr. Antonino Catanzaro of University of California in San Diego, more than 80,000 Filipinos were linked via the Philippine Nurses Association of San Diego in 2000. He was initially impressed by PhilCAT's relentless efforts in its fight against tuberculosis.

- *Philippine American Foundation*
- *TB Study Group of Research Institute of Tropical Medicine*
- *Alay Kapwa Kilusang Pangkalusugan, Inc.*
- *Christian Medical Specialist Services*

- *Friendly Care Foundation, Inc*
- *Medical Ambassador International*
- *Medicins Sans Frontiers – Switzerland (MSF)*
- *ReachOut Foundation International*

3.0 ASSESSMENT OF MEMBER ORGANIZATIONS

Based on the foregoing discussion on the profile of PhilCAT memberships, they will be assessed on their respective roles, reach and impact on overall TB control. The roles that member organizations in relation to PhilCAT can be categorized into five areas as follows:

- Advocacy and Support
- Treatment Organizations
- Training and Education
- Manufacturer and Distributor of Medicine
- Funders and Resources Providers

While some organizations perform one of the above-mentioned roles, some organizations perform all five in varying degrees.

3.1 Reach

The reach of significant member organizations can be summarized in the following table:

Organization Name	Estimated Reach
Department of Health	16 provincial health offices plus some 10,000 rural health offices (controlled by LGUs)
Philippine Health Insurance, Inc.	Nationwide
Philippine Tuberculosis Society, Inc.	28 strategic branches around the country Quezon Institute in Quezon City
Tropical Disease Foundation, Inc.	Makati Med attracting patients from as far as Quezon Province, Mindoro, Iloilo and Bukidnon. Majority of the patients are from Manila, Makati City and Quezon City.
Philippine Academy of Family Physicians	59 chapters around the country with some 6,000 members of which 85% are active
Philippine College of Chest Physicians	719 member-organizations (hospitals and health offices) located around the country
Committee of German Doctors for Developing Countries	NCR plus Cebu, Cagayan de Oro, Misamis and Bukidnon
World Vision Foundation	37 key provinces nationwide
Wyeth Philippines, Inc.	Nationwide logistics network
Concerned Cavitenos Coalition Against Tuberculosis	Major towns and municipalities in Cavite

The role and impact of each type of organization (government, NGO, professional organizations, corporations, local and international groups) shall be assessed against the five roles they play in a matrix.

3.2 Strengths and Weaknesses by Member Type

Government Organizations

Strengths	Weaknesses
Nationwide reach	Bureaucracy and political
Resources	Linkages with other government agencies
International affiliations	Personnel needs training
	Resources

Non-Government Organizations

Strengths	Weaknesses
Nationwide reach	Consistent funding
Skilled personnel	
International affiliations	
Logistics support	

Professional Groups

Strengths	Weaknesses
Skilled personnel	Members are busy with their respective practices
International affiliation	Organization
Capability to train	

Corporate Partners

Strengths	Weaknesses
Resources	Not focused on TB
Nationwide reach	
Logistics	

Local Groups

Strengths	Weaknesses
Local advocacy	Resources
Trained personnel	
Linkages to local interest groups	
Volunteerism	

International Groups

Strengths	Weaknesses
International presence	Reach
Potential for funding	

4.0 ASSESSMENT OF PHILCAT MEMBERS

4.1 Government

As a member of PhilCAT and a partner in the cure and control of TB, the government is rated highly in terms of treatment capability. The DOH directly and indirectly runs all government hospitals in the country. It also has regional offices in all regions of the country. LGUs on the other hand run all rural and municipal-based health centers in the country. There are an estimated 10,000 rural health centers in the country.

The DOH also has high control over the acquisition and distribution of medicine. A large chunk of the funding and resources provided by the government are being utilized to enable the distribution of subsidized medicine thereby taking a step further in the advocacy campaign.

Training and continuing education is rated low to medium and research and development is rated low as limited government resources restrict its entry into this types of activities. Funding and resources is high as it is backed by the government's resources, however, it cannot commit to unbudgeted activities. Advocacy is rated high as it remains the primary advocate for TB treatment procedures, especially to government physicians.

4.2 Non-Government Organizations

NGOs such as the PTSI is rated high in treatment. It operates the Quezon Institute, the country's premiere TB-dedicated facility, plus some 28 treatment and diagnosis facilities around the country.

Because it operates a network of treatment and diagnosis facility, its involvement in acquisition and distribution of medicine is fairly high as well.

NGOs also pushes for more active participation in the training and development that boils down to an effective role in the anti- TB advocacy campaign. PTSI also offers training and development as well as seminars for doctors continuing medical education.

NGOs such as PTSI do not have access nor provide funding. However, in terms of advocacy, they rate high.

4.3 Professional Groups

It is but inherent with these groups that treatment is high because of the training and educational background of its members. These are organizations mostly composed of physicians.

However, their role in the acquisition, manufacturing and distribution of medicine is quite limited given the fact that these groups are composed of doctors who are limited in issuing prescriptions but do not necessarily have control of acquisition and distribution.

They rate high in both training and research and development as they typically provide the expertise in seminars and other activities for continuing medical education as well as research and development.

They rate low to medium as a potential source of funding, but rate high as an advocate of TB control.

4.4 Corporate Partners

The corporate partners are low to medium in treatment. While they don't typically treat patients themselves, most of them organize community-based treatment activities as part of their annual activities. They rate high in the acquisition, manufacturing and distribution of drugs. Most of these corporate companies are pharmaceutical companies which are involved mainly in this business. They rate high in the training and continuing medical education as well as research and development as these companies typically provide resources to organize seminars and symposia for doctors. As mentioned they are a well spring of resources hence their high rating for this category.

4.5 Localized Groups

These localized groups work hand in hand with DOH and the rural health units to provide treatment to TB patients. The active participation of localized groups such as CCCAT may be attributed to its close working relationship with the DOH and its members' dedication to the organization. They have grass-roots reach of private and public practitioners. They also, at times provide medicine for the treatment of local patients. Typically, these groups hardly perform any training and education and research and development activities. Nor do they provide funding for projects. However, in terms of advocacy, especially to the community, these groups are rated highly.

4.6 International Groups

These are the groups that operate as a partner of PhilCAT outside the Philippines and are organized by concerned Filipino doctors abroad. These groups are notable for its very active participation in the advocacy against TB in their own locality. However, because of physical distances, they can neither treat nor provide access to drugs. They, at times, provide training and education. These groups are a potential source for access to funding.

	ROLE PLAYED IN PHILCAT					
TYPE OF MEMBER	Treatment	Acquisition, Manufacturing and Distribution of Medicine	Training and continuing education	Research and Development	Funding and resources	Advocacy
Government	High (DOH, RHUs)	High (DOH)	Low to Medium	Low	None	High
Non-Government	High (PTSI)	High (PTSI)	High (PTSI)	High (PTSI)	Low to Medium	High
Professional Groups	High	Low	High	High	Low to Medium	High
Corporate Partners	Low to medium	High	High	High	High	High
Localized Groups	High	Medium	Medium to High	Low	Low	High
International Groups	Low	Low	Low	Low	Medium to High	High

EXHIBIT I PHILCAT MEMBERSHIP AND PARTNERSHIP

Professional Organizations

- American College of Chest Physicians
- Bronchology Association of the Philippines
- Cavite Association of Public Health Physicians, Inc.
- Pediatric Infectious Disease Society of the Philippines, Inc.
- Philippine Academy of Family Physicians
- Philippine Academy of Pediatric Pulmonologists, Inc.
- Philippine College of Chest Physicians
- Philippine College of Occupational Medicine, Inc.
- Philippine College of Radiology
- Philippine Society for Microbiology and Infectious Diseases
- Philippine Pediatric Society

Government Organizations

- TB Study Group of Research Institute of Tropical Medicine
- UP-PGH Lung Study Group of the Philippines
- Center for Infectious Diseases (DOH)
- Alay Kapwa Kilusang Pangkalusugan, Inc.
- Center for Tuberculosis in Children, Philippines
- Christian Medical Specialist Services
- Committee of German Doctors for Developing Countries

- De La Salle University Health Sciences Campus Research Services
- Friendly Care Foundation, Inc.
- GlaxoSmithKline Foundation, Inc.
- Inner Wheel Club of Q.C.
- Medical Ambassador International
- Mediciens Sans Frontiers – Switzerland
- Medicos del Mundo – Spain
- Notre Dame of Dadiangas College – Cotabato
- Nuestra Sra. Del Gumamela Celis Center
- Philippine Foundation for Lung Health Research and Development
- Philippine Tuberculosis Society, Inc.
- ReachOut Foundation International
- San Juan de Dios TB Clinic
- Tropical Disease Foundation, Inc.
- TB Clinic Foundation (UST TB Clinic)
- World Vision Development Foundation
- Zuellig Foundation

Corporate Members

- Astra Zeneca Pharmaceuticals Philippines, Inc.
- Am-Europharma Corporation
- Boehringer Ingelheim Philippines, Inc.
- Eli-Lilly Philippines, Inc.
- GlaxoSmithKline Philippines
- Medcom International Inc.
- Medichem Pharmaceuticals
- Micro-Biological Laboratory, Inc.
- Natrapharm, Inc.
- Novartis Healthcare Philippines, Inc.
- Pascual Laboratories
- Pharma Care Products, Co.
- Respicare Enterprises
- United American Pharmaceuticals, Inc.
- Wyeth Philippines, Inc.

International Partners

- Philippine Nurses Association of San Diego
- Philippine American Foundation

EXHIBIT II ORGANIZATIONAL CHART

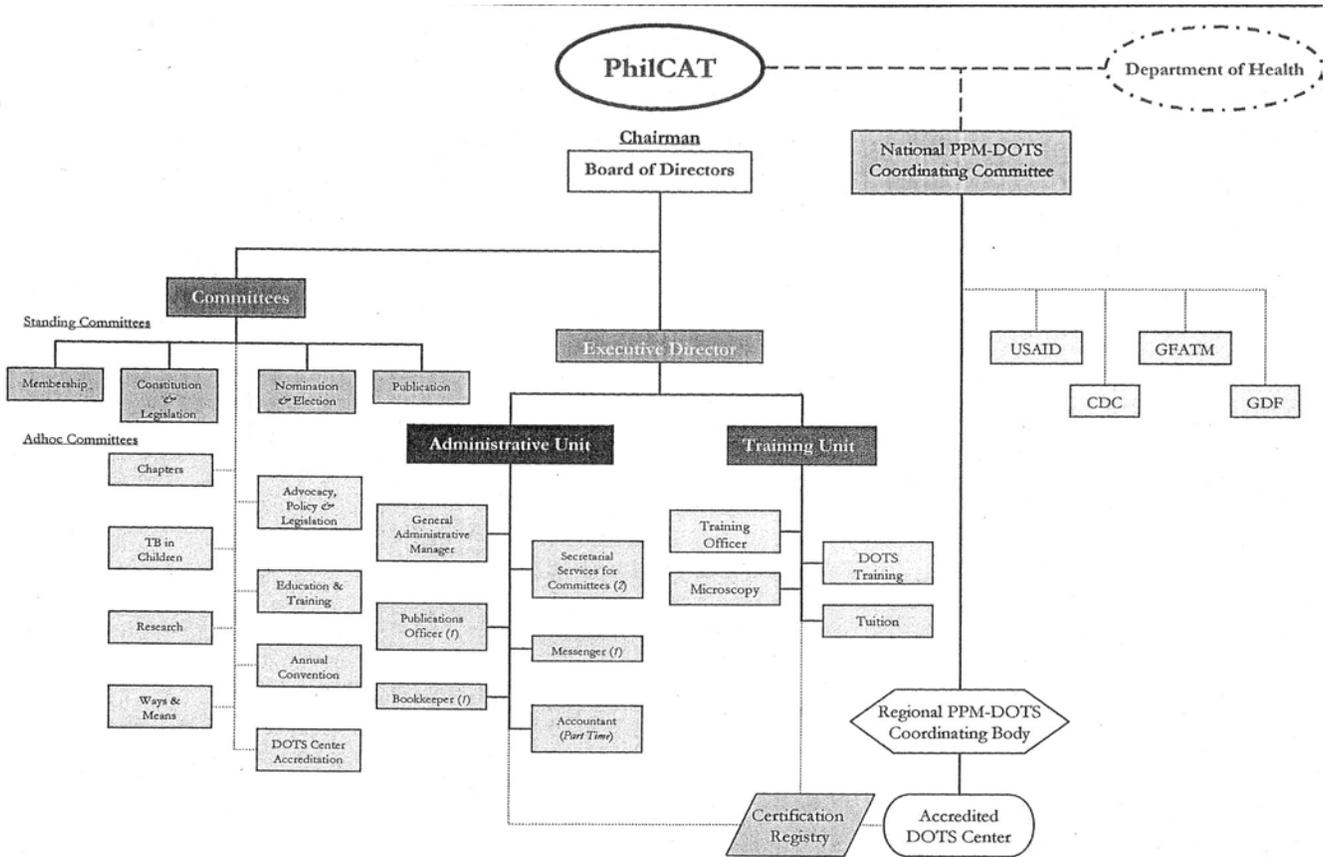


EXHIBIT II ORGANIZATIONAL CHART (continued)

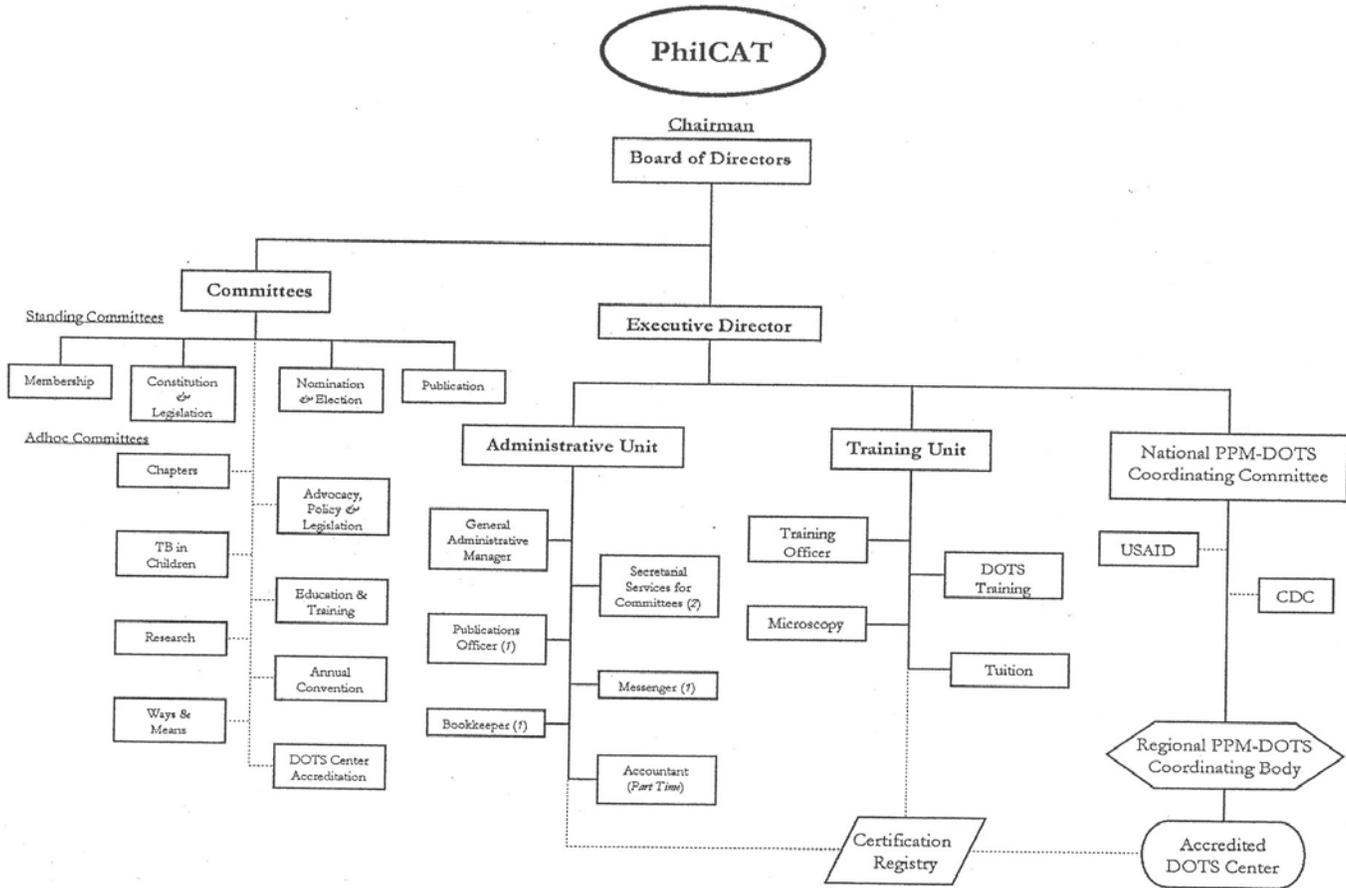


EXHIBIT III
LIST OF POTENTIAL PARTNERS IN TB CONTROL

PARTNERS	PERIOD	AREA COVERAGE	PPM ACTIVITIES	FOCUS
AKAP Foundation	> 20 years	NCR, Bicol	little	Community-based training
BAGA, Inc.	8 years	Cebu, Region VII	some	Education, training, research
De La Salle U (DLSU)	7 years	Cavite	some	Training/research/advocacy
DOH	47 years	Nationwide	little	Diagnosis, treatment
German Doctors Com.	8 years	NCR* (urban poor) Mindanao** (3 hospitals)	some	Diagnosis/treatment/ community org./training
JICA	8 years	5 regions*** esp. VII	none	Technical training
MSF	2 years	NCR, Oriental Mindoro	little	Community-based
Medicin Del Mundo (MDM)	2 years	6 provinces**** (urban poor)	little	Diagnosis and treatment
Makati Med Center (MMC)	3 years	Makati, NCR, Luzon	some	Diagnosis, treatment incl. MDR
PhilCAT	7 years	nationwide	large	Advocacy, PPM, research
PAFP	6 years	nationwide	some	Education/ training
PCP	5 years	nationwide	Potentially large	Education/ training
PCCP	2 years	nationwide	Potentially large	Education/ training
PhilHealth	14 years	nationwide	Potentially large	Compensation/ compliance
PTSI – Q.I.	40 years	nationwide	some	Training, active case finding
UP-PGH	> 70 years	NCR, nationwide	some	Diagnosis, treatment
UST	6 years	NCR, north of Manila	some	Diagnosis, treatment
World Vision	3 years	14 provinces*****	large	Community org./ technical
Zuellig Foundation	1 year	Rural areas	some	Diagnosis and treatment

* Bagong Silang, Tala, San Andres, Payatas, Canossa-Tondo, Novaliches, St. Anthony, Caloocan

** Cagayan de Oro, Bukidnon, Misamis Oriental

*** Cebu, Bohol, Iloilo, Mindanao (Zamboanga)

**** Mt. Province, Abra, Benguet, Kalinga-Apayao, Ilocos Sur, La Union

***** Phase I: Davao City, Capiz, Misamis Occidental, Surigao del Sur; Phase II: 10 other provinces including Cavite

EXHIBIT IV
PHILCAT PROGRAMS AND ACTIVITIES THROUGHOUT THE YEARS

Advocacy

Yearly Commemoration of World TB Day (1997 – 2002)

- World TB Day 1997 and 1998 were held at the Quezon Memorial Circle attended by thousands of participants from the different member organizations. Outstanding health implementers of the Directly Observed Treatment program of the DOH was also awarded and officiated by World Health Organization.
- World TB Day 1999 was held at the Department of Health. The occasion was highlighted with the signing of the Memorandum of Understanding in support of the DOTS.
- World TB Day 2000 was the most widespread with commemoration activities in fifteen provincial sites aside from the one held at the Quezon Institute.
- World TB Day 2001 was held at the Quezon Institute. Members organizations of PhilCAT, Department of Education, Culture and Sports (DECS), representatives from the World Health Organization and the Japan International Cooperation Agency participated in the event.
- World TB Day 2002 was held at the Quezon Institute with the theme “Stop TB to fight Poverty: Do it with DOTS.” This gathering was considered as one of the largest commemoration of World TB Day so far. The same in 1999, the event was highlighted with the signing of a Memorandum of Agreement (MOA) by the government and private sectors to work on the Development of a Comprehensive Policy for TB Control in the Philippines. The institutionalization of such eventually led to the National TB Summit.

Annual Convention

- August 1994 – TB: A Share Responsibility
(Co-sponsored by the Department of Health)
- August 1995 – Issues in TB Management
(Co-sponsored by the Phil. Society of Microbiology and Infectious Disease)
- August 1996 – Childhood Tuberculosis
(Co-sponsored by the Philippine Pediatric Society and Pediatric Infectious Disease Society of the Philippines)
- August 1997 – Tuberculosis in the Home, in the School and in the Community
(Co-sponsored by the Philippine Academy of Family Physicians)
- August 1998 – Tuberculosis in the Workplace
(Co-sponsored by the Philippine College of Occupation Medicine)
- August 1999 – PhilCAT – Five Years of Advocacy: Past, Present and Future

- August 2000 – Synergizing Tuberculosis Control: A New Mind Set (Co-sponsored by the Philippine Tuberculosis Society, Inc.)
- August 2001 – TB Diagnosis and Management: A Continuing Challenge (Co-sponsored by the American College of Chest Physicians, the Bronchology Association of the Philippines and the Philippine College of Radiology)

Development of Guidelines

1995 “Multisectoral Workshop on National TB Policies”

- organized by the Department of Health
- participants in this workshop were mostly representatives of institutions that had become members of PhilCAT
- purpose was to formulate a Revised Guidelines to the National Program of the DOH to be adopted by Health Units

1997 Consensus on Childhood TB

- initiated by PhilCAT in collaboration with the Philippine Pediatric Society with the participation of the Department of Health

Consensus on TB in the Home, in the School and in the Community

- initiated by PhilCAT in collaboration with the Department of Education, Culture and Sports (DECS) and the Department of Health

TB Consensus in the Workplace

- initiated jointly by the Philippine College of Occupational Medicine and PhilCAT
- other groups involved in the development are: Philippine College of Chest Physicians, Philippine Society for Microbiology and Infectious Diseases, Department of Health, Bureau of Working Condition (DOLE), Occupational Health and Safety Center, Social Security System, PMAP, SOPI, FFW, GSIS, De La Salle University

1999 – present: Task Force on TB in Children

- created by the Department of Health
- Members – DOH, Philippine Pediatric Society (PPS), Philippine Ambulatory Pediatric Association (PAPA), Philippine Academy of Pediatric Pulmonologist (PAPP), Center for TB in Children, World Vision, UP-PGH College of Pharmacology, and PhilCAT
- Task is to develop a technical guidelines for the diagnosis and treatment of childhood tuberculosis, to pilot test the proposed guidelines, and to recommend procedural guidelines for the incorporation of TB in children in the present National TB Control Program based on the results of the pilot testing.

2000 – Clinical Practice Guidelines: Diagnosis, Treatment, and Control of Tuberculosis

- initiated jointly by the Philippine Society for Microbiology and Infectious Diseases, the Philippine College of Chest Physicians and Tuberculosis Service of the Department of Health under the auspices of the Philippine Coalition Against Tuberculosis
- Financial assistance given by the Philippine Council for Research and Development of the Department of Science and Technology

2000 to present – Integrated NTP Guidelines

Research

1. pilot testing of the Guidelines on TB in Children at Bgy. Commonwealth, Quezon City (Task Force on TB in Children and PhilCAT)
2. the Control of Multi-Drug Resistant Tuberculosis in the Philippines through community-based DOTS-Plus Programme (Tropical Disease Foundation and PhilCAT)
3. randomized trial in the use of Family DOTS (FDOTS) among newly diagnosed smear (+) tuberculosis in the PTSI-FOD Clinics (Philippine Tuberculosis Society, Inc. GlaxoSmithKline Foundation and PhilCAT)
4. the development and implementation of the directly-observed treatment, short-course strategy by the private sector in the Philippines

EXHIBIT V
ACTIVITIES AND TIMETABLE FOR PPM-DOTS EXPANSION IN 2003

ACTIVITIES	TIMETABLE	REMARKS
1. Establishment of Central Program PPM-DOTS Task Force	4 th quarter 2002	Composed of DOH TB Manager, PhilCAT rep., PACT rep.
2. Development of operational guidelines for PPM-DOTS	4 th quarter 2002	By Central Task Force
3. Selection of expansion sites	4 th quarter 2002	
4. Establishment of PPM-DOTS coordinating committee at the provincial, city and municipal levels	4 th quarter 2002	Multisectoral local PPM group
5. Advocacy and mobilization in expansion sites	1 st quarter 2003	Identify local opinion leaders
6. Logistics in expansion sites	1 st quarter 2003	Medicine and R/R forms, etc.
7. Training workshop	1 st quarter 2003	PPM-DOTS mechanism based on operational guidelines
8. Launching of PPM-DOTS project	End of 1 st quarter 2003	MOU signing
9. Monitoring and supervision	2 nd and 3 rd quarter 2003	
10. Overall evaluation	4 th quarter 2003	To decide 2 nd phase expansion in 2004

Source: Empowering the Private Sector in a Strengthened NTP Public-Private Mix (PPM) in TB Control by Charles Y. Yu, MD, Chairman of PhilCAT.

PART III. STRATEGIC AND ACTION PLAN
PHILCAT

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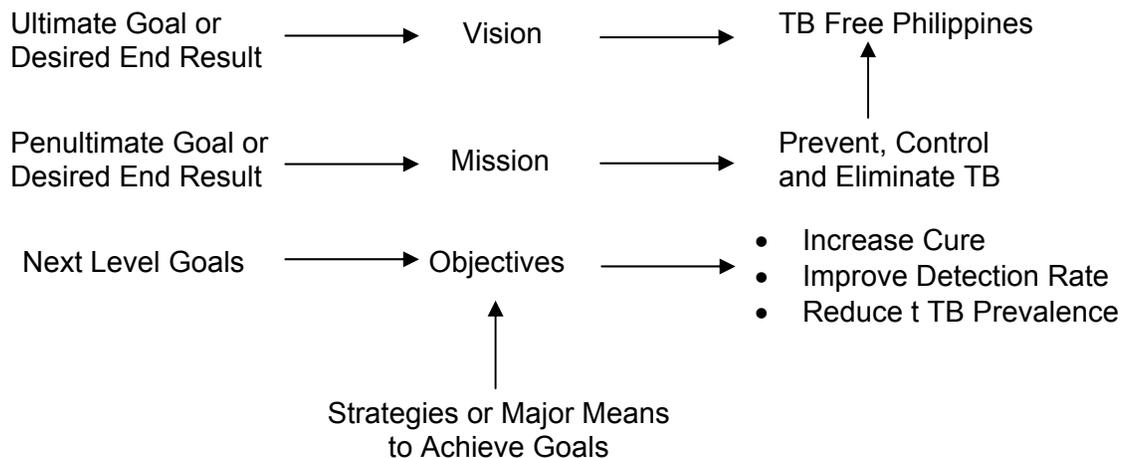
PART III. STRATEGIC AND ACTION PLAN

PHILCAT

1.0 VISION, MISSION, OBJECTIVES AND STRATEGIES

To provide a framework for formulating the Vision, Mission, Objectives and Strategies of PHILCAT, a hierarchy of goals was constructed, the top one being the ultimate end result desired by PHILCAT, which corresponds to its Vision. The next level goals correspond to the mission or basic purpose for being of PHILCAT and its objectives or measurable end results. In a way, lower level goals serve as strategies for higher level goals. However, strictly speaking, strategies are the major means by which these goals would be achieved. The framework is shown below.

Hierarchy of Goals



Based on the above framework, PHILCAT formulated the following Vision, Mission and Objectives. The Objectives were translated into Key Result Areas (KRA's) or qualitative manifestations that the Objectives are being attained and Performance Indicators (PI's) which are the quantitative or numerical equivalents of the KRA's.

Vision : ***TB – Free Philippines***

Mission : ***We are a broad based coalition committed to prevent, control and eliminate TB.***

Objectives	Key Result Areas	Performance Indicators
1. To improve TB cure rate	Increased TB cure rate	Govt: From 76% (2001) to 85% (2007) Private: From 24% (2001) to 75% (2007)
	Increased TB success rate	Govt: Maintain at 88% Private: From 62% (2002) to 85% (2007)
2. To increase TB detection rate	Increased TB detection rate	Govt: From 53% (2001) to 70% (2007 – International standard) Private: From 1,000 persons (2001) to 25,000 (2007)
	Increased detection by private sector based on absolute numbers	Based on 60% proportion of new smear cases over total cases Year 1 ----- 3,000 Year 2 ----- 8,000 Year 3 ----- 15,000 Year 4 ----- 20,000 Year 5 ----- 25,000
3. To help reduce prevalence of TB	Reduced TB prevalence rate	From 3.1 (2002) to 2.6 (2007) – addressed through survey

Strategies

1. Adopt DOTS as a national policy and as standard practice in both the government and private sectors
2. Increase the number of DOTS accredited centers that shall serve not only as testing and cure centers but as communication and dissemination outposts.
3. Increase public awareness about TB and improve the cure seeking behavior of the population. This strategy should increase the number of TB symptomatics seeking professional help or cure, from 35% doing nothing about their symptoms based on a 1997 survey to a much lower rate, eventually going down to zero.
4. Get full support and the necessary logistics for the effective, efficient and economical implementation of DOTS.
5. Strengthen PHILCAT and member organizations in their service delivery.
6. Mobilize the necessary funding and people resources.

2.0 PROGRAMS TO IMPLEMENT STRATEGIES

1. Manpower or human resource development to implement all six strategies.
2. Establish physical facilities for DOTS Centers and operate them properly.
3. Accelerate the formation of public – private mix (PPM) partnerships to implement six strategies.

4. Undertake appropriate research and development necessary for all six strategies.
5. Conduct information and education campaign to increase awareness, solicit support and get cooperation of all concerned.
6. Strengthen the PHILCAT Secretariat through:
 - a. IEC materials
 - b. Establishing local PHILCAT chapters (one per province) and increasing membership (to 100)
 - c. Institution building of member organizations according to their respective roles and functions
 - d. Achieve administrative efficiency through: better planning and programming; setting up a good information management system; developing and broadening the membership base; gearing up for accreditation, certification and standard setting role; improve financial and fund management; bolster R & D capabilities; and prepare proper manuals and procedures.
 - e. Operations and administrative create national database including both public and private sectors
7. Establish and operationalize fund sourcing and fund allocation group within PHILCAT.
8. Establish and operationalize logistics support generation, mobilization and dissemination group within PHILCAT. Enter into partnerships, contracts, and working arrangements with public and private sector organizations for the full implementation of PHILCAT strategies and programs.

For each program, PHILCAT must pursue specific activities and tasks.

3.0 ACTIVITIES AND TASKS

Program	Activities and Tasks
Program 1	<ul style="list-style-type: none"> ● Mapping and inventorying of members and training/support institutions. ● Determine capacities/competencies and training needs. ● Design and develop training courses. ● Conduct and evaluate training courses. ● Field manpower properly.
Program 2	<ul style="list-style-type: none"> ● Determine areas and target groups most needing DOTS. ● Set standards for DOTS centers. ● Accredite the centers. ● Ensure that all centers follow prescribed DOTS protocol through constant monitoring. ● Work out arrangements on who would fund, construct and operate the centers. ● Physically build or improve the DOTS centers. ● Run the Centers.
Program 3	<ul style="list-style-type: none"> ● Review all the strategies and programs of PHILCAT and its members. Based on this review, determine possible public – private partnerships for each major strategy of PHILCAT.

- Work out, facilitate PPM .
 - Support PPM.
- Program 4**
- Assess the Research and Development work needed to implement PHILCAT strategies and programs.
 - Determine the required R & D to support the strategies and programs.
 - Undertake the R & D.
 - Disseminate the results of the R&D to the proper organizations.
- Program 5**
- Determine Interest, Attitudes, Usage and other attributes of TB-prone population using surveys, FGDs, observations, etc.
 - From the above, craft appropriate IECs addressed to the different stakeholders of TB (physicians, clinics, hospitals, government agencies, NGOs, local chapters, population at large and TB patients).
 - Carry out the IEC using multi-media approach, celebrities, special events.
 - Integrate IEC into curriculum of formal / informal institutions.
 - Evaluate results to improve IEC.
 - Integrate TB program with other programs (internal child case, family planning, Bantay Bata)
 - Popularize Phil Health, benefit package.
 - Provide incentives to patients, care givers.
- Program 6**
- Do an in-depth organization study and craft an organizational development program for PHILCAT.
 - Membership drive to include academe, all medical schools and NGOs involved in TB.
 - Develop solicitation materials and enlist participation.
 - Determine the need for and create committees for specific strategies such as Operations or Service Delivery, Social Marketing, Investment Programming, Organizational Development, Financial Strategy and Fund Management, Accreditation, Certification and Standard Setting, Membership Development, etc.
 - Create interest and assist in the development of local chapters (one per province).
 - Support local chapters and include in network communications and assistance.
 - Bring manpower development programs down to member organizations and local chapters.
 - Determine “lean but mean” manpower needs of PHILCAT to carry out strategies and programs.
 - Hire and develop manpower.
 - Field manpower.
 - Establish monitoring, evaluation and feedback systems.
- Program 7**
- Determine funding needs based on fully developed plans and programs.
 - Determine fund sources.
 - Make program and project proposals containing the requisite budgets.
 - Present and defend proposals.
 - Establish financial group with expertise in the above and in day-to-day financial and treasury management.
 - Establish good accounting, control and auditing group.
 - Institutionalize reporting systems to funders,
 - PHILCAT board/management and members.
- Program 8**
- Detail out the programs, activities and tasks.

- Determine who will do what, when and where.
- Woo and enlist support of public and private organizations who can assist in the logistics.
- Coordinate and orchestrate the implementation of PHILCAT strategies, programs, activities and tasks.
- Ensure availability and continuous supply of medicine to both public and private sectors.
- Monitor, evaluate and provide feedback on logistics mobilization and distribution.

Documentation of Proceedings

Strategic Planning Workshop

Philippine Coalition Against Tuberculosis PhilCAT

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PART IV. Documentation of Proceedings

Strategic Planning Workshop

Philippine Coalition Against Tuberculosis PhilCAT

February 5-7, 2003 Asian Institute of Management, Makati City
and Days Hotel, Tagaytay City

1.0 INTRODUCTION AND OVERVIEW OF PLANNING WORKSHOP

Dr. Romulo stated that the Philippine Tuberculosis Initiatives for the Private Sector Projects (TIPS) has included the strengthening of the organizational structure of the Philippine Coalition Against Tuberculosis (PhilCAT), as part of its objectives. The strategic planning workshop was TIPS' first activity in achieving the aforesaid objective. TIPS has commissioned Dean Eduardo Morato of the Asian Institute of Management (AIM) to conduct the workshop for PhilCAT, as well as the research activities of his team two weeks earlier.

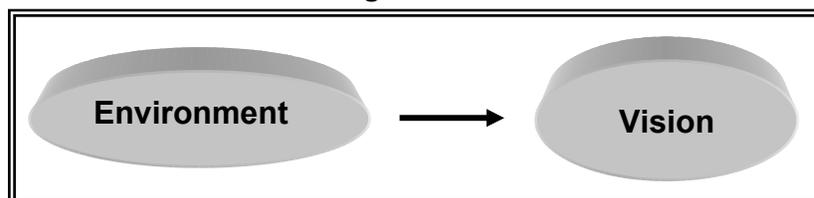
Dean Morato said that for the first day, they would tackle the external environment that PhilCAT finds itself in. The environmental scanning, of which secondary and primary data were gathered from PhilCAT and other agencies, was the first part of the team's activities to be presented on the first day. The purpose of the presentation was for the participants to validate and add their own inputs to what has been gathered. The inputs would subsequently be incorporated in the final document.

On the second day, they would be looking into PhilCAT as a coalition and assess member organizations that are involved in the coalition. This would include the presentation on the internal assessment of PhilCAT, which was gathered/documented from the interviews conducted with key personalities in PhilCAT and from some of their organizational and individual members.

The third day would be spent on doing the strategic planning workshops and action programming to complete their work. In the workshop, the participants would be assessing the capabilities, competencies and strengths of the organizations involved in PhilCAT, as well as the areas where they need to improve and develop additional capabilities.

Dean Morato gave a more detailed overview of what they would undertake for the planning workshop.

Figure 1



The first two half days would deal with the environment (on the left side of Figure 1), while the third day would involve the planning, starting from the end or vision. This would answer, "Where do we go from here or what kind of picture do we want to see regarding the TB situation in the Philippines. The ultimate vision should be the total eradication of TB.

In the process, they would calibrate to what extent they could accelerate the reduction of TB prevalence within the time frame of five to ten years. The participants would be defining the mission/role of PhilCAT and its member organizations (categorized into five). Some measurable objectives would be determined by which they would monitor their types depending on their roles, success/failure, within the same time frame. The objectives will be cascaded down to key result areas and no non-sense performance indicators.

The participants would review the two environments (external and internal), which would be presented to them, and come up with strategies or how they would get from where they are today, to where they want to be tomorrow. "What are the best means of getting there"? The strategies would be brought down to action programs, sets of activities and, ultimately, tasks. The last part involves the identification of the resources needed (people, peso, physical facilities) to achieve the objectives.

The external environment would be presented, followed by an open forum, which would entail the validation and contribution of participants to the data presented.

In assessing PhilCAT, the participants would be examining themselves as to what have been their roles, reach, how effective their interventions have been, and what kind of impact they have created. This aspect is quite sensitive in the sense that most organizations have a tendency to say that "we have done a lot". While this could be true, there is a need to ask "what more can we"? If there are areas which are difficult to do, the last day would be the forum for them to tackle the difficulties as a coalition. There would be overlaps but at the same time, they would hopefully find coordinating mechanisms to address them.

In the presentation of the external environment, they would be using data sifters as follows:

1. magnitudes- "Where are the magnitudes or big numbers going?" "How large is the prevalence of TB, and who are the most vulnerable groups?" The screening mechanism of magnitude tells the strategist where to concentrate his/her efforts. The jugular is shown through the numbers in order to create a big impact. Dean Morato noted that the data showed the larger prevalence of TB among sanitation workers.
2. relevance- there should be a relevance to the objectives and vision/mission being pursued. One relevant data for example is the patient's work setting since a study of this would provide some cause-effect analysis and could address the objectives of reducing TB more directly.
3. importance- focusing on a critical factor that has the highest influence of what one wants to accomplish is the best strategy. "What are the critical factors that most influence the incidence, detection, treatment and eradication of TB?"

4. urgency- there are certain things that cannot wait. On TB in particular, there is a need to stop its spread today even if there are other things to consider, like prevention of TB, which will take longer.

5. doability- this answers the question, "Can we do it?" Do we have the resources to do it?" The participants need not be constrained by the present resources because by acting together, they could achieve more.

2.0 PRESENTATION OF EXTERNAL ENVIRONMENT

2.1 Global and Philippine Statistics on TB

Ms. Lorna Balina presented the external environment in terms of TB-related statistics. Global trends were gathered from the World Health Organization (WHO) study in 2000, while the Philippine situation was mainly sourced from the Department of Health (DOH).

The Burden of TB:

- Tuberculosis kills approximately 2 million people each year
- Over-all one-third is currently infected with TB
- Over 150 million will get sick
- 36 million will die of TB

Global Burden of TB

- biggest share of infected population were in Southeast Asia (35%), followed by Western Pacific (32%) and Africa 1.4%
- Africa had the biggest share (32%) of TB cases that were HIV positive

Deaths caused by TB- More than one-third of deaths were in Southeast Asia, followed by Africa and the Western Pacific (19%).

Biggest number of TB cases could be found in India and number of cases reached 422,569 and 445 million Incidence and notified cases

- Of the estimated 7.963 new TB cases in the world, 42% were found to be sputum smear positive.
- In 1997 and 2000, the Philippines ranked number 7 among the 22 highest incidence countries.

DOTS Programmes: Case Detection Rate of New Smear Positive Cases: India ranked first, while the Philippines ranked 7th.

Treatment Outcomes: DOTS

- In 1999, 19% of all estimated cases were successfully treated under DOTS.
- Only Vietnam registered more than 50 % of successful treatment of all estimated cases under DOTS
- New smear –positive success rate- 80% in all countries, 81% in high burden countries
- Completed treatment- 8.2%

Treatment Outcomes: Non-DOTS

- Cure rate- 22% of those who registered
- (6.1%) completed treatment
- Over-all treatment success was 28%

Treatment Success: DOTS

- Treatment success rate of 63% globally
- DOTS programs treatment success rate of 80% in 1999
- High burden countries treatment outcome growth rate (1995-2000) Philippines grew by 83.5 %, followed by India (82.05%) and Indonesia (74.8)

Progress in DOTS Implementation in High Burden Countries, 1999-2000:

- High case detection rate:
 - 10%>49%: Philippines, Myanmar, Nigeria, Thailand, Tanzania
 - >50%: Vietnam, Zimbabwe

Dr. Yu informed the group that the Philippines has risen up to the >50% ranking in terms of progress in DOTS implementation.

Philippine Situation

TB as Leading Cause of Morbidity and Mortality

- TB (all forms) consistently ranked as the fifth leading cause of mortality form 1994-1996
- Dropped to number six in 1997
- Percent change 1994-1997- 1.4%
- TB remained to the sixth leading cause of morbidity during 1999-2000
- Percent change 1999-2000- (14.5)

Top 10 Provinces and Cities:1993

- Morbidity Rate:

Province

Bataan	Siquijor
Camarines Norte	Cagayan
Batanes	La Union
Camarines Sur	Bukidnon
Aklan,	Ilocos Norte

Cities

Legazpi	Dapitan
Carilaon	Iriga
Oroquieta	La Carlota
Naga	Tagaytay
San Carlos	Tabiliran

- Mortality Rate:

Province

Siquijor	Romblon
Marinduque	Negros Occidental
Aklan	Northern Samar
Catanduanes	NCR 4 th Dist.
Antique	Camarines Sur

Cities

Bago	Iloilo
Silay	Canlaon
Cadiz	Cabanatuan
Naga	Caloocan
Bacolod	Dipolog City

Ms. Balina noted that two provinces in the Bicol Region had TB as their top 10 causes of Morbidity and Mortality rates.

TB Prevalence:1998

- Highest prevalence per region- Western Visayas (.86%), Bicol (.79%), NCR (.61%), Southern Luzon (.55%)
- TB prevalence highest among the poorest segment of the population

TB Cases and Rates

- Highest TB Cases per province in 2001- CARAGA, Region 5, NCR
- Growth rate (1998-2001)- Philippines (10.5), Region 12 (26.9)

Case Finding Indicators: 2000-2002

Case Finding Indicators: 2000-2002

Case Finding Indicators	Year			Growth Rate
	2000	2001	2002	
1. Estimated national population	76.3 million	77.8 million	79.5 million	2.1
2. Number examined	614,332	449,460	257,157	(35.3)
3. Total number of smear (+)cases [No. new Sm(+) + No. Old Sm (+)]	75,634	64,720	39,374	(27.8)
4. Positivity Rate (Tot. Sm+/Number examined)	12.31	14	15.3	11.5
5. Case Detection Rate (Tot. pop. X 145/100,000)	62.3	53	32	(28.3)
5. Proportion of Sp(+) to total cases (Tot.Sm+ /Total TB cases)	58.9	60.4	54.2	(4.1)
6. TB case notification rate	168.3	137.6		(18.2)

Source: NTP Accomplishment Report DOH

Treatment Outcome:1999-2002

Treatment Outcome by Year, Philippines:1999-2001

	1999	2000	2001	Growth %
New SM(+) evaluated	35,842	50,196	44,838	11.8
Number cured	24,821	36,459	33,914	16.9
Cure rate	69	73	76	4.8
Number completed	6,319	7,606	5,629	-5.6
Completion rate	18	15	13	
No. of Tx Failure	554	620	625	6.2
No. of transferred-out	1,140	1,402	1,160	0.9
No. of lost	2,091	2,960	2,590	11.3
Number died	958	1,149	1,005	2.4

Source: DOH

Targets:

- By 2003, NTP was targeting 83,611 numbers of new sputum with a case detection rate of 74%.
- Targets are highest for Regions 4, 5, 7, 11 and NCR.

Health Survey from DOH:1997 and 2000

Where they sought treatment: 2000 (UNHP)

- Health Center (44.14%)
- Government hospitals (21.7)
- Private clinics (26.58%)
- Private hospitals (5%)

Factors affecting choice of provider

- Cost of treatment
- Proximity to the house
- Competent doctor and good services

Action taken by confirmed TB cases

- NONE (34.5%)
- Self medication (22.4%)
- Health Center (15.5%)
- Private doctor (10.4%)

Perceived best remedy for TB

- Drink medicine 51.6%
- Have regular check-up, health center 21.6%
- Eat proper diet 7.6%
- Have regular check-up with private MD 7%
- Take a leave from work 3.4%
- Get sputum examined 1.7%

Policy Environment for TB:

- RA 1136 (1954) of the Tuberculosis Law- created National Tuberculosis Center of the Philippines; mandated provision of funds for NTP
- RA 3573- Notification of communicable diseases
- Local Government Code of 1991- LGUs manage program
- Memo circular no. 98-155- pronounced TB Control Program as No. 1 priority health program

Funding Resources for TB Control and Prevention

- Budget for TB control is explicitly provided in the General Appropriations Act
- 2001 budget increased by 25%
- Annual NTP budget for drug regimens US\$3 million
- Health Sector Reform Agenda included NTP as priority for multi-year budgetting

Health and Finance Dynamics

- Line item in the budget called Health Operation, including TB Control Operations, Disease Prevention and Control was created
- Baseline budget for TB Control Program proposed by DOH
- DBM earmarks cost of TB drugs and supplies in the DOH budget

2.2 Perspectives in Private Sector Participation in the National Tuberculosis Program

Mr. Henry Grageda presented the findings/results of his interviews with some of the key players in TB control. The list of respondents were provided by PhilCAT. They are: Ms. Johnson and Dr. Lofranco from the Center for Disease Control and prevention (CDC), Dr. Siya Kato from JICA Quality TB control Program, Dr. Dongil Ahn (WHO), Dr. Alberto Romualdez, president of Friendly Care Foundation. Mr. Grageda mentioned that the respondent from PhilHealth was not available at the time of interview.

Framework of Presentation

- Areas of Intervention:
 - Case Finding and Diagnostics
 - Treatment Regimen
 - Monitoring and Quality Assurance
- Defining the Energies
- Opportunities and Challenges

Case Finding and Diagnostics

- Motivation: NTPS ('97) info that 36.2% of TB symptomatics consult private physicians
- However:
 - Discrepancy of reports (notification, case finding)
 - Sputum false positive findings
- JICA support dedicated to public program
 - Capacity building- core labs, training, equipment

- Networking of labs
- Operational research: feasibility studies, assistance to DRS, participations in TB diagnostics committee
- Coverage: Cebu, Bohol, Eastern Samar, and Negros, Laguna, Rizal, Bulacan, and Nueva Ecija. Network with Region 10 (Northern Mindanao) and 5 (Bicol); as well as with USAID supported programs in Region 8, 12 and the Cordilleras.

Private Sector: Case Finding/Diagnostics

- Preference for x-ray
- No clear counterpart to public system
- Reporting/ notification protocol undefined
- Support private initiatives? – Doubt on level of efficiency:
 - 1/3 of cases through the private sector
 - Not economical to train private labs- small, dispersed impact
- Mass survey? – Not efficient

Treatment Regimen

- Efficiency and Sustainability as indicators for support
- In every 100,000, 110 cases, public-private ratio: 2:1
- Private dispersed over many units
- Lack of consensus on Tx regimen (DOTS) among Priv. Clinicians
- Drug Supply:
 - Global Drug Facility (GDF)
 - Allocation, location, price, cultural factors

Monitoring and Quality Assurance

- Public: defined system, formats
 - Laboratory register, patient treatment cards, TB register
 - But not all is well in the public sector- difficult to get commitment and support from LGUs
- Private: undefined, no consensus

Opportunities and Challenges

Where are the Energies?

An established organization and network of trained workers with a defined operating framework	COORDINATION/COHERENCE AMONG IMPLEMENTERS
Demonstrable political and organizational commitment leading to substantive logistical and technical support	COMMITMENT OF STAKEHOLDERS
A scientifically supported case in a large scale	CASE-ESTABLISHMENT

Case Establishment

- Players supportive of private sector involvement; PhilCAT treated with high regard
- Predominant view: While private sector participation is novel and honorable, it might not result in the large, sustainable impact envisioned in the public programs
 - Difference in target beneficiaries (by income classes)
 - Absence of wider-scale studies; the few conducted were heavily infused with resources- not scalable to general setting
 - Conceptual Differences: Family DOTS, DOTS in Workplace
- SUGGESTION/ADVICE:
 - Conduct national studies wit representative site per region treating 20-40 Px each
 - Provincial model-building – flexibility; 5 or 6 models available for public-private mix (PPM)
- Key indicators:
 - operational feasibility (i.e., that it can be done)
 - relevance and suitability to existing conditions,
 - cost-effectiveness and efficiency
 - magnitude of impact

Commitment of Stakeholders

- Private sector largely seen as fragmented, varying interest
- Need consensus from the constituency- the private sector- on role and extent of involvement
- Addressing concerns of the “private physician” –aversion to supervision, market context, situation of hospitals
- Need to define national policy/program on financing (PhilHealth, access to GDF)
- Logistical issues in the private sector
- Interface with LGUs

Coordination/Organizational Coherence

- Operating strategy: what roles and level of responsibility to assume
- Being sought:
 - Defined counterpart organization in the private sector
 - manpower complement
- Strategy, Systems, Structure, Staffing

Summary

Area	Opportunities	Challenges
Medical/Program Management (general)	Greater scope of DOTS acceptance	Continued transmission: remains leading cause of mortality and morbidity. Only slight improvement on ARI.
	Increased resources and stakeholder commitment	Devolution of health: Protracted process of gaining commitments from LGUs
	Standardization: greater efficiencies	Inconsistencies between notifications and incidence
	Improvement of cure rates; declining proportion of new sputum + cases leading to mortality	Risk factors: HIV, extra-pulmonary, TB in children, drug resistant-strains
	Greater availability of drugs, Global Drug Facility	Uneven distribution of drug supply
Socioeconomic (RP)	Better economic outlook; growth rates	Static to worse poverty incidence (by population); TB incidence worse in the poorer quintiles
	Declining inflation (2002 vs. 2000)	-Higher price indices for non-food items; -TB Geographically more prevalent in poorer regions; Bicol, Visayas and Mindanao; -Greater TB prevalence in urban areas; congestion; -Continued migration to urban areas, migration overseas; -By age group, most prevalent in the productive ages
Specific to Private Physicians/Sector (RP)	Openness/support for involvement of private sector	Lack of consensus on diagnostics, treatment & quality; assurance protocol: knowledge and compliance with DOH & WHO guidelines
	Access to GDF	Preference for x-ray diagnostics, discrepancy with sputum + confirmation
	Availability of funds	-Inconsistent application of rules for notification; unclear role in case-finding; -Private labs dispersed; inefficient to train and equip; -Financing Private Clinicians; no agreed model for market-context and aversion to supervision; -High-cost drug supply, availability, price, location, cultural factors, logistics; -Un-established case for private sector involvement; -Unspecified commitment of private stakeholders; -Undefined operating strategy, structure, systems, staffing (manpower)

3.0 OPEN FORUM

Dean Morato reminded the participants that the data presented included the environment outside PHILCAT where they should focus their efforts in order to make a big difference.

Interpretation of data

Dr. Takeshi Kasai from the World Health Organization (WHO) commented that the presentors should be cautious in interpreting data because it could lead to the wrong implementation of strategies and interventions. He noted that this mistake actually happened to him when he was working in Japan. He cited that although there are really more notification cases among poor regions, it does not necessarily mean that these provinces have the highest TB prevalence rates. He explained further that TB notification does not necessarily mean that they constitute actual incidences of TB. Another data he commented on was the group's presentation of case detection rate (CDR) by region where he clarified that there was a denominator calibrated using the estimated figure which could only be used at the national level. Bringing them down to lower or regional levels could result in big variations. Moreover, these figures (CDR) would not indicate whether the health practitioners were doing a good job or not. He noted the same observations with the death rate figures.

Mr. Charles Yu remarked on the 1993 data from DOH where Region 5 showed a big number of TB cases. He explained that the Italian government purposively targeted Region 5 and other poor regions for their study. He added that the reason why there was a decrease in TB cases in the past two years was the strategy of DOH to focus on case holdings rather than case detection, or looking at quality rather than numbers.

Dr. Hernandez of DOH remarked that the quality indicators should be compared to the quantity indicators in terms of denominator. The cases could be getting higher because it is only being computed against a small number of population. She emphasized that the increase in the proportion of smear positive against total TB cases shows that there is high preference in sputum microscopy examination because of DOTS.

Dean Morato commented that the presentation included the comparison of data before and after DOTS. As a result, everybody could agree that the (DOTS) strategy was working.

Purpose of the Planning Workshop

Mr. Jomar Fleras from Reach Out Foundation remarked that they should be directly tackling the issues of PhilCAT. Dr. Reichman said that he did not see the trend concerning the interest/ involvement of people in TB in the presentation, specifically the efforts of PhilCAT from the beginning up to the present. Dean Morato explained that PhilCAT, as an organization would be discussed the following day yet. The charts represented only the macro environment where PHILCAT was operating. From these environment figures/trends, PhilCAT could determine what are the strategic issues that could be addressed.

Ms. Gigi Custodio (Reach Out Found.) asked for whom the planning workshop was (i.e. PhilCAT, TIPS, public-private mix) and how they could make use of the external assessment presentation. Dr. Romulo replied that it was a planning workshop for the Philcat Coalition wherein the coalition would be assessing its present situation in order to help them plan for the future. One participant remarked that PhilCAT should look at the TIPS project as a resource rather than see PhilCAT as an organization, being used by TIPS.

Role of PhilCAT

Dean Morato cited a particular issue which emerged from the assessment. This issue is the lack of adherence by other private practitioners to DOTS. In this connection, Philcat would have to decide on what role it would take to convince them to practice DOTS. Another decision that PhilCAT would have to make is whether it would let its members (as individual organizations) be left on their own to pursue their involvement in fighting TB or if it would continue to act as an implementing body on behalf of its members. The members should likewise decide on the extent of their contribution/participation in PhilCAT's efforts.

Opportunities in External Assessment: Health Insurance/ TB benefit packages, Projects

Dr. Camilo Roa, founding chairman of PhilCAT noted that there was an opportunity for PhilCAT which was not mentioned in the external assessment. The government has an on-going drive to achieve universal health insurance, including medicines, TB benefit packages which could impact highly on the private sector, if it could be achieved. He also pointed out that the funded projects coming in were opportunities they should take advantage of. Dean Morato assured the group that his research team would pursue their interview with Philhealth to include the health insurance package as one of the opportunities in fighting TB.

PhilCAT as A Critical Factor in TB Control

A participant asked if the research team saw PhilCAT as playing a critical factor in controlling TB. Dean Morato reiterated that they would be assessing PhilCAT together on the second day. Initially, there was an assessment on the role, reach, and impact. Mr. Grageda said that any initiative from the private sector was welcome.

Dean Morato revealed that they were not prepared to do statistical impact analysis since it would require a more sophisticated methodology and more resources, aside from the fact that it was not part of their terms of reference. However, the interviews conducted could surface some impact generated by PhilCAT, including the impact on the programs of the individual members. They would have to infer from what PhilCAT says in its self-assessment report. He added that they interviewed ten individual member organizations under PhilCAT for validation purposes.

Private Practitioners

A participant from the Philippine Academy of Family Physicians (PAFP) expressed her concern over some conclusions made on private practitioners such as the non-adherence to management recommendations, reporting/notification protocol undefined, lack of consensus on treatment regimen) and asked where they got it from. She also

asked where they got the treatment regimen ratio of the public-private of 2:1. She added that PAFP is comprised of 6,000 active members, mostly from the private sector. Mr. Grageda replied that the statistics was provided by Dr. Ahn (WHO). He explained that the validity of the data was within the content of the interviews itself, basically to illustrate what the potential impact of what private participation would be within the TB program. The accuracy of the data was up to the coalition to pursue.

Dr. Yu apologized for the misconception of the private practitioners' non adherence to management recommendation. He informed the group that there were guidelines given from PhilCAT with the Phil. College of Chest Physicians, where most of the PhilCAT Board are also members. The guidelines were created by TFP and DOH in 2000 where the practitioners acknowledged that smear sputum test should be the first choice of diagnosis. The problem is the adherence of the doctors to the guidelines, which they have themselves imposed. He said that based on the other data that he had reviewed, he could safely say that at least a third to half of TB patients consult with private practitioners. However, it is also not safe to conclude that the remainder of that percentage only consulted with the public sector.

Dean Morato said that the participant could have reacted mainly on the word "undefined" reporting. He believed that the private practitioners know what they are doing, but from the perception of an outsider, private practitioners may be using different approaches which led the interviewees of Henry Grageda to give the assessment as "undefined".

Awareness on TB

Dr. Maria Rubio of Medicos del Mundo said that as foreigners, they want to know the real situation of TB in the Philippines. In their country (Spain), the stigma on TB is also a problem, and because of this, many TB patients do not seek medical attention. They did a study in Metro Manila wherein respondents were asked what they would do if they had the symptoms of TB. Among the poor, who comprised the majority of those suffering from the disease, they said that they would not seek medical attention because they are skeptical about what would be done to them. This could be attributed to the terms being used by the health providers. Hence, it is important to analyse whether the correct messages are being relayed especially to those who cannot afford treatment.

Dean Morato said that the comment was just confirming the survey presented that 34% of TB symptomatics did not undergo treatment which could be attributed to the lack of awareness of people about TB. He considered this to be the biggest issue to be tackled by PhilCAT. He cited the behavior of people on social marketing which is composed of three levels: awareness, interest and usage. If their awareness and interest on the product are low, the greater the possibility of non-usage of the product. Thus, the issue for PhilCAT would be "How much of its effort would be placed in the awareness building and interest generation? How much could be placed on proper usage?" He added that among the many issues presented, the relative apathy of respondents to TB treatment bothered him the most.

A participant stressed that there are some 30%-50% of patients going to the private practitioners, which PhilCAT, as an organization must address. The ones not undergoing treatment could be addressed by both the public and private sectors. Dean Morato said that what was just pointed out was the next issue of interest. Those who are interested have two choices to make. "But if you go to the private practitioner, will you

get the right kind of treatment?” He cited himself as an example of one who went to one of the top private hospitals in Metro Manila for lung examination. He was told by the doctor to undergo x-ray twice because the doctor was not sure of the first x-ray result.

Since PhilCAT represents the private sector, the strategic issue is, “If they come to us, what do we do. How do we advocate to the private sector to get the best practice on the ground?”

PhilCAT Objectives, Planning Process

Dr. Mukund Uplikar (WHO) stated that they should know the exact objectives of PhilCAT before they could come up with good strategies. Dean Morato said that tackling the objectives was part of the planning workshop and that PhilCAT’s objective was well articulated. He had the option of doing the top-down approach (Vision, Mission, Objectives first) in strategizing but he decided to put everybody on a level playing field by making sure first that information was common to all of them through the external and internal assessment. Given the information provided in the EA and IA, he wanted to surface the issues so that when they re-visit the objectives, they could decide if they need to reformulate them or not, based on the issues.

Dean Morato explained further that the planning workshop would not only include objectives but specific performance indicators in measuring the objectives or end results of the plan. Finding out that there was a high level of dis-interest of people on TB treatment could help PhilCAT decide if they could include it in their performance indicator. For example, bringing the level of interest higher from x% to y% within the next five years or so. This could test the effectiveness of PhilCAT in terms of being able to raise the interest of the people. The level of interest as a performance indicator could be the starting point, going down to detection, treatment, and finally, monitoring. The big work for the group is on the last day, when the strategies and action programs would be crafted. The work could also be termed as a prioritization exercise where more important or urgent objectives could be implemented first on the first year, followed by the next ones in the subsequent years. This method could help in securing funds from the funding agencies who are quite keen about the impact of the program. A bigger impact is more likely to be addressed if PhilCAT focuses on one or a few programs only.

Prioritizing Issues

Dr. Rodrigo Romulo (PhilCAT chairman), expressed the need to forward two urgent issues that needed to be tackled. Firstly, PhilHealth has assigned PhilCAT to be its certifying body in rolling out their TB benefits package. This is an urgent issue for PhilCAT in terms of its readiness to take on the responsibility. The question is “Will PhilCAT be a certifying body for PhilHealth or will it set up an interim mechanism to eventually do it?” Another issue is: Should PhilCAT act as the trainers of people who need to be certified as DOTS providers.

Dean Morato said that they would be discussing the role of PhilCAT as an organization vis-a-vis all the data/issues presented. He said that it would be a deliberate choice of being an authority (certifying body) at one end or being a direct implementing body, which is at the other extreme. The roles and responsibilities have to be threshed out by the whole group.

Dr. Roa stated that the coalition exists because there was a big problem of TB locally. TB is still a problem and if TB is not controlled, they need to find out where the problem comes from. Medicine is not a major problem and the National TB Program is doing well. Thus, both are considered minor issues. What remains to be the major TB drivers are the patients who are classified into three, in terms of where they source their treatment: government, private and no consultation. He asked the group whether the private practitioners could be considered as an issue that needs to be tackled as well as the PhilHealth urgency. The participants agreed. Hence, he said that they should be prioritized.

He said that the polishing of data based on interpretation (i.e. notification versus case finding) could be threshed out. Funding also seems to be not much of a problem.

The participants agreed that MDR could be considered as a challenge.

Dr. Roa mentioned PhilHealth, GDF as opportunities for PhilCAT. A participant added the existing public DOTS centers which could be accessed by the private sector as another opportunity for them. He asked if there was an existing guideline for that.

Dr. Yu corrected Mr. Grageda's presentation on the absence of guidelines in the access of GDF. He said that there was a mother document containing the step by step process. What is needed is for the mechanism to be refined.

Dr. Roa said that they should look into the impact that PhilCAT created and where they have failed as well, to help them in future planning. A participant said that in two to three years, the coalition has brought in government agencies such as SSS, DECS, GSIS and the Department of National Defense. However, they are still considered to be an external factor to PhilCAT.

The impact of devolution is one external angle to look at because not all LGUs are supportive to the health program.

A participant pointed to the poor utilization of resources. If there are excess resources that are not utilized, they could divert the funding into some other areas.

Strategic Issues:

Dean Morato listed the major issues that were raised in the presentation and the discussions that followed after.

EFFECTIVENESS

1. *Low level of awareness of TB patients* - based on the data/survey presented.
2. *Inconsistency of diagnosis/treatment among private practitioners* (to the highest level)

EFFICIENCY/ECONOMY

3. *The need for strengthening advocacy of PHILCAT* - by bringing down its influence to the lowest (LGU/barangay) level. There may be varying levels of implementation of LGU depending on who is the official on top of the LGU.

4. *Public and private participation and coalition* - in terms of detection, treatment , influence on increasing government budget, etc. There is already an infrastructure in place. The budget is in but could be increased.

5. *Maximizing resources*- putting resources in the right places

Dean Morato cited that PhilCAT has done many programs. Focusing on the areas where it had been very effective are a good to expand. On the other hand, the areas of difficulty could be something to examine "Why did we find difficulty there?"

Dean Morato said that as they already have the magnitude and relevance (constituency), they have to answer question "What are the critical factors in influencing the targetted participants, such influencing TB patients to come out from hiding and submit themselves to treatment, how to get the private practitioners to change their practice. The answer to the critical factors is actually the strategy.

Dr. Yu stated that PhilCAT is a coalition of both the public and private sectors. The paradigm has changed because the NTP has accepted that the private sector is part of the NTP. It is an avenue where both private and public sectors have found common grounds.

4.0 Recap of Day 1

Dean Morato gave a recap on what has transpired on the first day of the workshop.

In looking at the external environment of PhilCAT, they were able to see some of the trends, patterns, behavior and practices in the drive against TB from the past until the present, as follows:

Attitude of TB patients. The most alarming data that was presented was about the result of a survey conducted (by DOH) among TB patient respondents, of which some 34% refused treatment. It was also pointed out that there are accepted medical practices that have a higher rate of success more than others and part of PhilCAT's advocacy is for both public and private to adopt the practices that have been proven to be effective. This could be hopefully achieved if the stakeholders synchronize their efforts.

Devolvement in health management. There have been changes in the environment with regards to the consciousness in TB where there is still a high interest at the national level. On the other hand, there may be varying degrees of interest and excitement over health, particularly in TB treatment, due to the devolvement/decentralization of health governance/management to the provincial/municipal levels.

Resource allocation. There is a way to be efficient in allocating resources to both the public and private sectors. There is room for collaboration such that the members become synergistic in their drive against TB. There was an issue raised on allocating the resources in the right places to attain effectiveness in fighting TB.

General trends. Although there are differences in the interpretation of trends and statistics, everybody recognizes that TB is a very big problem.

PhilCAT as a coalition. The coalition is a good means of addressing issues. Having a coalition is by itself a strategy since it coordinates, orchestrates, monitors the activities of everybody. It is also a good venue for advocacy on its objectives. Each member organization is doing its own thing and reaching out to its client system, contributing its own effort in fighting TB.

4.1 Overview of the second and third day session

Internal Assessment of PhilCAT

Dean Morato emphasized that the discussions on the internal assessment of PhilCAT was composed of two parts; PhilCAT as a coalition and the activities and programs of the member organizations.

- a. *PhilCAT.* The results of the interviews with PhilCAT officers, who were the mainstays of the coalition, showed that there have been definite accomplishments in terms of the reach of the coalition, the impact on policy formulation and the effects on anti-TB program implementation.
- b. *Member organizations.* This covered their roles, activities, reach, and impact. The methodology used or the results of the study was based on the self-assessment of the (10) interviewees in terms of their strengths and competencies and their weaknesses and deficiencies.

Overview of Workshop Activities

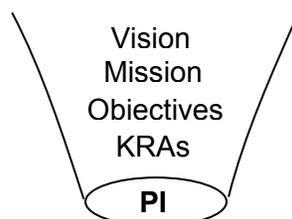
The planning exercises would be based on the two levels of strategic planning:

- 1) Top to bottom- vision, mission, objectives, KRAs, PIs and
- 2) Bottom up - external and internal analysis leading to the SWOT and strategy formulation.

Vision, Mission, Objectives, KRAs, PIs (V-M OKRAPI)

The exercise for the following day would be the top to bottom or right to left planning. The first half (See Fig. 3) of this process involves the following: Visioning, wherein they would have a vision of what would happen in the future, resulting from changes in the present environment (behavior and practices). This would be followed by crafting the mission statement or the role of PhilCAT and its member organizations in achieving the vision. Next would be the formulation of objectives which are the measurable end results, followed by the key result areas which are nothing but manifestations that the objectives are being attained and indicate that the organization is getting closer to the vision. The KRAs would lead to the formation of certain performance indicators, which would translate the KRAs to numerical terms.

Figure 3



External and Internal Assessment

The second level (from the bottom) is where the participants ground the organization according to the environment it operates in. They would re-visit the external and internal environment, look at the strengths and weaknesses of the organization, and the opportunities and challenges in the external environment so that they could formulate strategic interventions.

Strategic Options

After going through the two levels of visioning/objective setting and environmental analysis, the organization proceeds to develop strategic options, which the participants would do the next day.

1.) SWOT Analysis

Strategic options could be made through the SWOT Analysis (See *Figure 4*) which involves the juxtaposition of strengths (S), and weaknesses (W) of the organization with the opportunities (O) and threats (T) or challenges (C) in the environment. Four combinations could be made:

- a. strengths-opportunities (SO) strategies. Ask the question: how can strengths be employed to take advantage of development opportunities?
- b. Strengths-threats (ST) strategies. Ask the question: how can strengths be used to counteract threats or challenges that tend to hinder achievement of objectives and pursuit of opportunities?
- c. weaknesses-opportunities (WO) strategies. Ask the question: how can weaknesses be overcome to take advantage of or implement development opportunities?
- d. Weaknesses-threats (WT) strategies. Ask the question: how can weaknesses be overcome to counteract threats that tend to hinder achievement of objectives and pursuit of opportunities?

Figure 4. Strategic Planning Process

External Environment Assessment	Internal Environment Assessment	Strengths 1. 2. 3. 4.	Weaknesses 1. 2. 3. 4.
	Opportunities 1. 2. 3. 4.	1. 2. 3. 4.	1. 2. 3. 4.
	Threats 1. 2. 3. 4.	1. 2. 3. 4.	1. 2. 3. 4.

2.) *Right to left planning: Strategies, Programs, Activities, Tasks, Resources (SPATRES)*

Another process for generating strategic options is through the right to left planning process. This is a more creative way of generating strategic options.

This exercise starts with the performance indicators. For each performance indicator, (PI), strategic options are formulated. Each of the options is then converted to action programs, and then brought down to specific activities and tasks. The last stage of the process is to determine what resources are required to carry out the first steps. The resources include the three Ps of people, pesos and physical facilities. Dean Morato said that the PhilCAT board would have to re-group later on for the last stage, since they would not have the time to go through it.

For the presentation of the Internal assessment of PhilCAT, Dean Morato told the participants to contribute their own ideas to the presentation so that they may attain a more comprehensive view of the PhilCAT (as a movement) and its member organization. He explained that a movement is like a cause that everybody wants to push and participate in together, while an association/organization is oftentimes concerned only with its members. A movement is necessary because the enemy is huge and powerful.

5.0 INTERNAL ASSESSMENT

Mr. Luis Cruz presented the internal analysis of PhilCAT as an organization:

The methodology used in analysing PhilCAT is to interview of some key personalities of PhilCAT and selected members of the coalition. They came up with a cross-section of member organizations, as samples who would more or less be representative of what everybody is involved in.

PhilCAT was organized in 1994, with an initial membership of seven members and a goal of unifying organizations that are into curbing and controlling TB in the country. This was the time when the public and private sectors were controlling TB in their own independent ways.

PhilCAT Vision: TB control through unified action.

Two “extreme” roles of PhilCAT:

- Secretariat – coordinating all the activities of all the member organizations.
- Super body- does everything, including raising its own resources, conducts own treatment, etc. It is merely replicating what the members are doing anyway.

Reach of PhilCAT:

1. geographic- before- Manila base; now – nationwide resulting in the following:
 - advocacy campaign- difficulty in scheduling personalities
 - permanent presence- local chapters in the grassroots
2. membership- increased from seven to 52 in the present., with members from government, NGO, associations abroad.
3. international recognition- as working model of PPM

Impact assessment:

- number of patients in DOTS centers increasing
- awareness of PPM increasing
- funders coming in
- invitation for speaking invitations around the world
- international recognition as a working PPM model

Membership classification:

- nature of organization: Government, NGOs, professional societies, private corporations, localized and international groups.
- nature of service: treatment, acquisition/manufacturing of drugs, training and education, research and development, funding and resource generation, advocacy.

Strengths and Weaknesses:

a. government

Strengths	Weaknesses
Nationwide reach	Bureaucracy and political
Resources- drugs	Linkages with other government agencies- LGUs lack of facility to get drugs
International affiliations	Personnel needs training-treatment
	Resources- release of budget

b. non-government organizations

Strengths	Weaknesses
Nationwide reach	Consistent funding- reduction in funding from DOH, PCSO

Resources- training facilities	
International affiliations	
Logistics support	

c. Professional organizations

Strengths	Weaknesses
Skilled personnel	Some members busy with their org.
With international affiliations	
Capability to train on DOTS	

d. Private corporations

Strengths	Weaknesses
Resources	Not focused on TB drugs
Nationwide reach- drug supply	
Logistics-delivery of drugs	

e. Localized groups

Strengths	Weaknesses
Local advocacy-grassroots	Resources- funding
Trained personnel	
Linkages- tap local groups for DOTS	
Volunteerism	

f. International groups

Strengths	Weaknesses
International presence	Limited reach
Potential for funding	

Overall assessment of PhilCAT organizations:

Organizations	High	Medium	Low
Government			
Treatment	X		
Medicine	X		
Training/education		X	
Research & Dev't			X
Funding/resources		X	
Advocacy	X		
NGOs			
Treatment	X		
Medicine	X		
Training/education	X		
Research & Dev't	X		
Funding/resources		X	
Advocacy	X		
Professional societies			
Treatment	X		
Medicine			X
Training/education	X		
Research & Dev't	X		
Funding/resources		X	X
Advocacy	X		
Private corporations			
Treatment		X	X

Medicine	X		
Training/education	X		
Research & Dev't	X		
Funding/resources	X		
Advocacy	X		
International groups			
Treatment	X		
Medicine		X	
Training/education	X	X	
Research & Dev't			X
Funding/resources			X
Advocacy	X		
International groups			
Treatment			X
Medicine			X
Training/education			X
Research & Dev't			X
Funding/resources	X		
Advocacy	X		

PhilCAT's role- coordinate when needed; act when needed. There is a balance between being a secretariat and a super body.

Inherent strengths of PhilCAT

- International recognition as a working model of private-public cooperation in the drive towards curbing TB incidence
- Growing membership and expanding reach
- Presence of significant personalities as prime movers of PhilCAT
- Passionate leadership
- Neutral and non-partisan- for advocacy
- Spirit of volunteerism
- Increasing popularity locally and internationally
- Backed by corporate funding
- Increasing membership with dispersed geographic and sectoral reach

Perceived weaknesses of PhilCAT

- Moves of TB community are still fragmented
- To a certain extent only a limited number of organizations are actively participating
- Sufficient funding support
- Volunteerism means more doctors are part-time
- Lack of financial systems and procedures (?)
- Successes of programs is personality –based
- Limited resources
- Currently assessed as Manila or Luzon-based phenomenon
- More known internationally than locally

6.0 WORKSHOP 1 STRENGTHS AND WEAKNESSES

The participants were grouped into five namely, DOH/government, professional group, NGOs, private corporations, and the PhilCAT secretariat. The groups were asked to validate the strengths and weaknesses presented to them and state how their respective organizations could support the common drive to curb TB prevalence. They were likewise asked to validate the strengths and weaknesses of PhilCAT as an organization.

6.1 Workshop presentation:

Group 1:DOH/Government

Dr. Roa stated that DOH was an original member of the coalition and the main issue he brought up was “What part of DOH is considered useful in terms of planning for the coalition”? The structure of DOH, with regards to the implementation of NTP, reaches only the regional level, such that the provincial and municipal levels are not directly under DOH. He mentioned that one of their strengths is their nationwide reach, up to the regional level. Their weaknesses, as mentioned earlier, included bureaucracy, weak linkage with other government agencies and lack of personnel training. The group re-structured their strengths and weaknesses as follows:

Political Commitment	Strengths	Weaknesses
a. Reach	nationwide (regional level)	X bureaucracy, political, weak linkages
		w/ other gov't agencies, personnel trng.
b. Drugs (gov't health service)	X cover all sm+ TB cases w/ an equal no. of sm- TB cases going to RHUs	
c. Private doctors (MDs) reach-out		X DOH- no resources for meeting w/ MDs
d. Public DOTS	X with 90% validation	
e. Personnel		X due to devolvement
f. Non-implementation in some DOH hospitals		X
g. Training of LGU health personnel	X with capability to train	
h. International affiliation	X actual money coming in	
i. Maintaining quality of DOTS	X	
Implementation		
- monitoring		
-evaluation		

Comments:

Dr. Yu stated that all the private DOT centers are issuing DOH drugs. There is a provision of drugs going to private-public mix (PPM). The GDF explicitly stated/required the coverage of PPM patients for treatment: Year 1- 5,000 PPM patients; year 2-15,000 patients; Year 3- 30,000-40,000 patients. Hence, there is availability of and commitment to drug supply. By March, there will be a provision for drugs solely from GDF alone and, if there would be more private patients enrolled in DOTS, going beyond the prescribed number of patients covered, DOH would provide for the buffer (from the original group). He said that they would just have to look at the details for drug availment/eligibility, especially in the light of Phil Health accreditation of DOTS as well as PPM DOTS.

He added that the public health hospitals have a problem in the implementation of drug provision to patients, which was a reality that they had to look into. Dr. Roa replied that

the strength (in drugs) resulted in the GDF which is compensating for the lack of drug supply.

Dr. Hernandez said that there was an approval from the global fund (GFTAM) geared towards the installation of PPM DOTS units and if there is already a PPM DOTS infrastructure, a subsequent receiving mechanism for drugs (GDF) would complement this.

A participant asked if the DOTS expansion would consequently translate to personnel expansion. Dr. Hernandez replied that the proposal for the PPM installation included a provision for increase in manpower, with training on the implementation aspect, based on the capacity of the pilot areas.

Group 2: Professional Organizations

The group validated the results of the interviews conducted by the research team and added the following:

Strengths

1. Skilled personnel
 - a. Treatment of TB- direct patient contact
 - b. Capability to train undergraduates and post graduates
 - c. Information dissemination/advocacy handled through post graduate courses, annual and mid-year convention (health personnel), laymen forum involving teachers
 - d. Capability to do research
 - e. Capability to do consensus guidelines
2. Enlightened leadership- there is political will among leaders; many of the presidents have been present in the activities.
3. Social structure- to influence community and patients
4. Reach- nationwide through chapters and councils

Weaknesses:

As individuals:

1. Numbers- busy; apathetic
2. Diverse interests and priorities
3. Inability to sustain enthusiasm and interest
4. Lack of trust in government doctors, services and medical supplies- doctors in government hospitals are into private practices and medical supplies are diverted.

As a group (organization):

1. Lack of awareness of roles in and expectations of PhilCAT
2. Lack of funds- CME, advocacy and research
3. Lack of organization/coordination, and communication
4. Non-adherence to guidelines by members and other medical groups- some are advocating alternative medicines

Comments:

Dr. Yu revealed that the bastion of opposition against DOTS before came from the specialist group themselves, not only in the Philippines but across the globe. He cited strong opposition from two of the places/groups of people where they had tried to build a coalition before. These people are now PPM champions because of their strong pursuance and follow-up to practice DOTS. He suggested that. If there are those who do not really want to adhere to DOTS, they should look for the next generation in the community who are open to DOTS.

Dr. Lee Reichman said that TB in the Philippines is now “sexy” because the public sector as well as TB TIPS are doing very well. Thus, if managed correctly, government could be well tied in to TB such that it can’t get out of it anymore.

A participant asked for vigilance towards those belonging to the specialty society and from the academe who were telling medical students that there is no difference between DOT and non-DOT practice in treating TB. Dr. Yu commented that they should “train the trainers”, meaning the teachers of the medical students.

Group 3: Non-Government Organizations

Strengths	Weaknesses
Nationwide reach	Consistent funding
Skilled personnel	
International affiliations	
Logistics support	

A. MEDICOS DEL MUNDO (Research and Training Center)

Strengths	Weaknesses
Independent research	Lack of trained personnel
Follow NTP WHO standard	Sustainability issue
Wide coverage	
Continuous financial support	
Working with DOH-NGO	
Advise from local staff	
Cooperation of other NGOs	

B. ZUELLIG FOUNDATION (health advocacy and training)

Strengths	Weaknesses
Shorter gestation period	Irregular funding support
Speed of project start-up	Lack of mechanism to sustain monitoring
Networking/network	

C. UST DOTS CENTER (pioneer DOTS clinic)

Strengths	Weaknesses
Committed doctors	Funding problem
Teaching institution – medical students are exposed to DOTS	Non-JICA/DOH trained medical technologist(s)
Good implementor of DOTS	No pediatric drug supply

Research activities	Passive case finding
	Lack of DOTS doctors
	Not following NTP (culture) sensitivity test

D. COMMITTEE OF GERMAN DOCTORS

Strengths	Weaknesses
Volunteers	Volunteer physicians using variation of regimen
Funding	TB is not always the priority
Good reputation	

E. REACH-OUT FOUNDATION

Strengths	Weaknesses
Nationwide reach	Limited project lifespan
Leverage media contacts	New PHILCAT member
Leverage funds	No DOTS clinic
Strong research background	

F. GRANADA FOUNDATION (service delivery)

Strengths	Weaknesses
Capability to follow NTP protocol including monitoring	Funding problem
TB research (evaluate TB cases – NTP)	Lack of expertise in collecting epi data for evaluation
Credibility among NGOS	
Update guidelines according to NTP	
Realistic	
Willing to be trained in NTP	
Advocacy	
Assistance from Manila Health	

G. WORLD VISION

Strengths	Weaknesses
International affiliation	Continuity/sustainability of projects
Nationwide	No intervention on PPM to have common guidelines
Good relationship with DOH and stakeholders	
Training on DOTS	
Logistic support to LGU through health centers, contingency or buffer stocks	
Community mobilization	

Group 4: Private Corporations

Strength- The group concurred that one of their strengths is their resources and their nationwide reach and logistics.

Weakness- companies are not solely focused on TB. The threat to this strength is parallel importation.

Weaknesses of PhilCAT

They specifically zeroed on the following:

- Lack the financial systems and procedures- they could share their knowledge in building an accounting infrastructure for PhilCAT
- Personality based- PhilCAT needs a full-time manager who can stay on despite changes in leadership. This is important for private corporations since they allocate their resources based on personality.
- Limited resources- resources remain untapped
- Manila or Luzon based a general perception- awareness level in the key cities of the Philippines has improved

The group concluded that there was a need to make PhilCAT a “super body”

Group 5: PhilCAT Secretariat

Dr. Roa noted that the manager of PhilCAT had managerial skills. However, the weaknesses of PhilCAT could generally be attributed to its lack of staff.

Areas	Strengths	Weaknesses
a. staff	skilled/expertise in TB	Understaffed
b. office infrastructure	adequate for now	
c. international linkages	WHO, CDC, GDF, TIPS, PAF, NASD- some org. are stronger because of projects	
d. communications external and internal		no regular communications (i.e., newsletter, website, documentation of activities)
e. resources		inadequate and irregular funding

Dr. Roa reiterated that the leadership in PhilCAT provided a plus factor in the strength of PhilCAT.

Comment. In addition to the international linkages of PhilCAT, Dr. Yu informed the group that PhilCAT is a member of international organizations such as: member working group of one of the most organized international alliance called STOP TB Partners Forum, and PPM sub-group of a DOTS expansion group. PhilCAT was also invited and inducted as one of the stakeholders group to the Global TB alliance. He added that Dr. Romulo was a member of the GDF, the organization that screens the studies.

6.2 Synthesis:

Dean Morato remarked that he was quite enthused about the future of PhilCAT and admitted that he was surprised that TB was still an “in” thing.

He started synthesizing the groups' outputs by illustrating PhilCAT as a cat with a bigger head than its body. He said that PhilCAT has been very successful and has a very big head, denoting a very few but very vocal people, spear-heading the drive against TB, trying to get noticed, and "meowing" all over the place (or loudly advocating) until it got heard. Thus, he said that what was left to do for PhilCAT was to make its body bigger (i.e. the member organizations) to be able to take on the huge war against TB, which he compared to as a very big rat. The path has been paved and what was left to do was to make the coalition stronger.



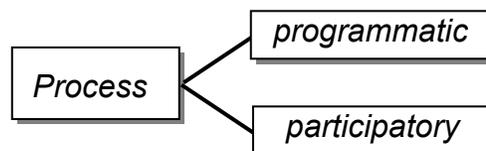
7.0 PLANNING PROCESS:

7.1 External (EA) and Internal Analysis (IA)

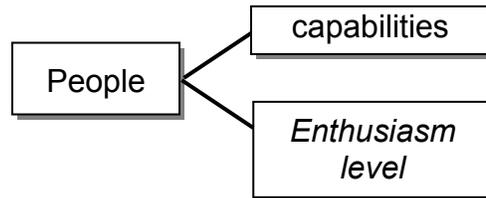
One level of strategizing was from the bottom where the strategist grounds the organization according to the realities he or she faces. There are two environments, the external environment which is the area or sector affecting or being affected by the coalition. The other was the internal, which is composed of the resources, manpower, capabilities and constraints of the coalition itself

Dean Morato said that they needed to draw out a strategic plan, but more important than the plan for the coalition is the process by which the plan would be done. PhilCAT could have commissioned him to write the plan but if it had done so, the body of the cat (the participation of the members) would not grow.

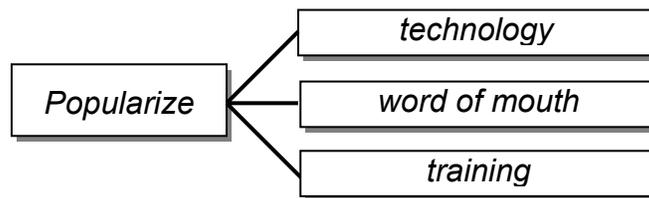
The process should adopt a "programmatic" or a step by step approach. It is quite hard to bring a coalition along with its members having diverse interests, as compared to just managing a single organization. The process likewise requires a participatory approach, generating a high involvement from the participants. Hence, it is important for the coalition to look at the *external environment*. The consultants and interviewed key people, no matter how small the sample size and increase it to as much as ten times the sample size by adopting the participatory process of the workshop. Dean Morato reiterated that this was important because of the major role that PhilCAT has given itself.



This participatory process involves the strengthening of the people involved in the coalition, and motivate them to mutually increase their capabilities to help one another and raise their enthusiasm level. As earlier asked, “Where will the energy come from”? The organization usually knows what to do but this was not enough. Dean Morato said that he tells his students (who are learning entrepreneurship) to hire people on the basis of their attitude (enthusiastic, ready to go) first rather than their skills because skills are learnable or easier to teach.



The next approach is to popularize the cause by taking on many strategic modalities. One modality is to use communications technology, word of mouth and training. It is hard to communicate or to go around connecting the 52 members of PhilCAT, but the connection has to be established and it is part of the investment. Dean Morato cited the weakness pointed out by the secretariat of the coalition in communication and the need for a website as one of the means of getting connected. Connection must likewise be established to the broader public. The coalition could make the cause “sexy” or attractive for writers to write about it. It would not be hard to persuade people to jump in the band wagon since the coalition has a good message to spread. For example, the write-up about the cost of TB affecting the country’s GNP or the Secretary of Health being called to Malacañang were enough to say “We have arrived.” Dean Morato told the group that advertising the cause need not be expensive. It is just a matter of touching the right people who would be willing to help for a cause.



The last part of the process is putting things in place or “tying the bell on the cat’s tail” so that the big rat (TB) will go away.” This means identifying the people who would do the different tasks and activities for the cause (i.e. advocacy, training, etc.).



Dean Morato discussed some things he learned, from working with organizations, that would help in building up and managing a coalition. These are as follows:

Small. An organization could not remain a monolithic bureaucracy It is best to divide the organization into smaller units which are very entrepreneurial and could act on their own.

Stimulate. People lose interest if they have to do the same things all over again. They should be given constant stimulation or something interesting or different to do.

Sound out. There should be constant sounding out to the members to avoid overstaffing of the secretariat. “There is a danger of having 20 “Amys” (managers) who find things for the secretariat to do, but leaving nothing for the members.”

Stratify. The organization should to be stratified into different levels (e.g. national, regional, provincial, municipal), but everyone should remain as part of the organization.

Solidify. The best way of solidifying a group is the presence of a huge threat. Another way to solidify is creating a big a dream because it elevates the people if they are doing something great for the country.

Strengthen. The members have to be strengthened through capability building, making sure that they are following certain standards of excellence.

Systematize. The larger the burden of the organization, the more it has to be systematized to increase fund absorption, capabilities, define responsibilities and pinpoint accountabilities. “If the financial system is in place, the funding agency would be fonder of you.” In terms of accreditation, clear cut standards should be set.

The larger the task of the coalition, the more it should put certain systems in place (fund distribution, accountability). However, more than putting these systems in place the harder task is to show the real impact of the coalition’s efforts to the public, funding agencies, government, stakeholders, etc.

7.2 Vision Mission, Objectives, Key Result Areas (KRAs) and Performance Indicators (PIs)

Dean Morato said that from the internal analysis, the group had to undergo two workshops. The first workshop involved revisiting PhilCAT’s vision, mission, objectives, key result areas and performance indicators so that they would have a performance measure in guiding PhilCAT as an organization. The second workshop entailed undertaking the broad strokes of strategies, programs, activities, and tasks that PhilCAT wanted to launch to be able to meet the performance indicators set. This means gearing the organization to action, initially through the pledges of the members in terms of where they want to help.

He reminded the group that as they go through their visioning, they could be easily be swept with optimism, but at the same time they would have to build the organization, lay the systems on the ground, make sure that everybody was following a similar tune. PhilCAT must find effective, efficient and economical ways of doing things.

Vision – is an idealized picture of what one wants to see in the future.

Dean Morato said that since PhilCAT is a cause-oriented organization, its vision should be oriented towards its public, constituencies and beneficiaries it wanted to address. Thus, its vision had to incorporate what would happen to the Philippine population vis-a-vis TB, or how PhilCAT would want to see itself as an organization after so many years.

Mission - the basic purpose for being of the organization.

The mission statement cannot go far beyond what the organization was created to do (i.e. its mandate).

Objectives- measurable end results.

This is where many organizations falter because they are confusing ends/final results (objectives) with means (strategies). One example of an (advocacy) objective is *To build the awareness and interest level of the population.*

Key Results Areas- are concrete manifestations that objectives are being realized.

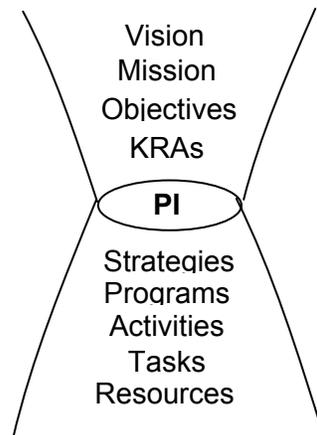
The KRA for the aforementioned objective example could be the *Improvement in awareness and interest level of the population.*

Performance Indicators- are numerical translations of the key result areas.

He reiterated that the more specific the numbers are in the performance indicators, the more they could be targetted at the level of strategies, programs, activities, tasks, and resources (see *Figure 5*). If the numbers are high, the strategist should be more creative in coming out with innovative strategies and programs.

It is important to have clear PIs so that the strategies would be very pointed, very specific and very focused.

Figure 5



Dean Morato observed that there were no performance indicators in the past workshops of PhilCAT. He asked the group to set performance indicators based on the EA and IA done by his research group and from other sources. This is the reason why they started with the EA and IA (which served to anchor the organization to the ground). The EA shows how formidable the enemy (TB) was, while the IA shows the strengths and weaknesses of the organization.

Dean Morato recounted his experience as a planning workshop facilitator of DOH during the time of Dr. Juan Flavier in 1993, whose background and bias was on the rural health system. Dr. Flavier realized the need to change the strategies of DOH because of the

fast change in the environment due to the high rate of urbanization within a period of 20 years. There were new types of diseases (mental diseases, cardio-vascular disorders, drug addiction) in the urban areas which a rural health strategy could not address. However, DOH was still carrying on with the same strategies inspite of these changes. During the 1970s the leading causes of mortality were respiratory and gastro-intestinal diseases, but this shifted to cardio-vascular diseases during the mid-1980s and had gone up more in the year 2000.

Dean Morato asked the critical factors that influenced good health, the reply was good food and water, sanitation, good air. However, they found out later that these factors affecting health were not under the control of DOH and that they needed the support of other government agencies to craft a national health plan.

It is important to find out who were the most vulnerable groups (to TB), who are in control of these groups. Because PhilCAT could be jumping into the water to save babies, but not stopping the one who is throwing them into the water. Thus, part of the strategy could be to stop the people from throwing babies in the water, increasing the minimization of the causes that lead to TB.

8.0 WORKSHOP 2: VM-OKRAPI

For the second workshop, Dean Morato told the group to “lose their identity” as individual organizations and take on the identity of being a PhilCAT member. They were asked to count off from 1 to 4 whereby all who had the same numbers were subsequently grouped together.

8.1 Workshop presentation

Group 1

Vision statement: Society working together towards the elimination of TB as a public health threat.

Mission statement: Directs, coordinates, implements, and innovates activities toward a TB free society.

Objectives:

1. Establish strong presence in the fight against TB.
2. Institute system and tools for effective coordination among members.
3. Mobilize public-private support and resources.
4. Develop innovative and sustainable strategies to address TB control.
5. Assist its members in implementing program.

Key result areas	Performance Indicators
<i>Objective 1 Established strong presence in the fight against TB</i>	
1. Membership broadened	-From 52 to 100 -LGU-1 to 1 for each province -Academe-all medical schools, social

	science -Civic organization
2. PhilCAT recognized as leading advocate	Included in TB policy making body
<i>Objective 2 Institute system and tools for effective coordination among members</i>	
1. Guidelines for collaboration formulated	
2. Strong organizational structure	Consistent 90% satisfaction rating
<i>Objective 3 Mobilize public-private support and resources</i>	
1. Public sector cooperation	-Number of LGUs increased -Funding support -Number of MOAs signed with other groups outside PhilCAT
<i>Objective 4 Develop innovative and sustainable strategies to address TB control</i>	
1. Established PPM model	1 PPM /province TB incidence decreased
<i>Objective 5 Assist its members in implementing program</i>	
1. Target on TB control met	Increased awareness Decreased TB prevalence

Group 2

Vision: TB-free Philippines

Mission: We are a coalition of organizations committed to the control of TB through the involvement and collaboration of all stakeholders by providing leadership and direction, fostering communication and understanding, and through optimal mobilization of resources.

Objectives	Key result areas	Performance indicators
1. To increase TB case detection rate by 2005	Increased TB case detection rate	TB case detection rate increased from 53% (2002) to 75% (2005)
2. To increase TB cure rate by 2005	Increased TB cure rate	TB cure rate increased from 73% (2002) to 85% (2005)

Group 3

Vision: Optimal TB control in the Philippines in five years

Mission: We are a coalition of organizations committed to fight against TB by providing leadership and direction, fostering communication and understanding, and optimally utilizing resources.

Objectives	Key result areas	Performance indicators
1. To adopt common DOTS policy in Dx, Mx of TB	Adopted common DOTS policy	50% of organization members adopt DOTS policy within one year

2. To have strengthened efficient and influential PhilCAT	Effective and efficient internal information system	100% of member organizations/individuals informed
3. To have the ability to address issues	Issues addressed	100% of issues addressed

Group 4

Vision: A country where TB is controlled through unified and sustained action

Mission statement: We are coalition of organizations and individuals committed to work together as the prime mover consolidating all efforts in order to control TB in the Philippines

Objectives:

1. To reduce the prevalence of TB in the Philippines within five years.
2. To improve the efficiency of PhilCAT members in advocacy, DOTS service delivery and training and education.

Key result areas:

1. Improved health-seeking behavior regarding TB
2. Well-supported government efforts against TB
3. Improved TB service delivery in private sector

Performance Indicators:

1. Decreased prevalence of TB
 - decreased number of non-action takers
 - Increased number of activities with government
 - Increased number of private doctors practicing DOTS
2. Increased number of activities in advocacy
 - increased number of DOTS centers, increased DOTS outcome measures
 - increased number of training- (for a, seminars, etc.)

Comments:

Mr. Fleras commented that TB should be looked at also as a development issue and not only as a disease.

Dr. Yu said that they were approached by World Vision Int'l. to join the global alliance for poverty alleviation. He said that the point was well taken such that they were advised not to confine themselves only to health but they had to "put their house in order first" and concentrate their efforts on health. Mr. Fleras pointed out that the reason why people are not going to DOTS centers is because of stigmatization. He added that people's behavior is hard to control.

Dean Morato said that Mr. Fleras was talking about the immediate causes in the environment that have impact on TB control. Dr. Romulo commented that it was important to acknowledge the inputs of social scientists and expand their horizons in that

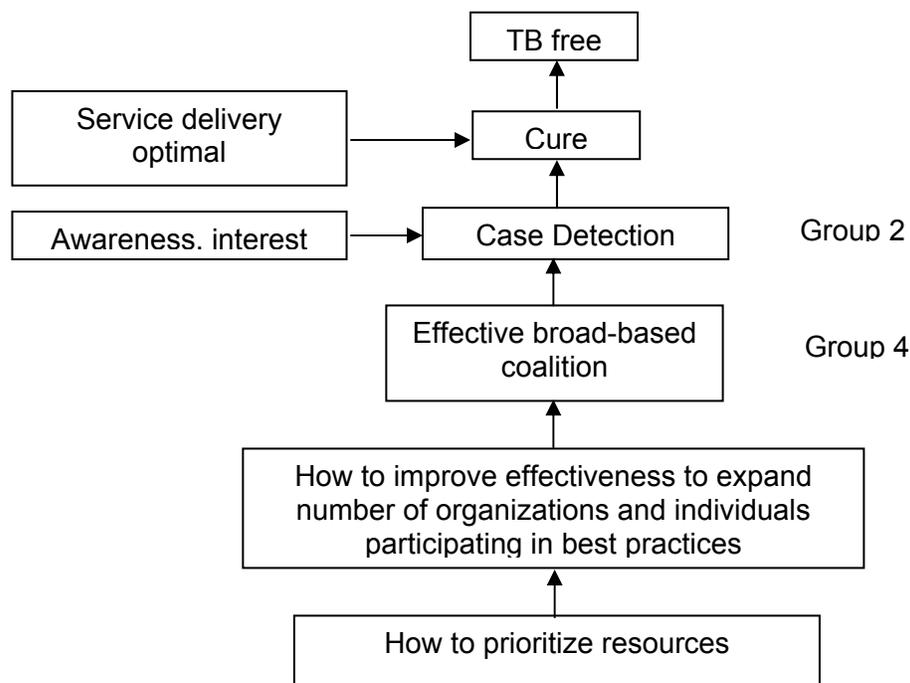
sense. However, TB is a disease and the priority is to control the disease, as specified in the objective of the coalition.

Ms. Amy Sarmiento expressed confusion about the different members with different concerns. There are some things that are unknown (e.g. PPM strategy) to other organizations and it is the role of PhilCAT to disseminate the available information/strategies to the member groups to help them enhance their effectiveness. She asked how PhilCAT could go about getting the information from the members and how often should PhilCAT do it. She also asked how they would be assessed later on.

Dr. Yu replied that the secretariat should be more than just but be a secretariat plus. The member organizations could inform the other members what areas they are involved in, what they are doing, their strengths and weaknesses, so that the coalition could add some inputs. With some more funds coming in, the coalition should efficiently use these funds by first setting the priorities. He suggested that they go to places where the chances of success are higher. However, there should also be a balance in terms of helping out the weak organizations.

8.2 Synthesis: Workshop 2

Dean Morato summarized the workshop output through the following:



There is hierarchy of objectives and the higher one goes, the closer he or she gets to the end or ultimate result, which is TB free. The end result should address the people that PhilCAT is serving. This is what a development organization should be doing, in contrast to the objective of a business organization which is self-serving.

Group 2 focused on the case detection and cure of TB (first rank of objectives) in order to attain their vision of a TB free Philippines.

Group 4 said that they have to make the service deliverer effective. Good detection and cure are only possible if the members of the coalition are effective service deliverers (second rank of objectives).

Dean Morato declared that when the secretariat and its committee members can make the members more effective, inspite of having their own roles, it could form part of the end result itself. Their organizations could be working with PhilCAT as a development organization, while at the same time pursue their own objectives (e.g. advocacy, treatment). They could ask, If we join PhilCAT, “how do we become better service deliverers, or what will PhilCAT add to me”? The members should be cautious when they ask what PhilCAT can do for their organization, rather than thinking what they can do for PhilCAT, because in reality, “PhilCAT is us.” PhilCAT is just an organizational strategy or a means towards the ultimate end. The members should work together to the extent that they find strength in union and ultimately achieve the objective of being effective service deliverers. The members are committed to their own organizations but, at the same time, they are coming together as PhilCAT only to attain the final objective.

Broadening the membership and base of the coalition is another objective at the lower level because, even if the members are not big or only a hundred but they are affecting the outcomes a thousand times more, then PhilCAT is not only a mere coalition but a movement. A purpose of a movement is to totally change the mindset of the population.

He cautioned the participants that in working out their objectives, they should be following the right hierarchy. The highest objective (TB free, TB detection and cure) is the “North Star” to follow, and could not be changed. The other stars are just means or strategies to achieve the highest objective and they could be changed if they do not work. If the strategist latches on to a strategy as a performance measure by itself, then he or she is trapped in monitoring what they are doing, instead of what is happening to the patient or intended beneficiary. In a sense, the intended beneficiaries of PhilCAT are also the members themselves and the objective of increasing the effectiveness of members is a legitimate one, as a coalition itself. Broadening the base or the reach is likewise a legitimate objective, but it should also be effective.

Dean Morato, together with the participants listed/combined the objectives identified for the participants to work on their strategies and programs:

1. Awareness and conscientizing. Broadening base (members, resources, supportive groups)
2. TB detection and cure (clinical basis)
3. Effective members in what they are doing now.
4. Effectiveness of PhilCAT as mobilizer, director, coordinator, leader, hub.

9.0 WORKSHOP 3: SPATRES

The participants were grouped according to where they thought they could best fit in achieving the set of objectives cited/summarized in Workshop 2. They were asked to do the following:

- a) Restate objectives
- b) State the KRAs and PIs of the re-stated objectives
- c) Generate strategies for accomplishing PIs

- d) Indicate programs and projects that are necessary to carry out the strategies
- e) Organize

9.1 Workshop presentation

Group 1

Group 1 dealt with the following combined objectives: **1) Awareness and conscientizing 2) broadening base of members, resources and supportive groups**

Objectives:

1. To increase awareness on TB and the need to control it among Filipinos.
2. To improve health seeking behavior of TB symptomatics
3. To involve all stakeholders in TB control

Key Result Areas:

1. Increased members/support/resources
2. Increased enrollment/referrals to DOTS
3. Increased members/support/resources

Strategies:

1. Info campaign using multi-media approach (e.g. TV soap operas, movie radio, commercials, print, e-mail/website, text messaging)
2. Community mobilization
3. Integration into curriculum
4. Special events/projects/World TB day/TB summit/photo exhibit/caravan/telethon
5. Orientation of HRDs, lobby for change in personnel
6. Lobby legislation
7. Recruit celebrity advocates (Gina Lopez, Mel Tiangco, etc.).
8. Service integration with other programs (maternal child care (MCH), EPI, Family planning, HIV, Bantay Bata)
9. Coordinate calendar of activities/directory of members
10. Popularize PhilHealth benefit package

Programs:

1. Film showing
2. Lay forum/pt. education series
3. Training workshops-integration into curriculum
4. Organize task force:
 - media rel./PR
 - special events
 - lobby DepEd/CHED, legislation, HRDs
 - training workshops
 - networking
5. Networking with religious groups/NGOs/LGUs
6. DOTS in workplace
7. TB hotline

Group 2:

Group 2 worked on their two objectives: **1) To increase detection of TB and 2) To increase cure rate of TB.**

Objective 1 To increase detection of TB	
Strategies	Programs/projects/tasks
A. Information dissemination	<ul style="list-style-type: none"> Hire the services of professionals from media
B. <ol style="list-style-type: none"> Adequate and efficient microscopy centers with well-trained staff Passive case finding intensified Sputum smear AFB as free of charge 	<ul style="list-style-type: none"> Expand the core of trainers to the regional level/private sector Motivate health workers to do sputum smears among symptomatics in special population e.g. prisons, rehab centers, etc.
C. Finalize pediatric consensus guidelines on diagnosis and treatment	<ul style="list-style-type: none"> By April 6, 2003
D. Increase number of cases found and report them to a central data base	<ul style="list-style-type: none"> Require private DOTS centers to submit report to national data base
E. Create national data base including the private sector	<ul style="list-style-type: none"> To be discussed by PhilCAT/DOH on who will gather data
F. Household contact tracing	<ul style="list-style-type: none"> Interview HH and do sputum microscopy
G. Revise policy for enrollment by using sputum smear as detection tool in the workplace	<ul style="list-style-type: none"> Course through PhilCAT model- in the workplace

Objective 2 Increase cure rate	
Strategies	Programs/projects/tasks
1. Ensure availability and continuous supply of medicines to both public and private centers	<ul style="list-style-type: none"> Through GDF; private to partner with DOH through MOA for free drugs
2. Improve mechanism of case holdings	<ul style="list-style-type: none"> Require/ensure defaulter follow-up system in DOTS center
3. Ensure compliance through sputum follow-up	<ul style="list-style-type: none"> Free sputum exam
4. Motivating patients through incentives/enablers	
5. Ensure care providers to follow/recommended regimen-DOTS strategy	<ul style="list-style-type: none"> Training of private health practitioners on DOT strategy Expand the core of DOTS trainers to regional level and the private sector/PhilCAT

Group 3:

The group tackled the objective: **How to make PhilCAT members more effective through training and certification.**

Performance Indicators	Strategies/programs
1. More certified DOTS centers from 0 to 12 by 2003	<ul style="list-style-type: none"> Set-up certification (PhilHealth and PhilCAT) w/c is already in place Identify specific area for future DOTS centers (w/ map) Identify key persons who will initiate DOTS centers Train manpower involved in DOTS centers Help establish source of drug supplies through DOH Formalize the tie-up with PhilHealth Marketing the services

	<ul style="list-style-type: none"> Continuing certifications by quality assurance group Strengthen certifying body by PhilCAT- to increase in quality and numbers
2. More certified DOTS providers from 0 to all MDs	<ul style="list-style-type: none"> Training through Training Unit Working Program (TUWP) of PhilCAT- for trainers Identify and train key persons from member societies (trainors' training) Train members Certification of members Marketing of services Continuing training for all DOTS providers
3. Revised curriculum	<ul style="list-style-type: none"> Create DOTS syllabus for professional associations and medical schools Meet with CHED APMC specialty boards to include DOTS syllabus in curriculum and exams
4. Developed Master TB educators	<ul style="list-style-type: none"> Develop Masters' Education Award program Develop guidelines

Group 4:

Group 4 was tasked to generate KRAs PIs and strategies for the objective: ***Effectiveness of PhilCAT as mobilizer, director, coordinator, leader as a hub.***

The group re-stated their objective as *Sustain and expand PhilCAT's capacity to coordinate and enhance efforts to control TB* and came up with the following KRAs and PIs.

Key Result Areas	Performance Indicators
1. General management systems	<ul style="list-style-type: none"> Improved organizational structure (defined successive mechanism) Establish communication system by August 2003 Financial management system in place One financial report a year Internal evaluation system in place
2. Resource mobilization	<ul style="list-style-type: none"> PhilCAT's funds increased to appropriate level of activities Increased number of donors Increased number of fund raising activities Increased number of regular revenue generating activities (certification and training)
3. Partnership development	<ul style="list-style-type: none"> Number of new members Website developed Quarterly Newsletter distribution Number of TB-related activities of members increased One annual convention a year Number of local PhilCAT chapters
4. Technical programs	<ul style="list-style-type: none"> System for certification of DOTS providers established/implemented by March 2003 System of training System for coordinating all PPM-DOTS activities established

	d. Number of meetings held to improve medical curriculum
	e. Number of policy instruments developed
5. Advocacy	(refer to Group1 output)

9.2 Synthesis: Workshop 3

Dean Morato observed some overlaps in the strategies and said that they would have to be cleared with the PhilCAT Board later on. He discussed the outputs as follows:

Group 1 presentation

The advocacy group (Group 1) was creative in formulating strategies. Some of the strategies could be grouped together into information dissemination, mobilization of communities, etc. Service integration was a good idea. It is always good to leverage resources with the resources of other institutions because the little that the organization has multiplies.

Behind the lobbying of legislators is the more difficult task of policy research formulation and advocacy (including lobbying). The policy part could be discussed through a forum and goes through a process of discussing with the members and finally lobbying with legislators. The performance indicator is that the policy is translated into a law by the government and adopted in practice by all government agencies and the private sector.

Group 2 presentation

The group had a very comprehensive presentation. They had the broadest base of strategies such that they have included the strategies of the other groups because they were working on the higher end objective. Their suggestions expanded the organization's view on how it could effectively deliver its services.

Group 3 presentation

The group decided to focus on certification and training. Dean Morato suggested that they re-visit their work after listening to the other groups because the group's objective on how to become more effective members include being effective as advocates, policy formulators, detection and cure, social marketing, mobilization of communities, etc. The performance indicators of Group 3 should address the concerns/ PIs of the members. For instance, if a member is into advocacy, the PI for the member is their communication reach and their conversion into "believers", leading to the increased number of advocates from the initial number.

Group 4 presentation

Dean Morato suggested for a re-classification of some of the areas where PhilCAT has to perform into the following:

1. PhilCAT's accountability to funding agencies, members. The strategies should include systems and operations in monitoring, reporting and evaluating. One

performance measure is when the donors are extremely happy with PhilCAT's accountability.

2. Resource mobilization- there are activities that have to do with mobilizing resources for policy research, advocacy, treatment, etc. Donors like giving money to strong organizations for a better chance of their donation being absorbed and utilized properly.
3. Resource allocation- this is the counterpart of resource mobilization. The resource properly allocated to the members/other groups would result in greater reach and impact.
4. Advocacy- there are two levels; a) policy advocacy and b) program advocacy.

Each of the grouping would have their own performance indicators.

Organizational development

The next level in strategizing is organizing the members. There are many plans of government and NGOs that do not work. One reason is that they don't follow-up their plans with resources. Investment programming is important –“putting your money where your mouth is.” Some of the plans are ambitious but when funds are scarce, the organization should prioritize those programs which would make a difference.

Organizational development requires utilizing the capabilities of persons in the organization for the particular tasks needed. In social marketing, the person responsible for a task must have the capability to give the right message to the right audience and also the right timing. If not, he or she should tap the correct experts in delivering the tasks assigned.

Organizational development is also a time consuming process. In the Philippine arena of politics, the organization has to do the “*gapang*” approach, woo incessantly those who are the influential decision makers.

Convergence, Clustering, Chaining

Coalition is a *convergence* strategy. The common reason why organizations, like government, fail is that the departments try to do everything by themselves. For instance, In helping the cutflower industry, there is a need to tap technology from The Netherlands, set-up flower processing centers, distribute seedlings to cooperatives, such that convergence is needed from DOST, DA, DPI, etc. Coalition is an effective strategy if it could push the idea of convergence to the hilt.

There is a need for *clustering* like-minded people according to what they are “passionate about” in order to muster the right level of energy.

Chaining is making sure that the original message and the message that PhilCAT wants to communicate is all strung up in one continuous flow.

Dean Morato encouraged the group not to be overwhelmed by the big picture presented to them because they could be broken down into bite-size pieces which they could chew

one day at a time. For organizations who have been successful in their implementation, they need a follow-through by putting programs into attachable/detachable bite-size pieces. He said that he and his team would be helping out PhilCAT in cleaning up the strategy paper, revising the EA and IA according to what they have learned in the last three days, as well as documenting the workshop proceedings.

He urged the participants to use the strategic planning workshop as some sort of a living bible for them which they could revise and amplify as they move along. The plan could likewise be a testament to their accountability. They must revisit the plan and see to it that they are accomplishing what they agreed upon to do. It is also good for the members to visit and monitor each other, if not personally, through e-mail.

Dean Morato thanked the participants for inviting his group to participate in their workshop.

10.0 CLOSING REMARKS

In his closing remarks, Dr. Yu thanked all the participants, PhilCAT staff and their partners for attending the three-day workshop. He offered Dean Morato and his team, Dr. Uplikar, Dr. Kasai, and Dr. Reichman to be honorary members of PhilCAT. He stated that like Moses, he hopes that PhilCAT would reach the promised land. There are plenty of things to do and once they are put together, PhilCAT will hold a general assembly for presentation and subsequently, ratify their strategies.