

BASIC DESIGN STUDY REPORT
FOR
THE ESTABLISHMENT PROJECT
OF
TUBERCULOSIS MEDICAL FACILITIES
IN
THE REPUBLIC OF HAITI

OCTOBER 1981

JAPAN INTERNATIONAL COOPERATION AGENCY

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国際協力事業団	
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PREFACE

In response to a request of the Government of Haiti, the Japanese Government decided to conduct a basic design study on the Project for Tuberculous Medical Facilities and entrusted the study to the Japan International Cooperation Agency (JICA).

The JICA sent to Haiti a basic design study team headed by Dr. Kikuji Simamura from 6th to 21st June, 1981.

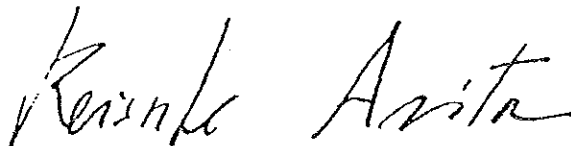
The team had discussions with the officials concerned of the Government of Haiti and conducted a field survey in Port-au-Prince and Siguenueau.

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 our two countries.

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

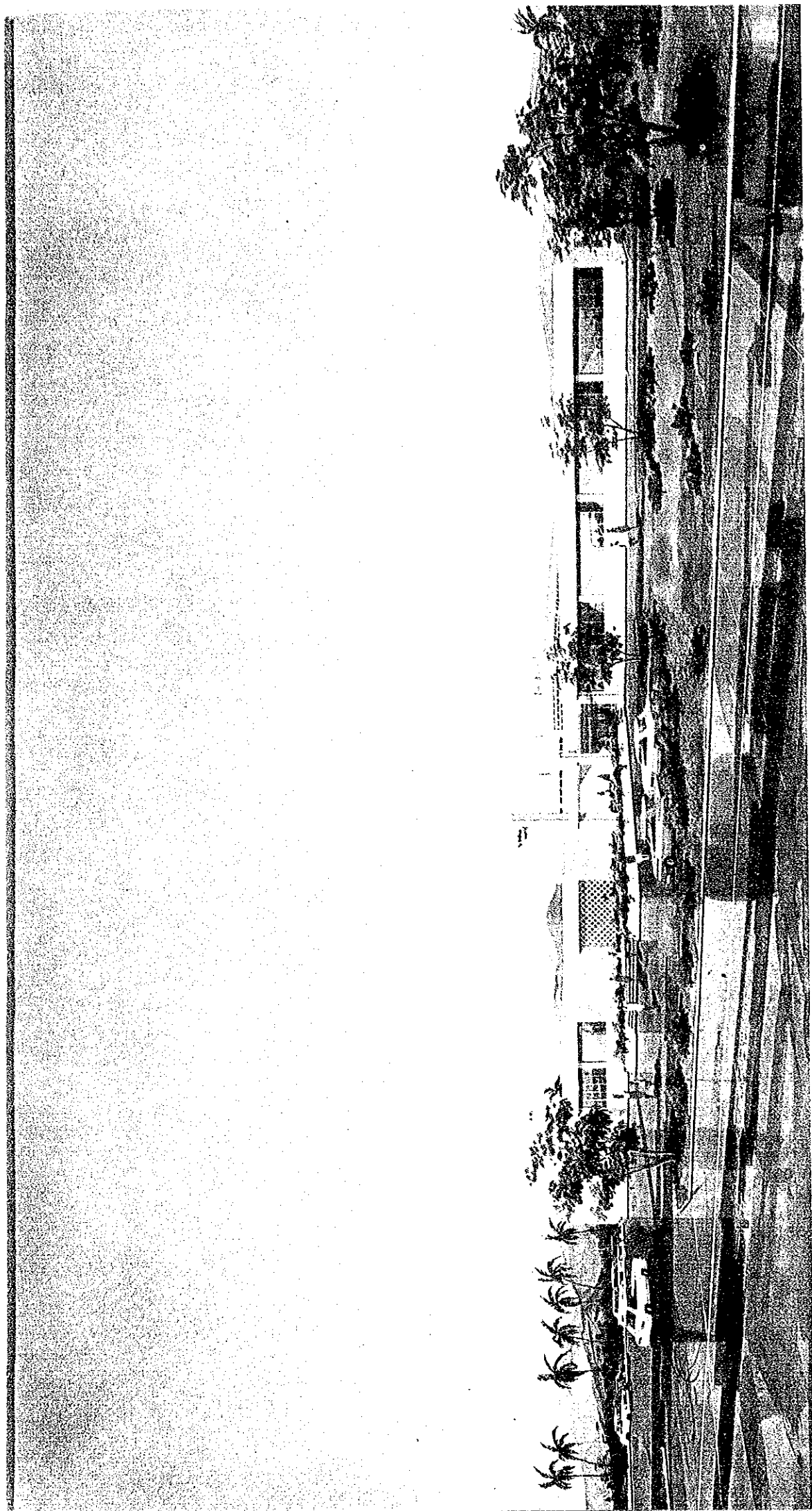
October, 1981.

A handwritten signature in black ink, reading "Keisuke Arita". The signature is written in a cursive, flowing style.

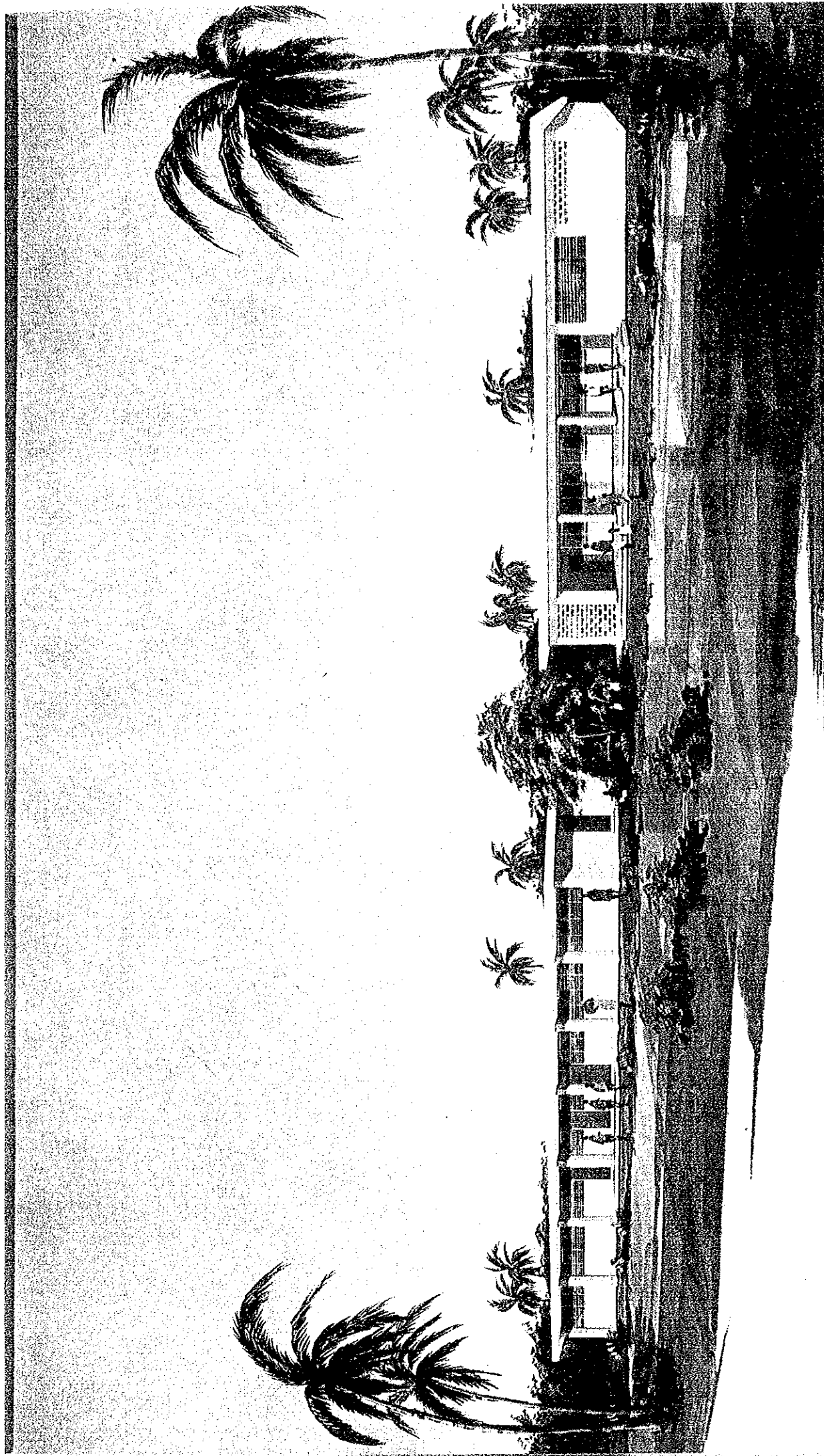
Keisuke Arita

President

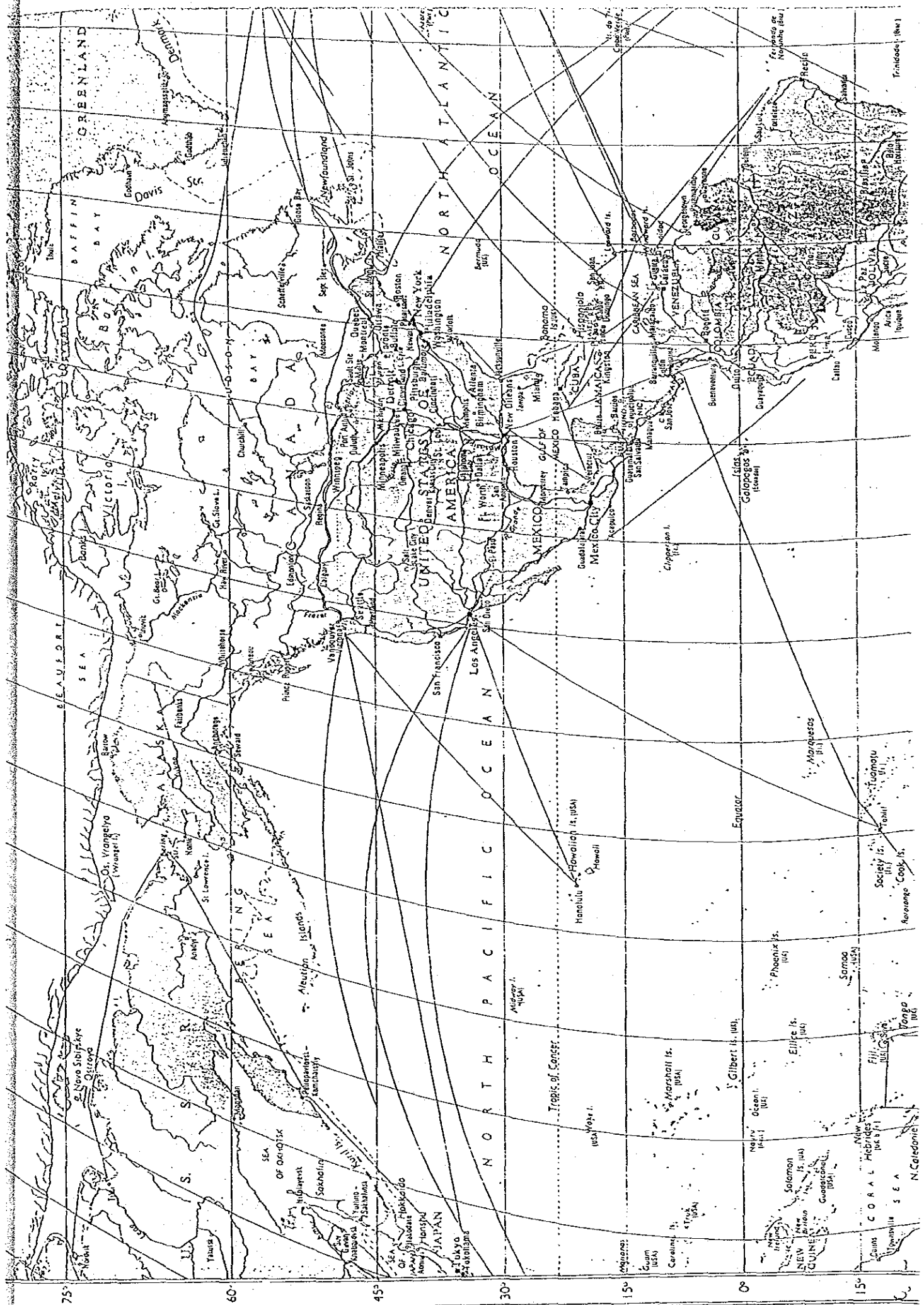
Japan International Cooperation Agency.



PORT-AU-PRINCE. TUBERCULOSIS CONTROL CENTER



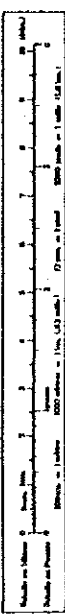
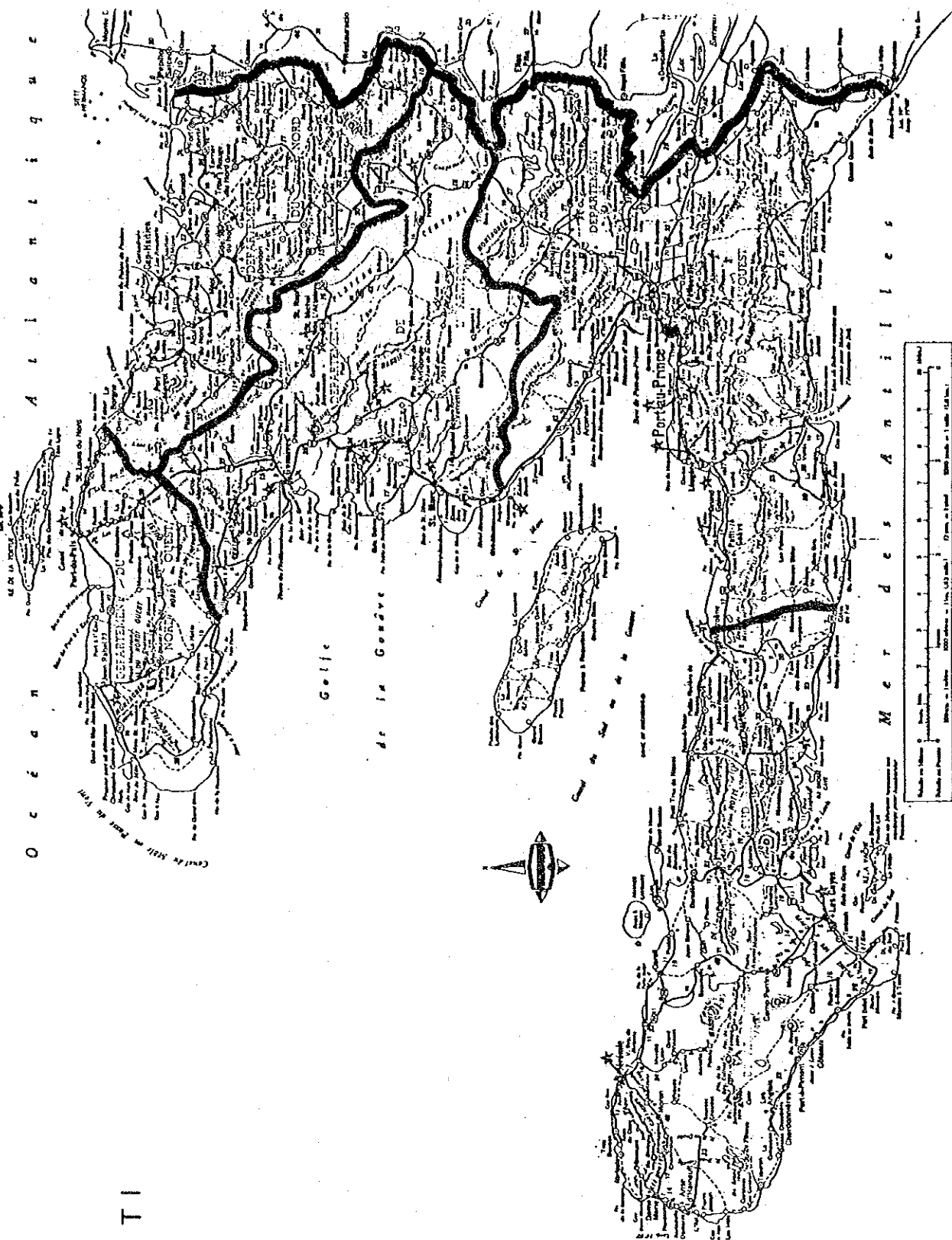
SIGUENEAU SANATORIUM. MEDICAL CLINIC AND WARD FOR INTENSIVE CARE



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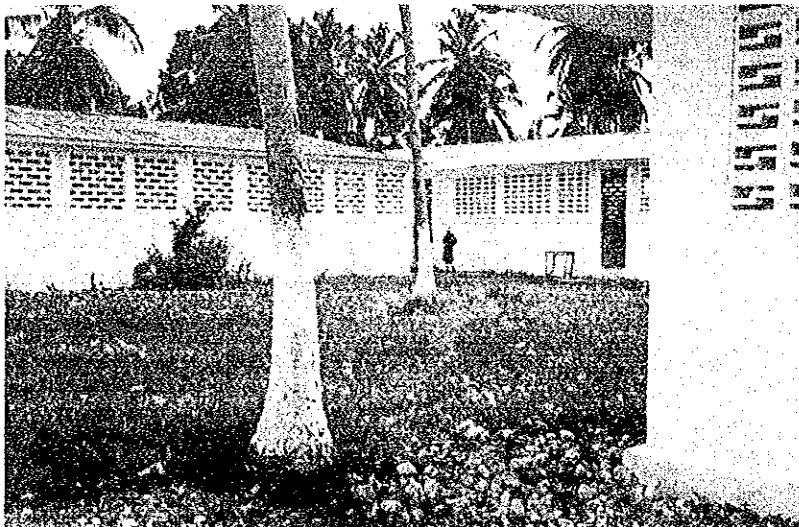


PORT-AU-PRINCE. TUBERCULOSIS CONTROL CENTER SITE

SIGUENEAU SANATORIUM



MEDICAL CLINIC AND WARD FOR INTENSIVE CARE SITE



DINING HALL SITE

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Summary

Summary

1. Background and Objective of the Project

The Republic of Haiti has a population of ca. 5,000,000. of which 500,000 (10%) is concentrated in the capital of Port-au Prince, and covers an area of 27,750 square kilometers, including many mountains.

Haiti is not so plentiful in natural resources that its national income is only US\$272 per capita as calculated in 1978. In this economic situation, a gap between rich and poor is very wide.

The morbidity rate of active tuberculosis is said to be 3% of the population, which is rather higher than that of other countries. This is due to many causes as follows:
the high humidity of climate; low ingestion; family infection for narrow spaces of their houses; and difficulties of medical treatment of the people with limited education.

Under these situations, The International Child Care (ICC) plays an active role in carrying out a project of the BCG vaccination for all children throughout the republic for tuberculosis control with the aids of other countries, i.e. Canada and the United States.

Apart from the above activities, Sister Sudo, a Japanese medical doctor, has been devoting her life to the tuberculosis patients of the Sigüeneau Sanatorium at about 30km distance from Port-au-Prince.

At a request of the Government of Haiti for the promoting their activities, the Government of Japan has recognized the importance of cooperation and decided to carry out the study.

The Ministry of public Health and population regards its tuberculosis control program as the most important project in Haiti's medical care sector. This control project has, as the first step stone, been realized into a concrete form to establish the tuberculosis control center which is now requested for the grant assistance. Naturally, the program observes the recommendation by the WHO expert committee for tuberculosis control.

The establishment of the Center aims at giving screening and medical treatment to inhabitants in the metropolitan area and to carry out various prevention projects in the same area. Based on the experience obtained by these projects, the center is to carry out an efficient study, basic and

applied, to meet the existing medical state of the country against tuberculosis, to draft tuberculous control measures in a nation-wide scale, and to foster the technologists and researchers as many as possible to the national requirements in general.

In the other areas, plans for the establishment of regional centers are conceived on the basis of the control program. Therefore, the proposed Control Center shall act as the administrative headquarter for tuberculosis control, so that all kinds of budgets, materials, staffs, technology and others shall be provided to the respective Centers.

In addition to the above grant assistance, an expansion project for the Siguneau Sanatorium's facilities was considered without question to extend Japanese grant assistance to the extent that Dr. Sudo could implement her medical activities smoothly.

2. Outline of the Project

The substance of Haiti's request was jointly confirmed in the discussions held in Haiti and the major issues were prescribed in the minutes. The facilities which are to be constructed and the equipment to be supplied to Haiti, are out-lined below.

- 1) This project consists of two, namely, one is the construction of a Tuberculosis Control Center and the other is the expansion of the facilities of the Siguneau Sanatorium. The site for this center is a government lot which faces the Avenue Jean Claude Duvalier in port-au-Prince.

2) Tuberculosis Control Center

Building :

1 one-storied building, made of reinforced concrete blocks
(by the local construction method)

Floor space: Approx. 3,150 m²
with necessary incidental facilities

Equipment:

Equipment necessary for the new building.

3) Sigueneau Sanatorium

Building:

1 building for medical clinic	approx.	193 m ²
1 ward for intensive care	approx.	204 m ²
1 building for dining	approx.	182 m ²
1 cottage for generator (including emergency power generator)	approx.	14 m ²
Roofed passage area		

Total: approx. 600 m²

All these buildings will be constructed with reinforced concrete blocks (by the local construction method) and equipped with necessary incidental facilities.

Equipment:

Equipment necessary for the new buildings.

Equipment which are now lacked but necessary in the existing facilities - that is, in the X-ray room and laboratory, kitchen, laundry and ward.

3. Share of The Project

The Government of Japan shall bear the costs to be incurred by the construction of the buildings and the installation of the equipment.

The Government of the Republic of Haiti shall take charge of the acquisition of the lands, site clearance, landscaping, power supply, water supply and drainage to the sites and the maintenance cost of the facilities upon/after completion.

4. Schedule of the Project

It is necessary to require a period of 14 months for the construction works. Being required another 2 months for bidding and contract making and additional 3 months for the working design of the buildings, a total of 19 months are necessary for the completion of the project.

5. Significance of the Project

As has been mentioned in respect to the objective of this project, the completion of this center will make it feasible to draw blueprints for the tuberculosis control program since the control measure is one of the most serious assignment to her medical policy.

Naturally, many difficulties will lie in front of her eyes upon/after the implementation of this program. The Ministry of the public Health and population is incumbent to concentrate themselves on developing various measures to cope with them. In terms of funds, materials, equipment and personnel, there will be needs for more cooperation from both the inside and outside of the Republic. This center shall unite the regional centers with the systematic activities as so far having decentralized in function. The establishment of this center shall be of immeasurable much significance to implement the tuberculous control program.

The grant assistance for expanding the Sigueneau Sanatorium will be rendered from a humanitarian point of view. This sanatorium is very limited in numbers being opened to the poor patients who have no means of saving themselves from despair. Up until recent years, the sanatorium has been called by the name of "asile". Due to the strenuous efforts of the sisters, it has been regenerated as a heavenly sanatorium. This project is to improve its facilities to assist their sincere devotion.

It is firmly believed that the actual implimentation of the Project shall contribute to the medical care of tuberculous patients in the country and deepened closer tie-up of friendship between the Republic of Haiti and Japan owing to devoted assistance extended by Japanese sisters in Port-au Prince, Haiti.

Chapter 1 Outline of the Study

Chapter 1 Outline of the Study

1-1 Background and Circumstances of the Project

The Republic of Haiti has a population of about 5,000,000 and 10 percent, or 500,000, of which is concentrated in the capital, Port-au-Prince. There are no other big cities but there exist communities as big as towns. The remaining 90 percent of the population is scattered in the countryside. The country covers an area of 27,750 square kilometers. There are many mountains, most of which are treeless. Flat lands account for only 17% of the entire land. No significant natural resources are available other than sugar cane, coffee and bauxite. The national income is US\$272 a year per person (1978). The disparities in wealth are conspicuous and people in the lower social stratum are leading hard lives.

The national budget stands at US\$77.5 million (1977), of which US\$8.3 million is appropriated for public health.

Catholicism ranks high in the religion, but Voodoo which had come from Africa permeates the lives of people in the lower social stratum.

No accurate data are available on the prevalence of tuberculosis, however the number of active T.B. patients are estimated to nearly 3% of the population. Tuberculosis might therefore be described as a national disease. The fundamental reason for this high prevalence of tuberculosis lies in the low national income level in providing insufficient medical care to the T.B. patients. The only earnest and most effective effort at present is a BCG vaccination campaign which is carried out by the International Child Care (ICC) with the aid of Canada and the United States. The medical care facilities are insufficient both in quality and quantity. Low-income patients, who account for more than 90% of the people, are unable to undergo medical care at their own expense and there is a need for many free of charge public facilities. At the Sigüeneau Sanatorium which is one of the few facilities although it can hardly call as a hospital in terms of our definition. Sister Sudo, a Japanese physician, is in service.

As for the background of Dr. Sudo's activities, Japan was requested for cooperation in the medical facilities for tuberculosis. In response to this request Japan sent the preliminary survey team and later another team to carry out this basic design study.

The Ministry of Public Health and Population formulated a plan to establish a central tuberculosis control center and to reinforce the facilities of Sigüeneau Sanatorium and put it to the first priority for Japan's grant assistance.

This was the request that the Government of Haiti asked for Japan through a diplomatic channel and that we were assigned to.

As the result of an analysis of the data studied in Haiti, however, it turned out that the contents of the Haitian request had gone beyond the framework of cooperation Japan may provide. For this reason, discussions were held again and again to put it within the framework. Consequently, in connection with Sigüeneau Sanatorium, it was mutually agreed that the requested contents should be adjusted in proportion with those which were designed to allocate to the Tuberculosis Control Center.

The proposal regarding the schematic design of the center prepared by the Ministry of Public Health and Population was exceeded the budgetary allocation to a great extent that it should be adjusted further through mutual discussions. To adjust it, the study team prepared and presented the following three counter-proposals for further consideration to reduce the construction cost of the buildings with the full use of local construction methods.

1. The scale of the buildings will be reduced to a great extent, but all necessary equipment will be furnished. This means that the functions of each sector in the center will be reduced as a whole.
2. The sector of medical consultation and treatment including its equipment, will be completed as in the original plan, however the facilities related to the administrative sector and education will not be included.
3. The scale of the buildings will be reduced to some extent as a whole, to such an extent not to impair the functions suggested in the original plan. However, no equipment will be included.

Among the above three counter-proposals, the second were turned down on the spot by the Director-General of the Office of the Minister at the Ministry of Health and Population. The first and third counter-proposals were subjected to a decision by the Minister of Health and Population.

As the result, the third counter-proposal was approved by the Minister and the Agreed Minutes of Discussions was signed.

According to the report of basic design study team, The Government of Japan measured the necessity of equipment for the Tuberculosis Control Center and sent the confirmation study team to Haiti.

These equipment necessary for the Tuberculosis Control Center were confirmed by the Government of Haiti and the "Minutes of Discussions" was signed.

1-2 Members of the Study Team and Itinerary

a) Basic Design Study Team (June 6 - 26. 1981)

In accordance with the request of the Government of the Republic of Haiti, the Japan International Cooperation Agency selected a consultant, organized the basic design study team composed of seven member being headed by Dr. Kikuji Shimamura, director of Tokyo National Chest Hospital to confirm the contents of the request and to carry out a necessary survey on the local situation, and sent the team to the Republic of Haiti. The seven members are:

Leader Kikuji Shimamura, Director, Tokyo National Chest Hospital
Member (Project Coordinator)

Yoshihisa Kondo, Grant Aid Division,
Japan International Cooperation Agency

Member (Design and Planning)

Michio Ito, Ishimoto Architectural and Engineering
Firm, Inc.

Member (Construction Planning and Computation)

Toshiro Kawada, Ishimoto Architectural and Engineering
Firm, Inc.

Member (Building structure)

Eiichi Yabumae, Ishimoto Architectural and Engineering
Firm, Inc.

Member (Medical equipment)

Hiroshi Murakami, Ishimoto Architectural and Engineering
Firm, Inc.

(assigned on temporary duty from the
Murakami Clinic)

Member (French-Japanese interpreter)

Hiromasa Uchida, Ishimoto Architectural and Engineering Firm, Inc.

(assigned on temporary duty from the International Cooperation Service Center)

b) Confirmation Study Team (September 12, - 21. 1981)

Leader Kikuji Shimamura, Director, Tokyo National Chest Hospital

Member (Project Coordinator)

Toshiyuki Ando, Economic Cooperation Bureau
Ministry of Foreign Affairs

Member (Design and Planning)

Toshiro Kawada Ishimoto Architectural and Engineering Firm, Inc.

Member (Medical Equipment)

Hiroshi Murakami, Ishimoto Architectural and Engineering Firm, Inc.

(assigned on temporary duty from the Murakami Clinic)

Member (French-Japanese interpreter)

Hiromasa Uchida, Ishimoto Architectural and Engineering Firm, Inc.

(assigned on temporary duty from the International Cooperation Service Center)

1-3 Minutes of the Discussions

The study team held discussions with the relevant government officials of the Republic of Haiti on the construction project of tuberculosis medical facilities in the Republic and reached a basic agreement. In Port-au-Prince on 15 June and 17 September, 1981, the agreed minutes of the discussions were signed by, and exchanged between, Dr. Kikuji Shimamura, leader of the Japanese side, and Dr. Gerard Desir, Minister of the Public Health and Population.

A copy of the minutes is attached to the data section.