

**BASIC DESIGN STUDY REPORT  
ON  
THE PROJECT  
FOR  
THE EQUIPMENT UPGRADING  
OF 26 PROVINCIAL HOSPITALS  
IN  
THE REPUBLIC OF THE PHILIPPINES**

**SEPTEMBER, 1988**

**JAPAN INTERNATIONAL COOPERATION AGENCY**



JICA LIBRARY



1071241[2]



**BASIC DESIGN STUDY REPORT  
ON  
THE PROJECT  
FOR  
THE EQUIPMENT UPGRADING  
OF 26 PROVINCIAL HOSPITALS  
IN  
THE REPUBLIC OF THE PHILIPPINES**

**SEPTEMBER, 1988**

**JAPAN INTERNATIONAL COOPERATION AGENCY**

国際協力事業団

18433

## PREFACE

In response to the request of the Government of the Republic of the Philippines, the Government of Japan has decided to conduct a Basic Design Study on the Project for the Equipment Upgrading of 26 Provincial Hospitals and entrusted the study to the Japan International Cooperation Agency (JICA). JICA sent to the Philippines a study team headed by Mr. Satoshi Kinugawa, Official, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, from June 6 to 29, 1988.

The team had a series of discussions on the Project with the officials concerned of the Government of the Philippines and conducted a field survey in Central and South Luzon. After the team returned to Japan, further studies were made and the present report has been prepared.

I hope that this report will serve for the development of the Project and contribute to the promotion of friendly relations between the two countries.

I wish to express my deep appreciation to the officials concerned of the Government of the Republic of the Philippines for their close cooperation extended to the team.

September, 1988



Kensuke Yanagiya

President

Japan International Cooperation Agency





# REPUBLIC OF THE PHILIPPINES

## Provincial and regional map

Philippine Copyright, 1983 by National Book Store, Inc.  
Cartographic Design: Heinrich Engeler 1980

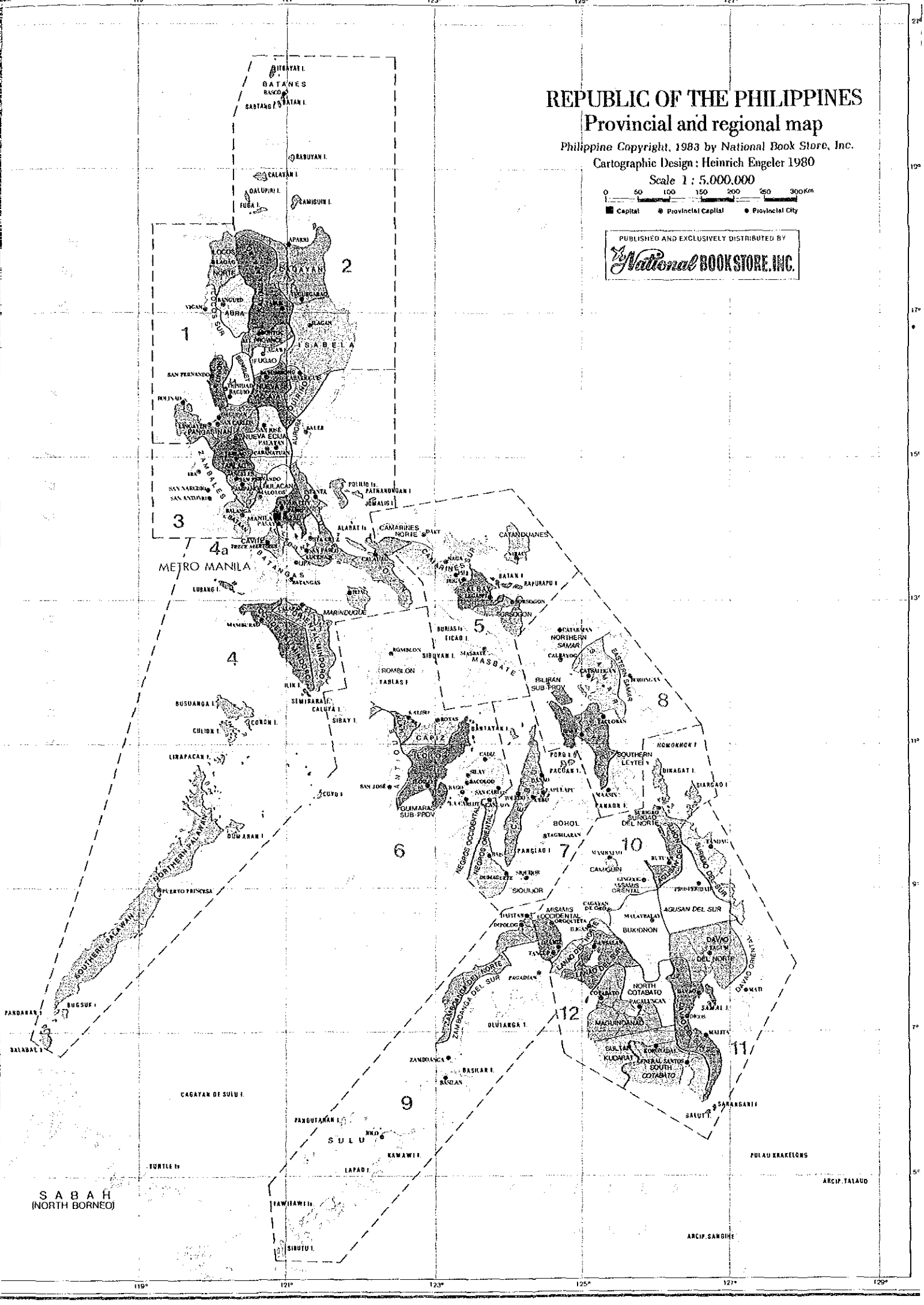
Scale 1 : 5,000,000

0 50 100 150 200 250 300km

● Capital ● Provincial Capital ● Provincial City

PUBLISHED AND EXCLUSIVELY DISTRIBUTED BY

*National BOOK STORE, INC.*



SABAH  
(NORTH BORNEO)

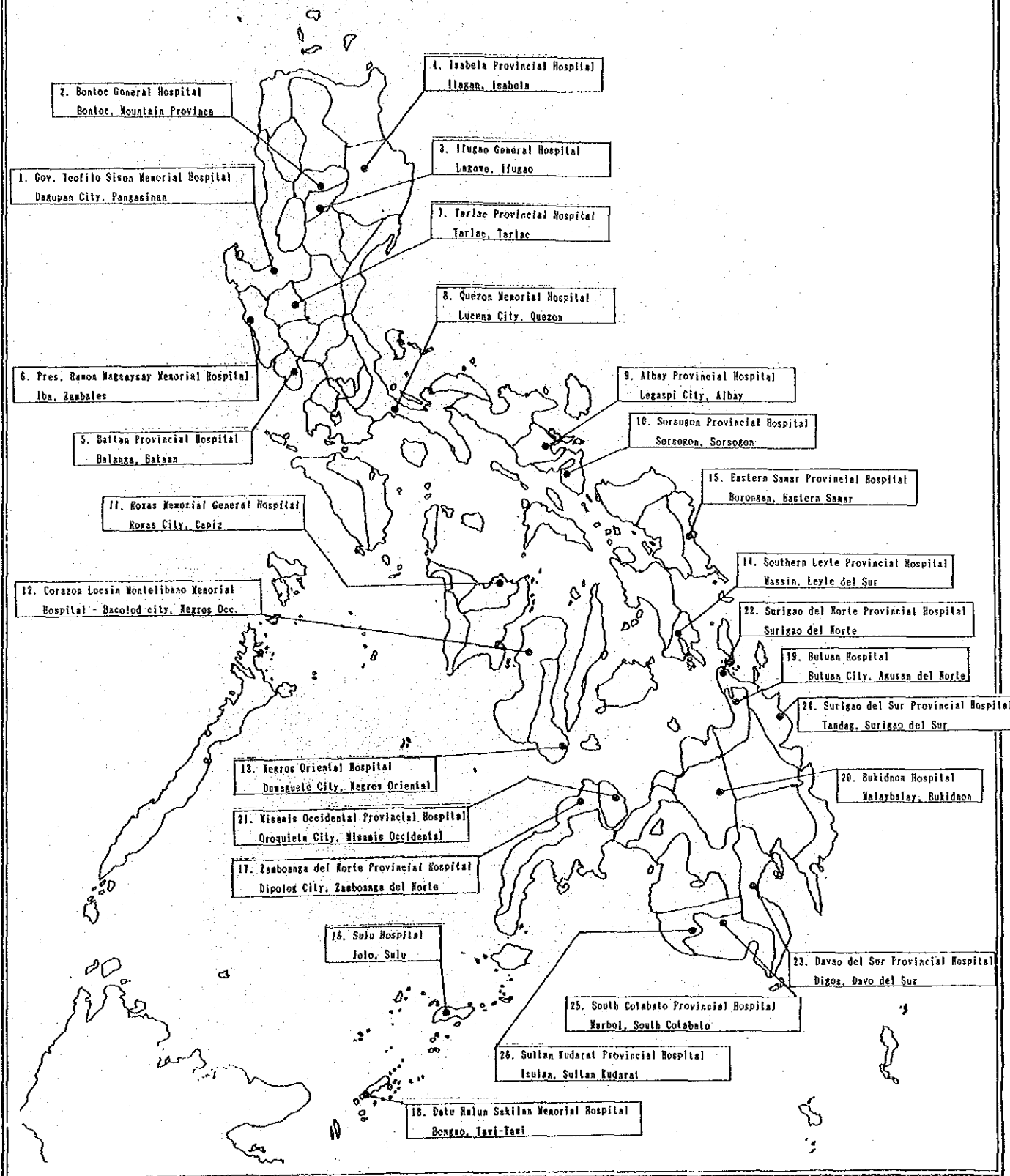
ARCIP. SANGHAI

ARCIP. TALAUD

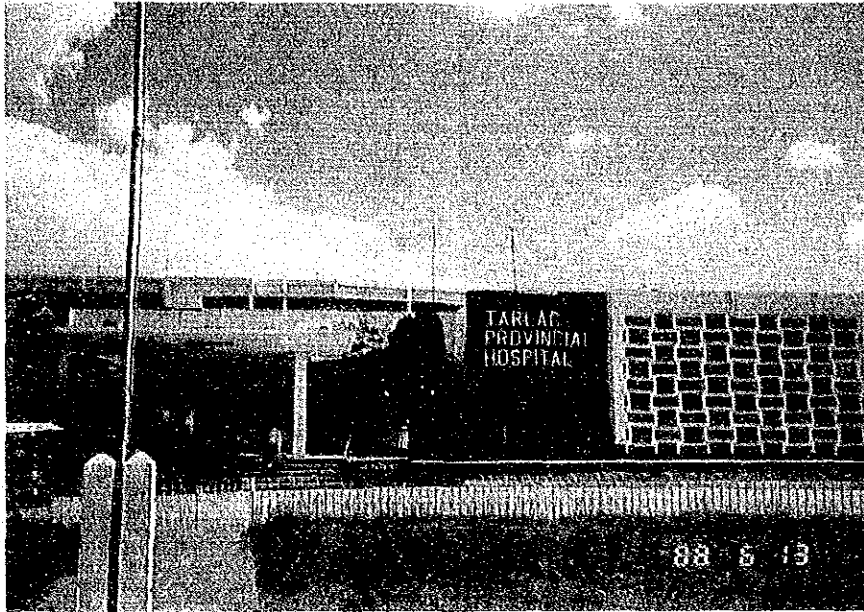
PULAU KRAKELONS



## LOCATION OF CONCERNED FACILITIES





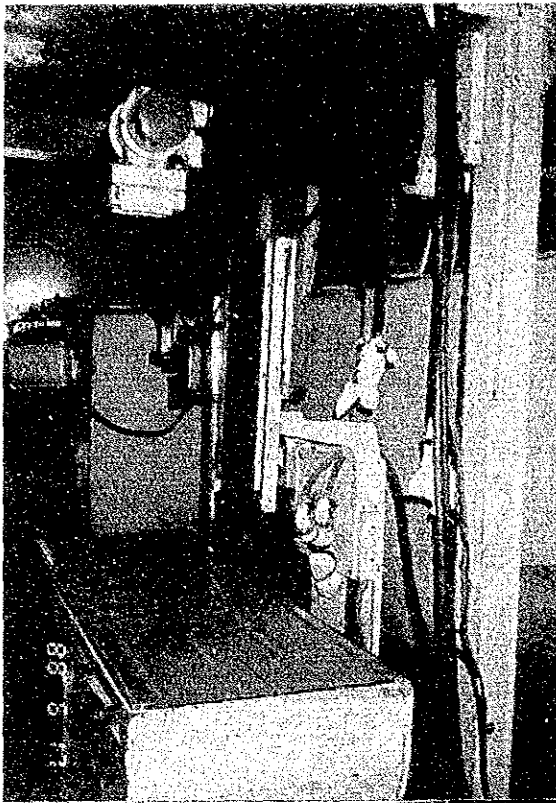


Provincial Hospital



Provincial Health Office

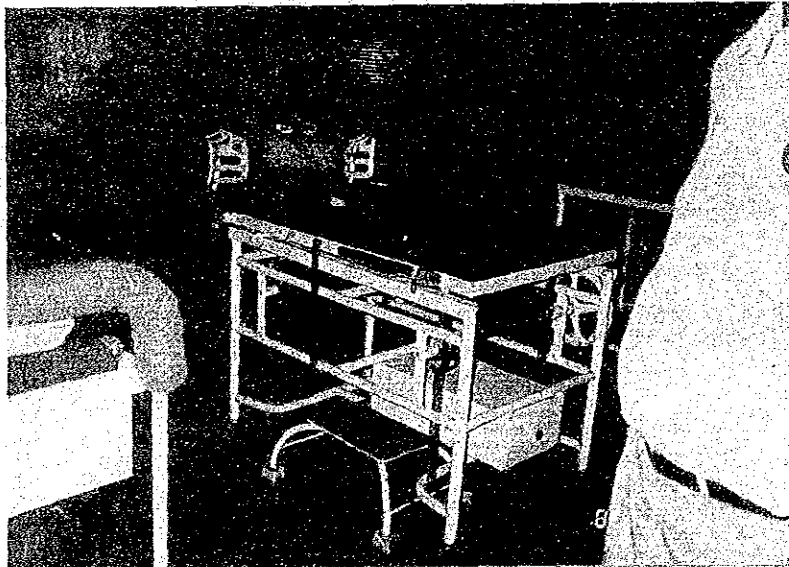
X-Ray Department



Operating Room for General Surgery

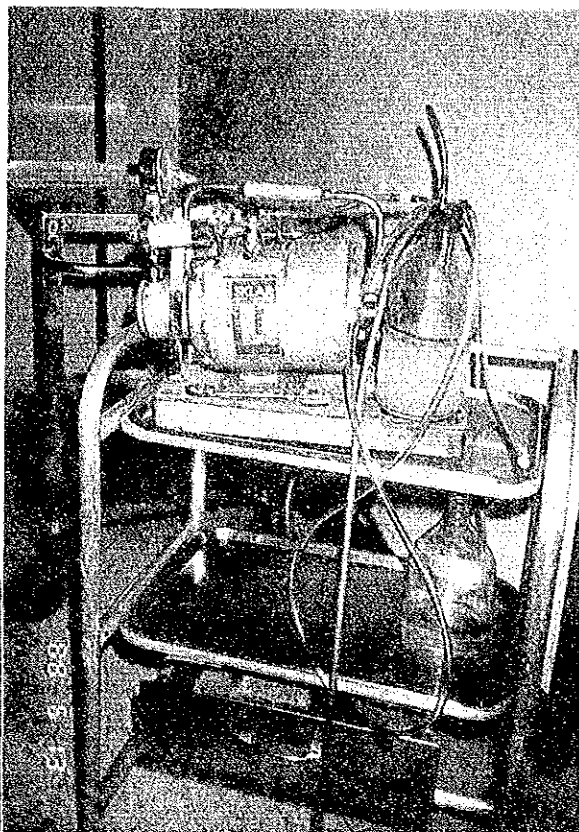


Obstetrics and Gynecology

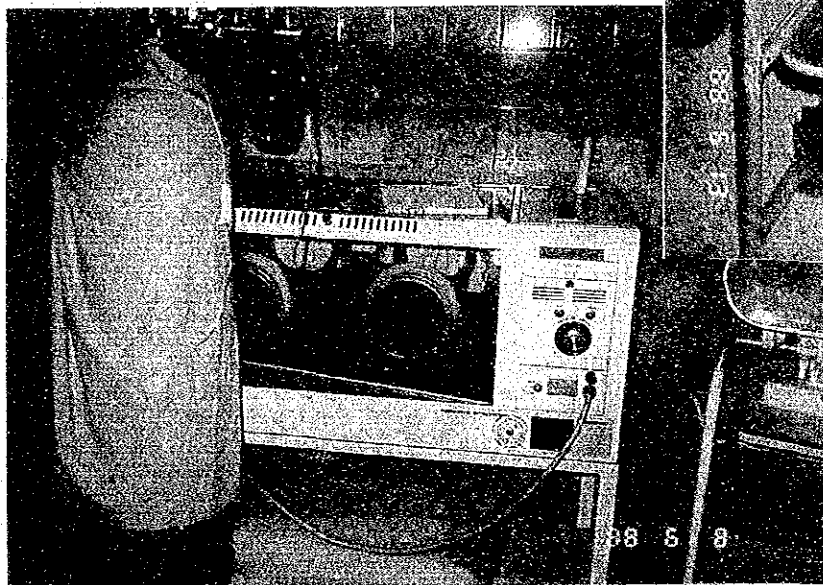


Provincial Hospital

Suction Unit

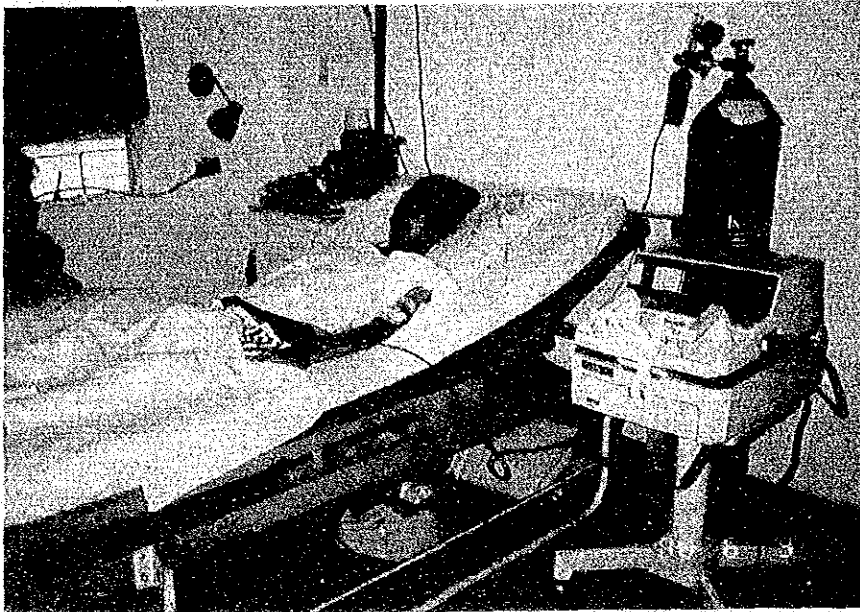


Nursery

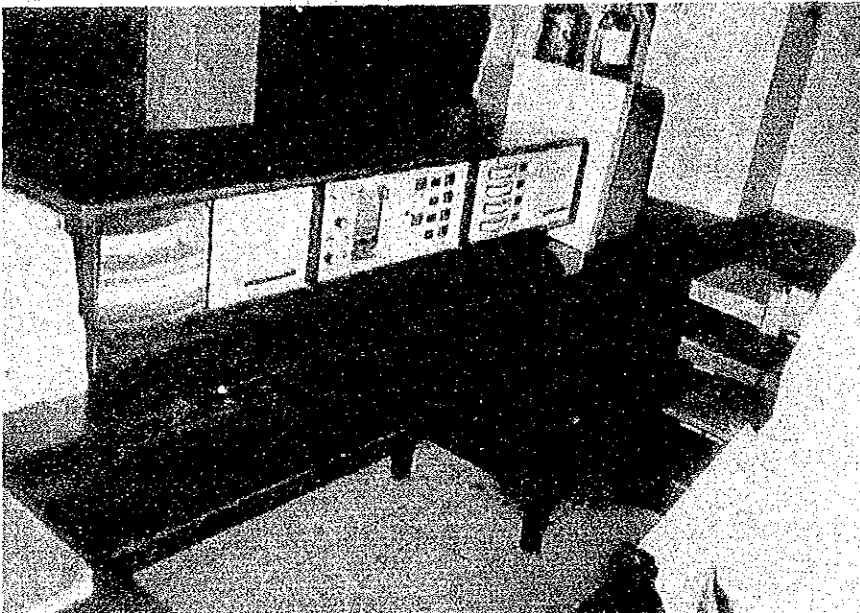


Nursery



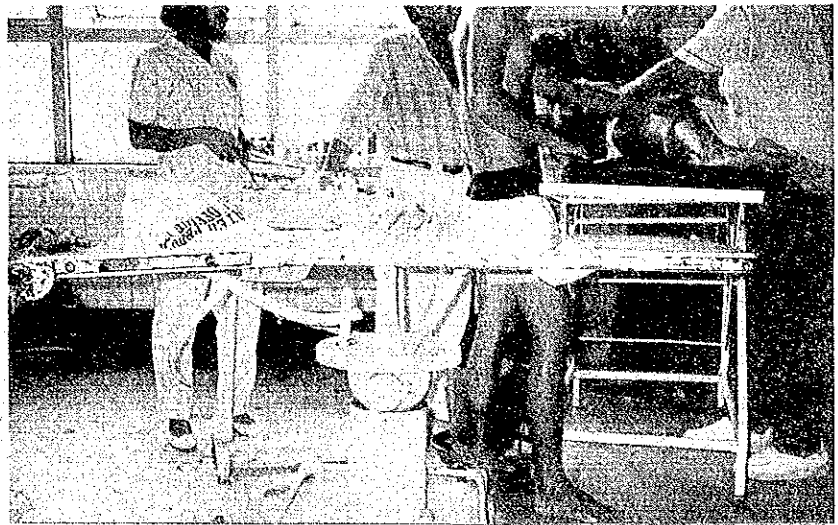


ICU Room





Provincial Hospital



Operating Room for Out-patient



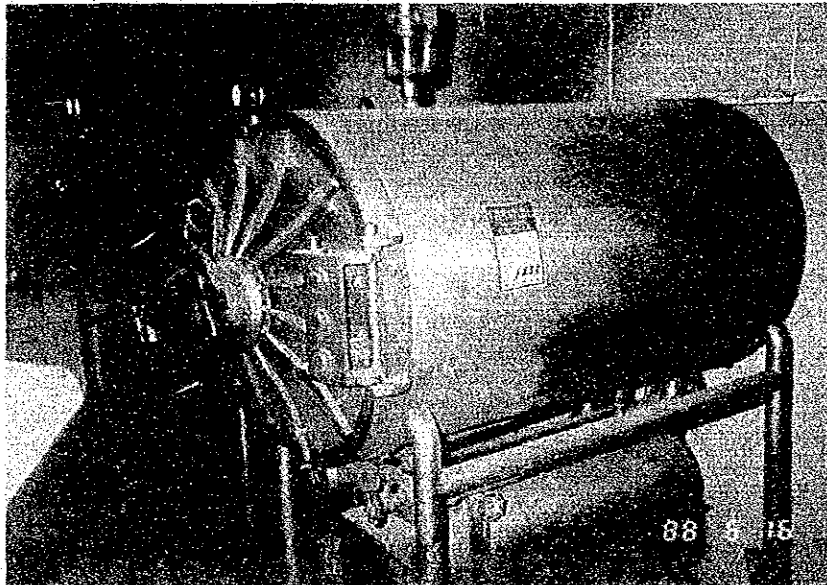
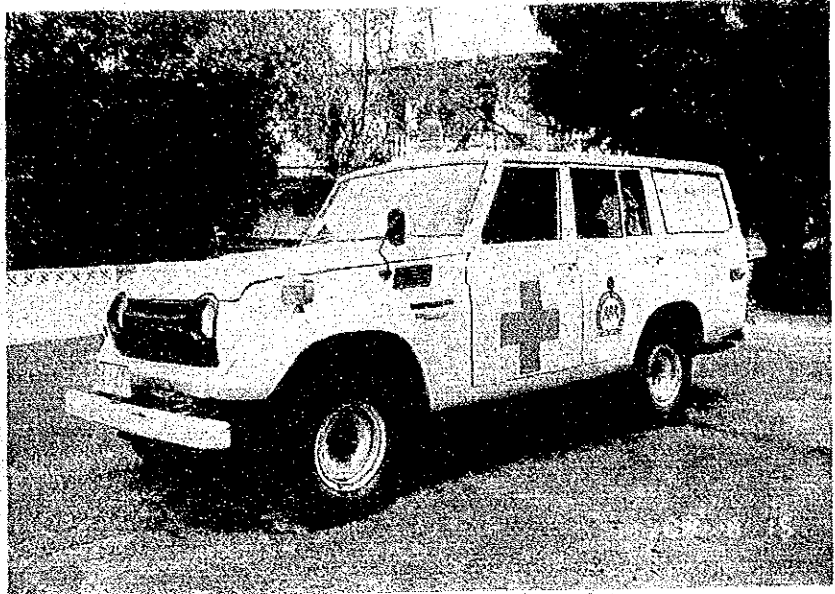
Operating Room for Out-patient



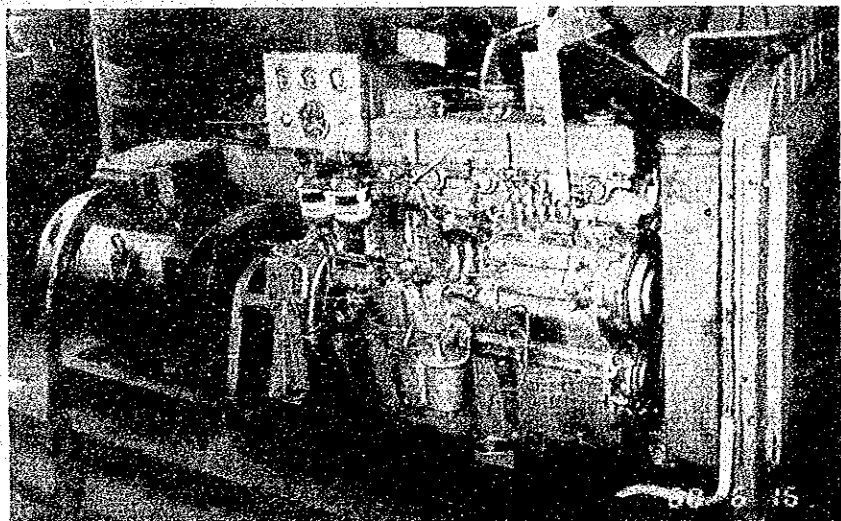
Laboratory

Provincial Hospital

Ambulance



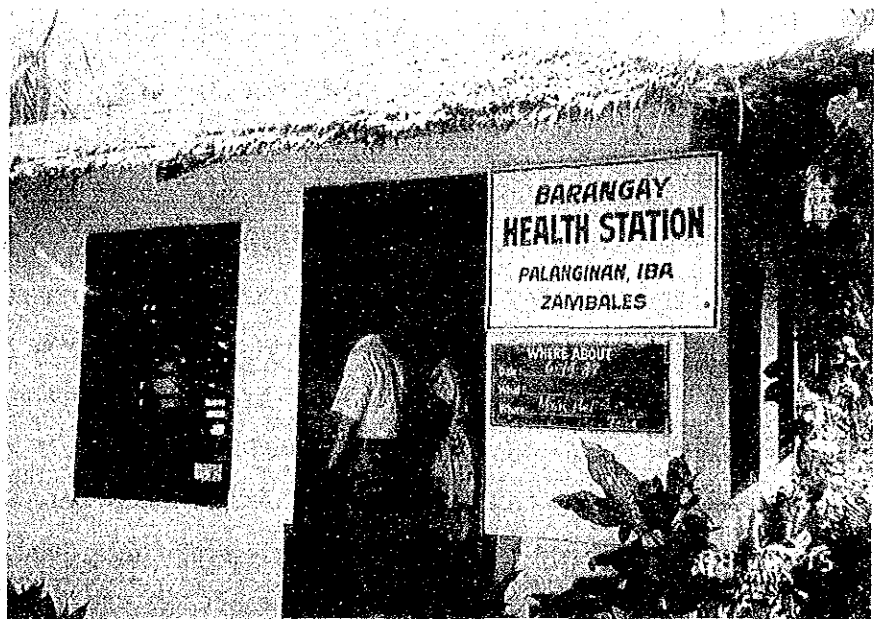
Sterilizing Room



Generator



District Hospital



Barangay Health Station



## SUMMARY

In the Republic of the Philippines, during the year from 1972 to 1973, only 30% of the population received medical care due to the incomplete system of health service in remote areas. However, through the efforts of the Government to improve the service, the percentage reached 80% in 1980. Furthermore in 1981, remarkable development of health service was achieved as a result of the renovation of the primary health care which was put into force throughout the country based on two main points namely: ① working out health service in rural areas essential in primary level and strengthening the supporting system such as mass health examination for the secondary level, and ② attaining the comprehensive health service up to tertiary level to be promoted through the cooperation and coordination of all the governmental agencies concerned and private medical sector in compliance with the health service policy formulated in socio-economic program in National Development Plan, and under the Executive Order No.851 issued at the end of 1982 which provide for policies of diseases prevention, treatment and rehabilitation. When the figures of 1972 and 1984 were compared, substantial decreases were noted: the birth rate decreased to 15.5% , the death rate to 24.4%, the infant mortality to 29.3% , the death rate of pregnant women at delivery to 52.9%, and the death by communicable diseases to 20.6%. On the other hand, increases rather conspicuous in the mortality of heart and circulatory diseases to 107.7%, and in the death rate by malignant neoplasms to 38.6% indicate insufficient efforts by the Government authorities. The conditions of health services between 1980 and 1985 may be described in terms of diseases as follows: the ten major diseases in the country in the order of the number of cases are bronchitis, dysentery, influenza, pneumonia, tuberculosis, malaria, rubella, whooping cough, gastroenteritis and colitis. Eight of these ten major diseases are infectious, and this fact shows the insufficient system of public health common in the developing countries of the world, which fact accounts for high rates of diseases.

Under the these circumstances, the Government of the Philippines established in 1986 a National Development Plan to aim at continued

economic and social development as well as the improvement of the balance of international trade. With respect to the health care under the said Plan, the effort were made with three goals: namely, (1) promotion of nutritive conditons of the people, (2) working out of effective health services for all the citizens, which would result in advancement of the primary health care and (3) better family planning through improvement of home environments. However, insufficient amount of budget for medical facilities brought about an obstructive factor which made it difficult to renew medical equipment necessary for fundamental health service and to physically strengthen the facilities concerned. At the same time, it brought about differences in the number of medical personnel in the facilities concerned. For example, in the medical facilities having 100 beds, some of them have as many as 98 doctors, while others have only seven, its difference being as large as 14:1. This certainly prevents effective health service for the total population, which is one of the objectives of the Plan.

With the background of the conditions stated above, the Government of the Philippines, intending to expand medical facilities and improve the health services, obtained in Japanese fiscal year 1983 grant aid from the Government of Japan, under which medical equipment was provided to 13 Regional Hospitals, making the facilities more efficient and their services better rendering. Moreover, recently in accordance with the National Development Plan, the Government of the Philippines emphasized the improvement of the fundamental health service mainly aimed at the eradication activities against the infectious diseases which were the major ones in the country. This time, 26 out of the 77 Provincial Hospitals which are in the position of leading the medical facilities in rendering health services to the people in the provinces mainly along the line of secondary medical care, were selected and the Government of the Philippines requested the Government of Japan for grant aid to supply medical equipment to the hospitals.

These facilities were selected by three standards, namely, (1) Hospitals in provinces where a comparatively large number of people are able to receive benefit, (2) Hospitals in provinces where population to

receive the benefit was not so large, located in distances from main cities geographically, and consequently budget allocation was held low in the past and aid from the Department of Health was meager, and (3) Hospitals in provinces where population increases were large.

In response to the request, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team to the Philippines for a period of 24 days from June 6, 1988 to June 29, 1988. The Study Team surveyed six provincial hospitals out of the 26 which the Government of the Philippines had planned to supply with medical equipment, and then conducted a thorough survey on the four Regional Hospitals which were supplied with medical equipment in Japanese fiscal year 1983. The Team discussed the background, purpose and contents of the Project with representatives of the Department of Health of the Government of the Philippines. At the same time, the Study Team made hearings on the 19 Provincial Hospitals which had not been surveyed and obtained necessary information and data. The Study Team returned home and analyzed the results of the field survey as follows.

- (1) The major portion of the budget of the Department of Health was spent for the management of the facilities now in existence, and it was hardly used for the purchase of new equipment.
- (2) The equipment of the facilities which was the subject of the Project was badly worn out, some unserviceable, and unable to render proper health service.
- (3) This made it difficult for the facilities to cope adequately with the infectious diseases, major diseases in this country.
- (4) The equipment requested by the Government of the Philippines was absolutely necessary and of greatest urgency for the health and medical program of the country including anti-infectious disease activities.
- (5) The subjected facilities are those of the secondary health care level, rendering health services closely related to the anti-infectious disease activities. These facilities are distributed one for one province, as the top and important facility for health services in each province.
- (6) The subjected facilities are in the provincial areas having no high quality medical facilities and, placed in a position to carry out not only the secondary health care but also the primary health care, which

is the basic health services and also being expected to render the tertiary health care which includes highly professional health services. In view of the points aforementioned, these facilities are regarded as the kernel of the health services of the country.

Consequently, the Project will greatly contribute to the promotion of the health service activities of the country and benefit the whole nation. It is a really appropriate and significant project from the viewpoint of the principle of the Japanese Government's grant aid system.

The outline of the supply plan formulated as a result of the basic design study is mentioned below.

The main problems of the medical activities in rural areas of the Philippines are lower and poorer services in terms of both quality and quantity caused by the time-worn equipment owned by each medical facility concerned. And the supply of medical equipment for the primary and secondary health care is especially essential. Based on the preconditions mentioned above and taking into consideration the purposes of the Project, budgetary and maintenance systems of the Government and expected benefit of the Project, the Team formulated a basic design in accordance with the following fundamental principles.

- ① Basic design shall be planned along with the policies of the National Health Program and Regional Health Program being pushed forward by the Government of the Philippines.
- ② Basic design shall be planned within the framework of the present health budget of the Government.
- ③ Basic design shall be planned to ensure impartial distribution of the equipment so that the inhabitants in the islands area can also be benefited.
- ④ Basic design shall be planned on the basis of prevailing diseases so that effectiveness of the Project will quickly be materialized.

With above-mentioned fundamental principles in mind, the Basic Design



Team selected medical equipment under two conditions of the demanding aspect and the technical aspect. As for the demanding aspect, a top priority was given to the basic medical equipment essential to upgrading the primary health care while the next priority was given to the equipment for the secondary health care essential to the promotion of more effective health services, so that enriched health service activities in rural communities shall be secured. As for the technical aspect, priority on selection was given to the equipment which is easily operated with the present level of medical technique of local personnel concerned, which is comparatively simple in structure and durable with little possibility of breaking-down, and which is suitable to the unstable power supply situation and severe environment caused by the tropical climate of the country.

The subjected facilities and equipment selected under the above-mentioned considerations are as follows:

Subjected facilities

1. Gov. Teofilo Sison Memorial Hospital
2. Bontoc General Hospital
3. Ifugao General Hospital
4. Isabela Provincial Hospital
5. Bataan Provincial Hospital
6. Pres. Ramon Magsaysay Memorial Hospital
7. Tarlac Provincial Hospital
8. Quezon Memorial Hospital
9. Albay Provincial Hospital
10. Sorsogon Provincial Hospital
11. Roxas Memorial General Hospital
12. Corazon Locsin Montelibano Memorial Hospital
13. Negros Oriental Hospital
14. Southern Leyte Provincial Hospital
15. Eastern Samar Provincial Hospital
16. Sulu Hospital
17. Zamboanga del Norte Provincial Hospital
18. Datu Halun Sakilan Memorial Hospital
19. Butuan Hospital
20. Bukidnon Hospital
21. Misamis Occidental Provincial Hospital
22. Surigao del Norte Provincial Hospital
23. Davao del Sur Provincial Hospital
24. Surigao del Sur Provincial Hospital
25. South Cotabato Provincial Hospital
26. Sultan Kudarat Provincial Hospital

## Equipment Selected

### 1. Diagnosis Equipment

- Diagnostic X-Ray Equipment
- Image Intensify TV Monitor
- X-Ray Room Airconditioner
- Automatic X-Ray Film Processor
- X-Ray Film Processing Tank
- X-Ray Accessories Set
- Ultrasound Scanner
- Defibrillator
- Others

### 2. Operating Room Equipment

- Major Operating Light
- Major Operating Light
- Mobile Operating Light
- Major Operating Table
- Orthopedic Surgery Table
- Gynecological Surgery Table
- Major Operating Table
- Others

### 3. Intensive Care Unit Equipment

- Bedside Patient Monitor
- I.C.U. Bed
- Defibrillator
- Others

### 4. OB & GNY Equipment

- Infant Incubator
- Phototherapy Unit
- Obstetric Delivery Table
- Others

#### 5. Ward Equipment

- Examination Lamp
- Portable Suction Unit
- Orthopedic Bed
- Others

#### 6. Laboratory Equipment

- Spectrophotometer
- Laboratory Autoclave
- Blood Bank Refrigerator
- Laboratory Refrigerator
- Laboratory Incubator
- Others

#### 7. Miscellaneous

- Ambulance
- Power Generator
- High Pressure Sterilizer

The implementation body of this Project is the Department of Health of the Republic of the Philippines and the Under Secretary of the Department of Health is in charge of business liaison and general administration.

No additional budgetary appropriation by the Government of the Philippines is necessary for this Project since the equipment shall be supplied to the existing hospitals fully equipped with facilities of water supply and drainage as well as power supply.

The expenses to be borne by the Government of the Philippines for maintenance and management of this Project include electricity charge, water supply and sewage fees, gas rate and costs for medical equipment consumables. Most pieces of the equipment to be supplied are to supplement the equipment presently in use which is worn-out or recently got in trouble and unrepairable. And the present budget appropriated for the above purpose is sufficient enough to cover these expenses.

The work schedule of the Project will be started upon conclusion of the Exchange of Notes (E/N) between the Government of Japan and the Government of the Philippines in accordance with the following three steps. The period of time required for the completion of the Project will be approximately 12 months.

- (1) For detailed design: approx. 2.5 months
- (2) For tendering: approx. 1.5 months
- (3) For project execution: approx. 7.8 months.

Implementation of the Project will improve the level of health services in 26 provinces, and the estimated total population of approximately 19.8 million of 26 provinces in 1989, nearly 33% can be benefited by more effective health services to be rendered mainly from the secondary health care level. In the budget of the Department of Health, the ratio of maintenance and repair expenses will be reduced and the amount thus saved can be utilized for the accomplishment of purposes of the National Health Plan which is being executed. In addition to these direct effects, the supply of equipment can help more efficiently the activities of health services including secondary health care, which has so far been rather insufficient as well as primary and tertiary health care. Furthermore, the scope of medical activities in the fields of treatment and diagnosis will be extended.

As described above significant effects can be expected from the Project, of which management shall also be properly materialized. Therefore, this Project is considered to be appropriate for the Grant Aid.

In this connection, it is firmly recommended that the Government of the Philippines put in practice the following proposals in order to make the Project more effective.

- (1) A visiting maintenance team from Hospital Maintenance Services of the Department of Health mainly consisting of engineers shall be sent to each facility at least once in half a year to spend four or five days at one facility in order to maintain equipment in good condition as

long as possible.

- (2) Although necessary repair or spare parts for a certain period of time are included in the basic design of the Project, it is recommended that the Department of Health keep in stock necessary parts to cope with any emergency requirements in the future.



## CONTENTS

	<u>Page</u>
Preface	
Map of the Philippines	
View of the Hospital	
Summary	
<b>CHAPTER I INTRODUCTION</b> .....	<b>1</b>
<b>CHAPTER II BACKGROUND OF THE PROJECT</b> .....	<b>4</b>
2-1 Overview of Health Service .....	4
2-1-1 General Situation of Health Service .....	4
2-1-2 Current Situation of Health Service .....	14
2-1-3 Present Status of Health Service Administration .....	18
2-2 General Situation of Related Plans .....	39
2-2-1 Development Plan for Health Service .....	39
2-2-2 Implementing Programs of Health Service .....	45
2-3 Foreign Assistance to the Health Sector .....	52
2-4 Outline of Subjected Facilities of the Project .....	54
2-4-1 Location of Subjected Facilities of the Project .....	54
2-4-2 Situation of Subjected Facilities of the Project .....	55
2-5 Background and Contents of the Request .....	107
2-5-1 Background of the Request .....	107
2-5-2 The Contents of the Request .....	108
<b>CHAPTER III CONTENTS OF THE PROJECT</b> .....	<b>112</b>
3-1 Objective of the Project .....	112
3-2 Study of Request Contents .....	112
3-2-1 Study of Project Contents .....	112
3-2-2 Selection of the Medical Equipment to be Supplied .....	118
3-3 Outline of the Project .....	120
3-3-1 Executing Bodies .....	120
3-3-2 Project Components .....	120
3-3-3 Equipment to be Supplied .....	121

CHAPTER IV	BASIC DESIGN .....	125
4-1	Basic Design Policy .....	125
4-2	Basic Design Condition .....	126
4-3	Study of Basic Design Condition .....	128
4-4	Equipment Supply Plan .....	133
4-4-1	Type, Specification and Quantity .....	133
4-4-2	Equipment to be Supplied to the Individual Facility .....	137
CHAPTER V	PROJECT IMPLEMENTATION AND MANAGEMENT .....	140
5-1	Project Implementation System .....	140
5-2	Undertakings of Both Governments .....	142
5-3	Implementation Program .....	143
5-4	Procurement of the Equipment .....	146
5-5	Implementation Schedule .....	147
5-6	Estimated Cost to be borne by the Philippines Government .....	149
CHAPTER VI	OPERATION AND MAINTENANCE .....	150
6-1	Operation and Maintenance System for Medical Facilities and Equipment .....	150
6-2	Estimation of Operation and Maintenance Expenses .....	150
6-3	Operation and Maintenance Expense of Health Service Budget .....	154
6-4	Manpower Program and Budgetary Appropriation for Maintenance .....	157
6-5	Cooperation form Private Sector .....	158
CHAPTER VII	PROJECT EVALUATION .....	159
CHAPTER VIII	CONCLUSION AND RECOMMENDATIONS .....	164
8-1	Conclusion .....	164
8-2	Recommendation .....	164



APPENDIX I ..... 166

- 1-1 List of Members of Study Team
- 1-2 Itinerary of Study Team
- 1-3 List of Persons Interviewed
- 1-4 Minutes of Discussions
- 1-5 List of Materials Collected

APPENDIX II ..... 183

- Table 1 Live Births, Total Deaths, Deaths Under 1 Year, Maternal Deaths and Foetal Deaths Philippines: 1950 to 1984
- Table 2 Mortality : Leading Causes by Attendance
- Table 3 Number of Medical Personnel under Department of Health
- Table 4 Major Health, Nutrition and Family Planning Program Indicators
- Table 5 ~ Table 31 List of Designed Equipment to Each Facility
- Table 31 Summary List of Designed Equipment



# CHAPTER I INTRODUCTION



## CHAPTER I

### INTRODUCTION

Medium-Term Philippine Development Plan of the Republic of the Philippines which was formulated in 1986 aims to attain the recovery of national economy for growth as well as betterment of life of people and to realize stabilization of price of commodities, increase of income, creation of employment opportunities, strengthening of competitive power in the field of industries improvement of the international balance of payment, and finally up-grading of overall national life. Under this development plan, National Health Plan was created.

The Plan is being implemented with following three main objectives;

①Improvement of health service for the people and nutritive conditions of the people ②the delivery of effective health service for entire nation by A.D. 2000 through Primary Health Care ③family planning for their better life circumstances.

Meanwhile in the Philippines, increases in communicable diseases, circulatory diseases and digestive diseases have recently been observed, and because of the lack of medical personnel, mal-distribution of equipment, deterioration of medical facilities and insufficiency of maintenance budget, satisfactory health service is not currently delivered, making it difficult to attain the above objectives. Under these circumstances, with the aim to improve health service by way of reinforcement of medical facilities, the Government of the Philippines requested in 1983 to the Government of Japan the grant aid for the supply of medical equipment to 13 regional hospitals and obtained the aid.

With the purpose of further materialization of the above objectives, the Government of Philippines requested again in 1988 the cooperation of the Government of Japan to supply medical equipment to the 26 Provincial Hospitals.

In response to the above-mentioned request, the Government of Japan decided to execute a basic design study and entrusted the study to the Japan International Cooperation Agency (JICA). JICA organized and sent the Basic Design Study Team headed by Mr. Satoshi Kinugawa, Official, Grant Aid Division, Economic Cooperation Bureau, Ministry of Foreign Affairs, to the Philippines from 6 June to 29 June 1988.

The study Team examined the background of the project, the contents of the request, confirmed the project implementation organization and conducted field survey at 6 proposed project sites and 4 facilities sites to which the supply of equipment was made in Japanese fiscal year 1983.

For the rest of 19 proposed project sites, study by hearing from persons in charge who came from the Project sites was conducted.

The followings are findings as the result of field survey and analysis thereof in Japan.

- 1) Even though National Health Plan is presently under process, major part of allocation of budget is given to man power, maintenance and operation of existing facilities and small amount is allocated for the procurement of new equipment.
- 2) Because of the above, equipment in the facilities have been deteriorated very much, and some of them are not serviceable and therefore sufficient health service can not be offered.
- 3) In these facilities because of declining of activities of fundamental health service, diagnosis and treatment of not only communicable diseases but also wound and circulatory diseases are not satisfactorily offered.
- 4) The equipment requested this time are fundamental ones which are mainly used for primary and secondary health care. These facilities, however, are in shortage of the equipment because of financial reason, necessity of the equipment for the facilities should be very emergent.
- 5) Accordingly, this project should contribute greatly to the improvement of health service in the Philippines and also to the benefit of the

people in general of the country.

Therefore it should be quite a matter of significance that this project will be implemented by the Grant Aid of Japan.

The Study Team, based on the study, has reached the conclusion, as a result of the evaluation made on prospective number of patients to be caused by population increase in the future and on financial aspect, that it is appropriate to supply the medical equipment to 26 Provincial Hospitals by the Grant Aid of Japan, and therefore a report on the Basic Design Study has been prepared.

Member list of Japanese Study Team and itinerary of the Study Team are shown in the Appendix-|.





## CHAPTER II BACKGROUND OF THE PROJECT



## CHAPTER II

### BACKGROUND OF THE PROJECT

#### 2-1 Overview of Health Service

##### 2-1-1 General Situation of Health Service

The activity of health service in the Philippines was completely renewed in 1981 by applying Primary Health Care System conducted throughout the country.

Effort has been made for the betterment of health of the people by the movement with an aim to establish self-reliance of individual, families and communities instead of relying on the government.

Recently, the Government of the Philippines has established regional health offices and provincial health offices respectively in regional hospitals and provincial hospitals with an objective to secure health of the people by A.D. 2000 under the National Development Program, and emphasis is placed on educational encouragement of health personnel technological up-grading and on expansion of the facilities.

##### (1) Brief History of Health Service System

The Department of Health has a long history. During the Spanish Era, hospitals were established primarily for hospitalization of injured soldiers.

During the early American Regime, the focus is on preventive medicine because there were several deaths as a result of epidemics. In the early twenties, the Bureau of Health was under the Department of Public Instruction. There was then a District Health Officer for every province who was responsible for the delivery of health service.

During the Commonwealth Regime a law was passed establishing one hospital for every province. This is the provincial hospital which is located in the capital of the province. To provide support to these hospitals a law was passed which obliged every province to contribute 5% of its income for the support of the provincial hospital. The town or city where the hospital is located is required to contribute 7% of its income. There were also charity clinics in some municipalities and these were manned by a charity physician and a sanitary inspector. The charity physicians treated simple cases only because they were more concerned with preventive measures rather than curative work. The sanitary inspectors were responsible for the environmental sanitation of the municipality and they were provided with police power. Medicines available were scarce; there were no antibiotics then nor were there sophisticated technologies. People were not too health conscious.

In 1954, the Health situation in the country showed the following:

1. There was maldistribution of manpower and facilities.
2. Only 30% of the Medical & Health needs of the people was answered.
3. 50% of the people die without medical attendance.
4. Communicable diseases were prevalent.
5. There was a high population growth rate.
6. Malnutrition was prevalent.
7. Environmental sanitation was very poor.

It was at this time that the Rural Unit Act was passed. Health and Service was expanded. District Hospitals were organized. Pres. Magsaysay was the President then and he was so concerned with the welfare of the rural folks.

In the beginning there were only 84 Rural Health Units. Later more RHU's were created until they cover all municipalities. A more effective health service system was therefore implemented.

In 1958 there was a reorganization of the Department of Health. Eight regional offices were created and operated in the principle of decentralization, to bring down authority and supervision to lower level. All health facilities were made to render total health services from the periphery to the center within their capabilities and resources.

In 1965 the Hospital Licensure Law was passed. The objective is to set standards for hospital construction, operation and management to protect the health interest of the people.

In 1972-1973, an assessment of the program thrusts of the Department of Health revealed that:

1. Only 30% of the population were served. Health services were confined primarily in the population and neighboring areas since the RHU is located in the population.
2. Health services were scheduled. Health personnel were stationed in the RHU and they seldom go to the barangays of their municipality.
3. Utilization of health manpower was not maximized.
4. The health practice showed that communicable diseases were still rampant and there was a rapid increase in the population.
5. A research study made in some province showed that a great number of in-patients need not be hospitalized at all and can be managed at home.

In 1974 there was a re-structuring of Health Service System. This was placed under the responsibility of the Project Management Staff. The general objective of the program is to expand health services to 80% of the population.

Activities under the System:

1. Training of existing health personnel
  - a) to provide health services when needed;
  - b) scheduling of services were removed so that all services were made available to the people every day.
  
2. Expanded role of each RHU personnel.
  - a) Municipal Health Officers were trained as managers.
  - b) Public Health Nurses were trained as supervisors. They now render medical care and perform simple laboratory works aside from their nursing care activities.
  - c) Midwives were deployed to an area of 5,000 population (3-5 Barangays). These Rural Health Midwives were trained to deal with simple cases of birth and complicated ones were referred to higher health authorities.
  
3. Infrastructure Construction of Main Health Centers, barangay health stations and improvement of the different hospital buildings were made.
  
4. Equipments - These were upgraded both in hospitals and in RHU's.
  
5. Improvement of information system.

In 1980 another assessment of health service system was made and this revealed that only 70% of the population was served. So an approach was thought of to cover 100% of the health needs of the community. In 1981 the Ministry of Health adopted primary health care as an approach to total development.

On December 2, 1982 Executive Order No.851 was issued. There was integration of promotive, preventive, curative and rehabilitative components of health and medical care. The offices of the Provincial

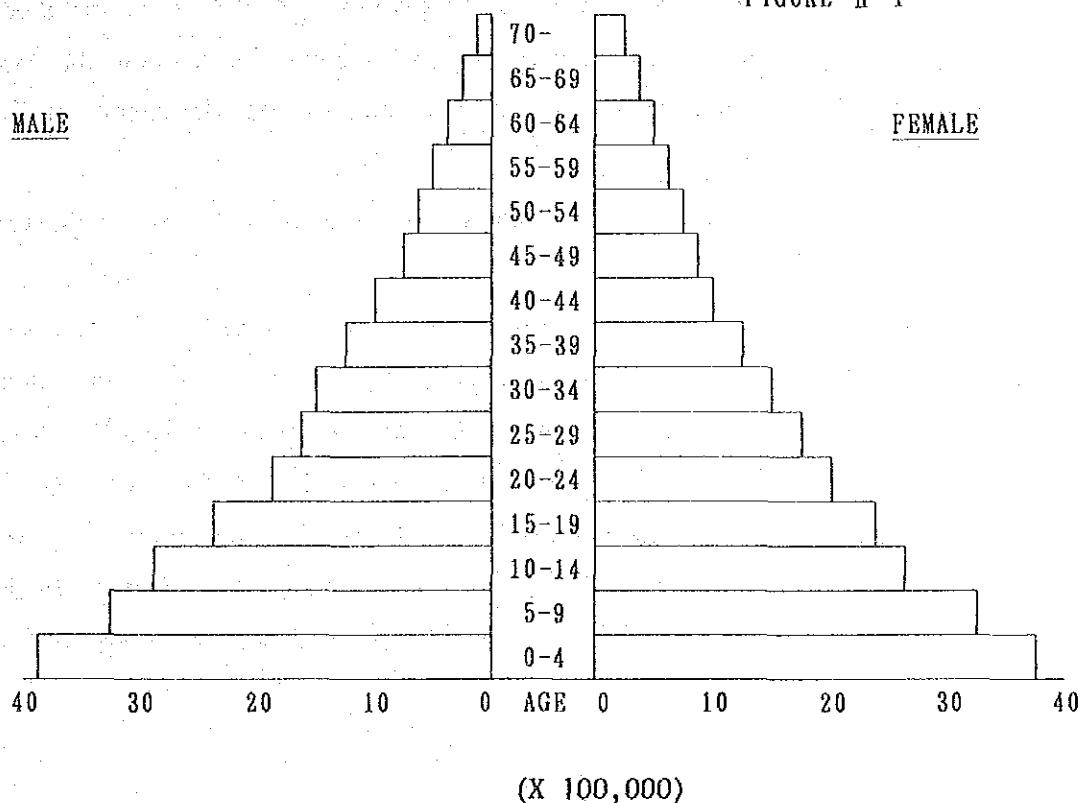
Health Office and Provincial Hospital were merged to constitute a new integrated provincial health office. The Provincial Health Officer shall exercise supervision and control over district hospitals and other field health units of the Department except those placed directly under the Secretary. Each district hospital has an area of one or more municipalities (with its Rural Health Unit). Under each RHU is the Barangay Health Stations which are run by the Rural Health Midwives.

After February 24, 1986 came a new Political Power and a new DOH with the executive order of the new government to reshape/rebuild the Department of Health.

(2) Population

The composition of population by age in the Philippines is presented here under. (FIGURE II-1) It was announced by census of population report that the total population of the Philippines in 1983 was 51,953,600, and increased over 2.3% against previous year.

FIGURE II-1



Distribution of population by age group of the Philippines is one-sided to rather younger age groups, namely percentages of age groups against total population indicate 39.45% for 0~14 age group, 57.56% for 15~64 age group and 3.99% for 65 and above age group respectively.

It is a typical population increasing type that the ratio of younger population against older population is extremely large, which is quite contrary to the bell type represented by Japan, namely static type of population. This kind of population composition can be said to form a pattern of vulnerable infant type which is characterized by the facts that mortality of children is high, that children shall be subjected to the natural selection year after year, and that average life span is short.

### (3) Situation of Health Service

The Public Health Status of the Nation of 1972 and 1984 are shown in the Table II-1 below. The proportionate mortality rate of 50 year and over, cardio-vascular disease death rate and malignant neoplasms death rate have been increasing while others declining, but the mortality rate of communicable diseases have been showing high number which is 1.5 times as many as the number of diseases of heart and circulatory system.



NATIONAL PUBLIC HEALTH INDEX

Table II-1

Item	1972	1984	Rate
Population	39,040,100	53,165,800	+ 36.2%
Crude Birth Rate	37.4/1000 Population	31.6/1000 Population	- 15.5%
Crude Death Rate	9.8/1000 "	7.6/1000 "	- 24.4%
Infant Mortality Rate	82.0/1000 Live Births	58.0/1000 Live Births	- 29.3%
Maternal Mortality Rate	1.7/ " "	0.8/ " "	- 52.9%
Proportionate Mortality 50 Years and over	35.5/1000 Total Death	44.3/1000 Total Death	+ 24.8%
Communicable Diseases Death Rate	286.2/1000 Population	227.1/1000 Population	- 20.6%
Cardio-vascular Disease Death Rate	69.5/1000 Population	144.4/1000 Population	+ 107.7%
Malignant Neoplasms Death Rate	27.4/1000 Population	38.0/1000 Population	+ 38.6%
Life Expectancy	Age: 59.3	Age: 62.8	+ 5.9%

Source: Department of Health  
Annual Report

(4) Prevailing Diseases and Mortality Rate

FIGURE II-2 shows the comparison of morbidity rate of leading Diseases between the average of five years from 1980 to 1984 and 1985. Among of 10 serious diseases, 8 were communicable diseases such as bronchitis, Diarrheas, Influenza, Pneumonias, Tuberculosis, Malaria and Measles. These data mean that the communicable diseases shall be important problem in the Philippines. Although the rates of these diseases have been decreasing, but slightly.

FIGURE II-3 shows the comparison of mortality rate of leading causes between the average of five years from 1979 to 1983 and 1985. The top of leading causes of death during these 6 years is Pneumonias. The morbidity rates of the leading diseases has been going up recently, and the Mortality rates of leading diseases are leveling off and/or increasing. Especially, the mortality rate of the communicable diseases is increasing.

TABLE II-2 presents change of crude birth rate, crude death rate, death rate under one year, maternal death rate and foetal death rate from 1980 to 1985. From this table, it is understood that the crude birth rate, death rate under one year and foetal death rate have been improved remarkably, but the crude death rate and maternal death have been leveling off. It is considered that this relate to the lack of skillness for delivery. Only 50% of all delivery would be attended with doctor and nurse. The other would be attended for delivery with midwife without licence.

CRUDE BIRTH RATE AND MORTALITIES

Table II - 2

YEAR	CRUDE BIRTH RATE	CRUDE DEATH RATE	DEATH RATE UNDER ONE YEAR	MATERNAL DEATH RATE	FOETAL DEATH
1980	30.2	6.2	45.1	1.1	9.6
1981	29.5	6.1	44.1	1.1	9.1
1982	29.0	6.1	41.8	1.0	9.1
1983	29.0	6.3	42.7	1.0	9.8
1984	27.8	5.9	38.5	0.9	8.0
1985	26.3	6.1	38.0	1.0	6.2

• CRUDE BIRTH RATE AND CRUDE DEATH RATE: To 1,000 population.

• OTHER: To 1,000 Live Births.

SOURCE: Health Intelligence Service, Department of Health

National Census and Statistics Office. (1985)

For detail refer to Appendix II

FIGURE II - 2

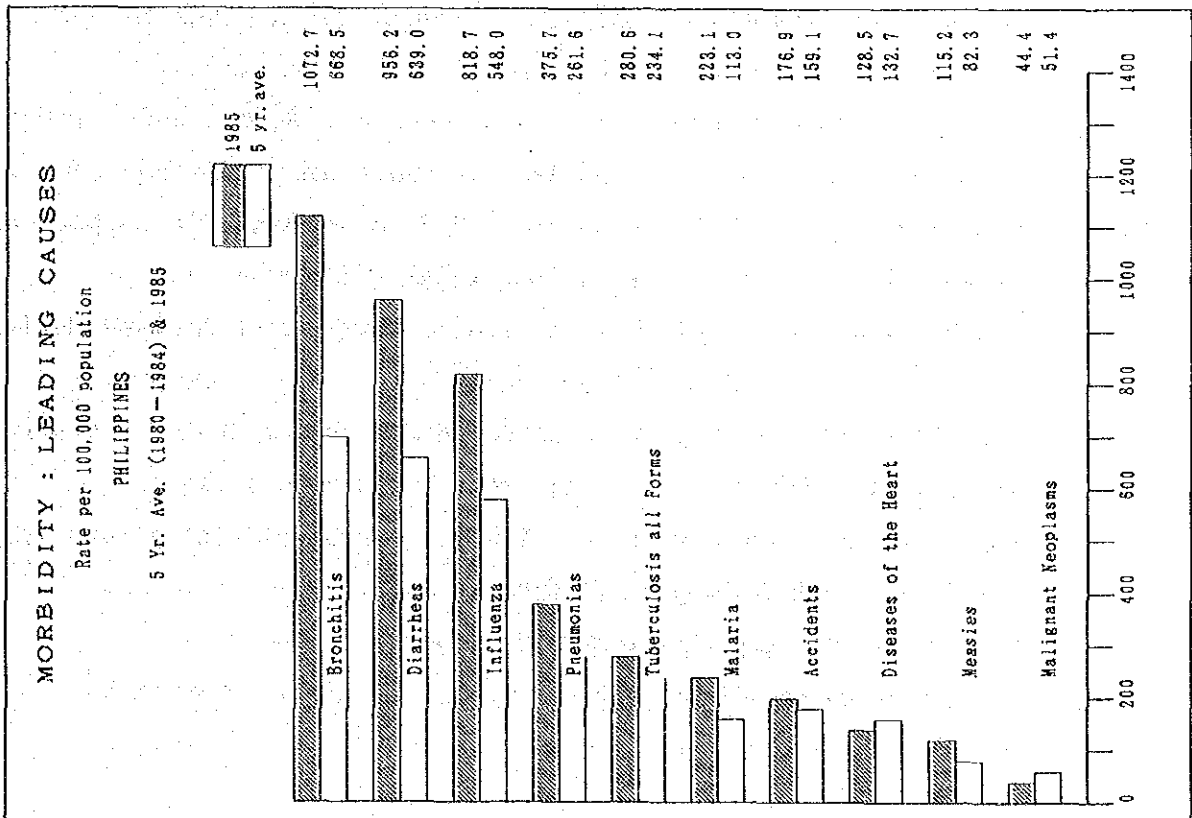
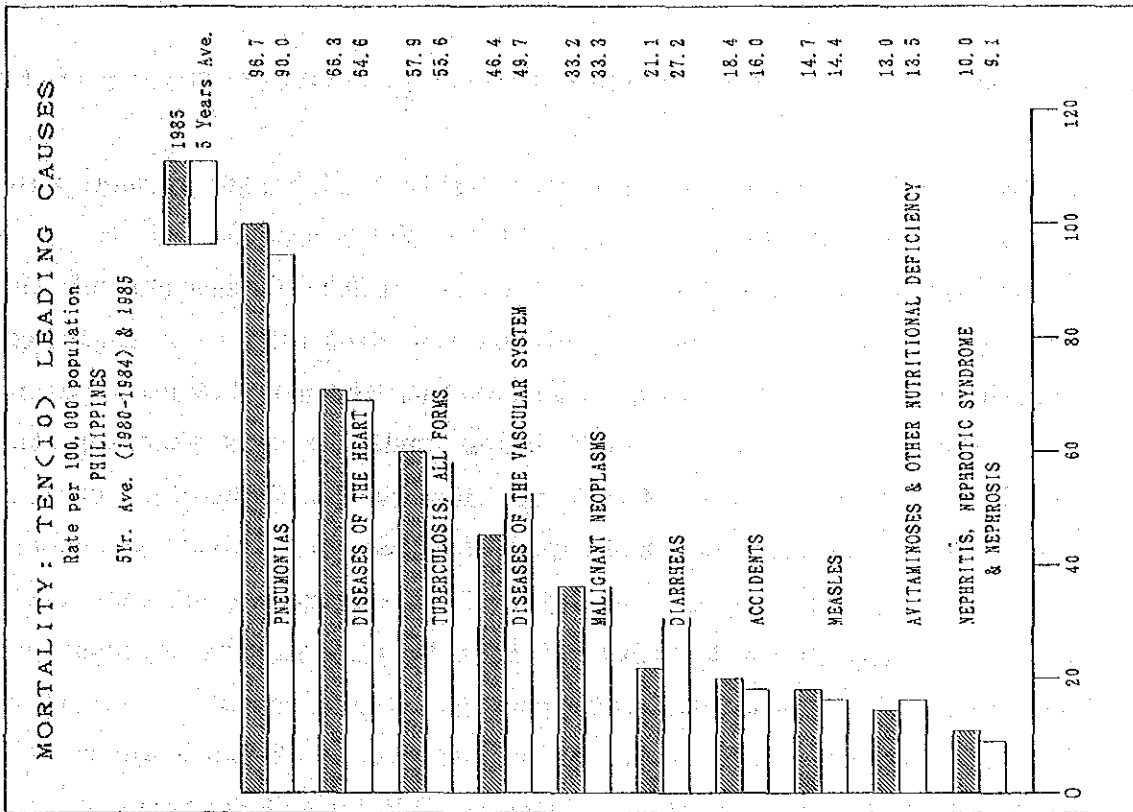


FIGURE II - 3



(5) Present Situation of Primary Health Care

- ① Primary Health Care is the most accessible health service available to public in general.

In order to activate PHC, the efforts of the Government of the Philippines are centered in information dissemination, training, health education, community organization and mobilization, along with these other efforts are being made in strengthening the services delivery system for basic and essential health services including reorientation of health services staff and personnel, upgrading of equipment and facilities, system improvement especially in the distribution and supply of essential drugs, medical supplies, and expansion of public health services and diagnostic facilities for water analysis, food sanitation, detection of cases in endemic areas through improved surveillance. Thus, the Government of the Philippines takes these steps as above which give the people the benefit of Primary Health Care.

- ② Moreover the Government of the Philippines, in order to materialize the above steps, gives technological, administrative and financial supports which are as follows.

1) Health Manpower Development

Barangays-based training of rural health midwives and barangay Primary Health Care Committee members in operating PHC at barangay level. A series of orientation workshop in support of Primary Health Care for Regional Health Officers.

Another Workshop of Health Service in Support of Primary Health Care for Provincial Health Services.

- 2) Promotion of Workshop on Health Service by members of Central Training Committee.

- 3) Improvement of communication of health service informations from the Department of Health.

- 4) Promotion of study on various diseases.

## 2-1-2 Current Situation of Health Service

### (1) Activity of Health Service

Against the diseases which mainly cause death in the Philippines, activity on National Health Plan is centered in the following programs.

#### 1) Control of Diarrheal Disease Program

Diarrheal disease has for many years continued to be the leading cause of morbidity and mortality among children of the vulnerable age group. It affects greatly their nutritional status and consequently their growth and development. Seven (7) out of ten (10) deaths among children are due to diarrhea and five (5) out of ten (10) reported case among these age group are also caused by this group of diseases.

Recognizing the magnitude of the diarrhea problem, a program on the Control of Diarrheal Diseases within the context of Primary Health care was launched in late 1980 which has the following objective : the reduction of mortality and morbidity from diarrheal diseases.

The program has the following components : Oral Rehydration Therapy, Environmental Sanitation, Maternal and Child Health, Nutrition and Health Education.

#### 2) Tuberculosis Control Program

At present, the TB Control Program is implemented in the basic health services through the Primary Health Care approach. Referrals are now functioning in all health institutions participating in the program.

The program which embodied the modern concept and approaches of tuberculosis control consists of BCG vaccination, case finding by direct sputum microscopy and x-ray and internal medicine treatment of cases. Table II-3 shows case finding in 1983.

A number of changes to improve the program has been introduced. The need to conduct an assessment of the program were finally felt and an assessment of the operational and technical aspects of the

program with the assistance of WHO, was pushed through on the basis of records and observations at different levels.

Three regional health offices (Regions II, VI and X), a province of each Region and two microscopy centers and eight barangay health stations for each province were assessed by the team of six evaluators from the Department of Health and National Institute of Tuberculosis.

Accomplishment of Case Finding in 1983

Table II-3

REGION	X-RAY EXAMINATION				SPUTUM EXAMINATION							
	EXAMINED		POSITIVE		EXAMINED		POSITIVE					
	Target	Accom.	%	Target	Accom.	%	Target	Accom.	%			
I	40000	40781	100	4000	4585	100	37232	46346	100	3723	3340	89.7
II	X-ray Out of Order						23952	19192	80.1	2395	1186	49.5
III	40000	30193	75.4	4000	2786	69.2	51852	28285	54.5	5125	1307	25.2
IV	50000	20210	41.6	5000	1706	34.1	67186	169421	24.4	6718	1261	18.7
V	Out of Order						36928	19481	52.7	3692	1406	32.0
VI	10000	5440	54.4	1000	1413	100	48342	14111	29.1	4834	1655	34.2
VII	10000	2317	23.1	1000	984	98.4	40404	9757	24.1	4041	535	13.2
VIII	Out of Order						39734	4166	14.0	2973	576	19.3
IX	Out of Order						27152	11600	42.7	2715	1717	63.2
X	10000	10112	100	1000	920	92	30336	22518	74.2	3033	1833	60.4
XI	10000	14405	100	1000	1637	100	37066	53412	100	3706	1522	41.0
XII	Out of Order						24064	16335	67.8	2406	2319	96.3
TOTAL	170000	124051	72.9	17000	14013	82.4	454258	261636	57.5	45425	18657	41.0

Source : Annual Report 1983, Department of Health

### 3) Malaria Control Program

The Department of Health has been undertaking, in addition to formulation of Malaria Control Program, procurement and distribution of insecticides and drugs, blood test for out-patients of Malaria, manufacture of testing apparatus for research in the drug resistance of mosquitos carrying Malaria in collaboration with WHO, domestic and overseas training of specialized personnel concerned and execution of joint research with authorities of United States Navy and Philippine University etc.

Outline of the Program in 1988 is as follows :

- i) Positive eradication activities and supervisory activities were integrated in the field activities of the Department of Health.
- ii) 111 personnel concerned were trained in 10 courses.
- iii) Test and inspections in the laboratories and medical clinics were carried out.

### 4) Dermatitis Control Program

The Dermatology Research and Training Service which provides services related to leprosy and dermatology cases continuously conducted consultation and treatment activities including the training of personnel in leprosy control.

The program aims to reduce the incidence and prevalence of leprosy and other communicable skin diseases, utilizing the Primary Health Care Approach. The conduct of clinical researches as well as the training and health education services for dermatological conditions are also being pursued.

The program activities included the preventive and curative aspects as well as health education activities like information dissemination regarding a change in attitude towards Hansen cases. Those who conducted researches on dermatological conditions availed of library facilities which includes publication on medical journals. These services were extended to a total of 20,331 persons.