

5-5 Procurement Plan for Materials and Equipment

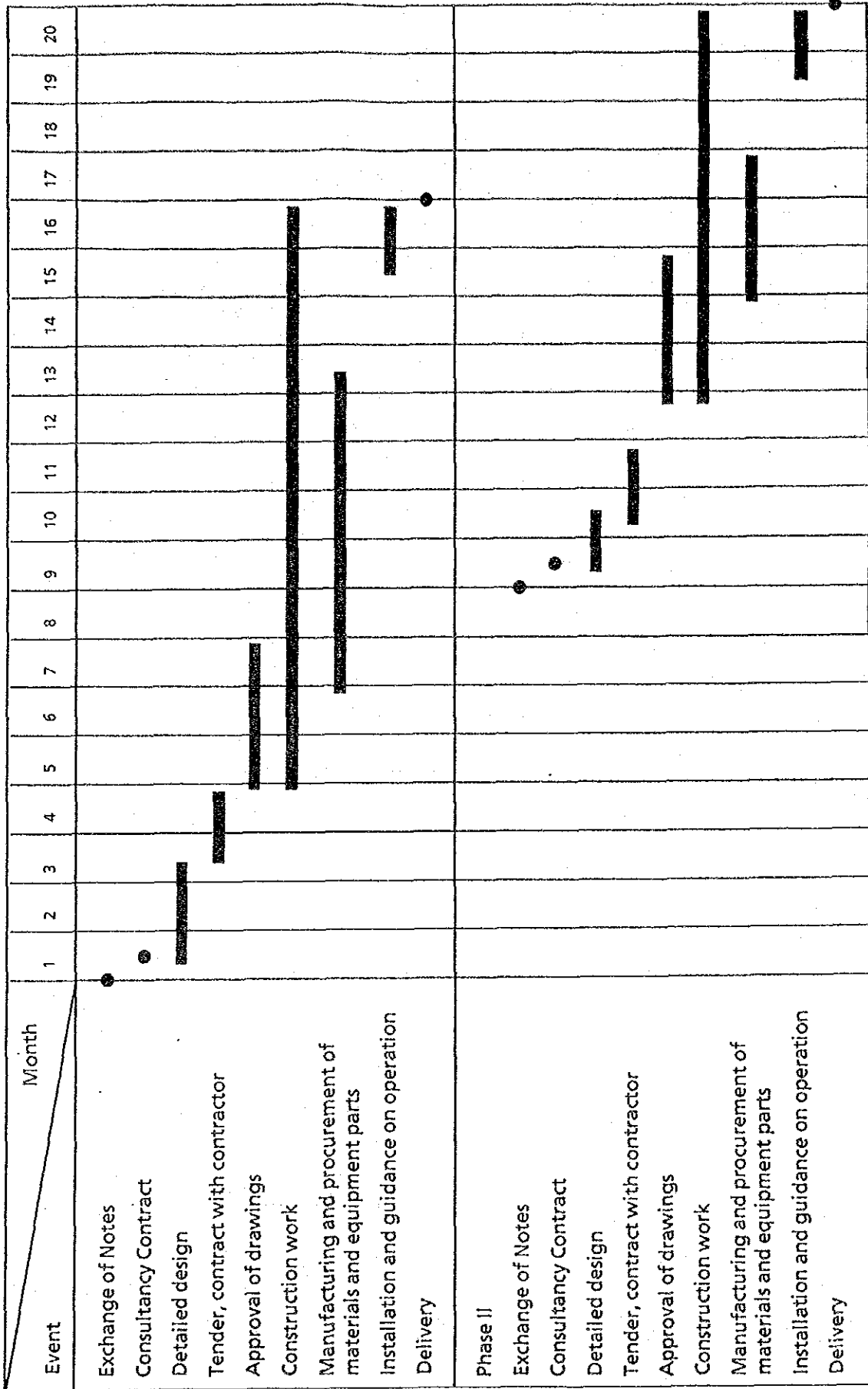
Of the construction materials required for the construction work in Kiribati, the only ones that are locally manufactured are crushed stone, sand, and concrete blocks. Those in connection with utilities and mechanical systems must all be imported. The Supply Division of the Ministry of Trade, Industry and Labour of the Government of Kiribati imports all construction materials for constructing government-related facilities and also for sale to the private sector. The Division always carries a stock in inventory and imports on order whatever materials are in short supply and sells them at a price arrived at by adding the costs of procurement, transport and customs clearance plus a fee for necessary procedures. Also, as infrastructure projects in Kiribati are implemented under the aid and guidance of Australia and the United Kingdom, almost all of the equipment parts for utilities and mechanical systems such as piping, lighting fixtures, switches and sanitary fixtures are in accordance with Australian Standards (which are almost identical to British Standards). The connections with main lines and maintenance supplies including spare parts, therefore, will be imported from Australia. Construction materials such as movable louver windows, timber and cement will be imported from Australia, Fiji and other third countries while others will be imported from Japan. Items to be imported from third countries will be procured through the Supply Division in view of its past performance.

All medical equipment including that made in foreign countries will be imported from Japan.

Table 5-3 Procurement Plan for Construction Materials and Equipment

	Local Procurement	Third Country Procurement	Import from Japan
Related to buildings	Crushed stone, sand, concrete blocks	Timber, movable glass louvers	Steel rod, plywood for framework, asbestos board, paint, cement, gypsum plasterboard, metal fittings, rock wool acoustic board, metal wares for fittings, plastic tile, tile, calking compound, glass, iron plate, grating, manhole covers, heat insulating material, etc.
Related to utilities and mechanical systems	Some lighting fixtures, switches, convenience outlets (plug sockets), sanitary porcelain	Some lighting fixtures, switches, convenience outlets (plug sockets), sanitary porcelain	Panels, generators, air conditioners, some lighting fixtures, wiring materials, blower, washers, refrigerators, etc.
Medical equipment			All

Table 5-4 Implementation Schedule



5-6 Implementation Schedule

Detailed design work and execution supervision for this project will be undertaken by a Japanese consultant firm. Under the supervision of said consultant firm, a Japanese company will procure the construction materials, undertake construction of the facilities, manufacture, procure, transport and install the equipment and mechanical systems and carry out all other work necessary to realize this project under the general contracting system. Implementation of this project will be carried out under the control of the Government of Kiribati and the Government of Japan.

After consummation of the exchange of official notes for the grant-aid between the Government of Japan and the Government of Kiribati, the consulting firm will conclude a consultancy contract with the Ministry of Health and Family Planning of the Government of Kiribati (the executing organization) and start on the detailed design work.

The design work will take two months, the details of which will be worked out by consulting with the Government of Kiribati. Upon receipt of the detailed design, the executing organization will determine the contractor through tender. The successful tenderer will have the breakdown of his tender price examined and upon receiving confirmation of its propriety will conclude a contract for the work with the executing organization. The period required for this procedure is about 1.5 months.

This project will be implemented in two phases based on the Japanese Government's budgetary measures. The division of the construction work into two phases will be planned to make the total construction period as short as possible by paying due regard to the timing of the cabinet meeting in Japan (June every year) and the conclusion of the exchange of official notes.

After signing of the contract by and between the Government of Kiribati and the successful bidder, the contract will be verified by the Government of Japan, upon which the procurement of construction materials and manufacturing of equipment and mechanical systems will commence. Prior

to commencing work, the contractor must prepare detailed drawings and obtain approval on them from the consulting firm.

The materials procured will be transported to Kiribati whereupon construction of the facilities will be begun. The materials and equipment procured from Japan and third countries and the necessary services extended under this project as grant-aid cooperation will be exempted from taxes in Kiribati. Phase I will cover the two-story Administration Building, Nursing School Dormitory and Operating Theater of the Central Medical Department, X-ray Examination Building and Laboratory Building which require a long construction period. Phase II will cover other buildings and medical equipment.

Sixteen months will therefore be required from the time of commencement of work to manufacture, procure, install and test operate the construction materials and equipment until the facilities and equipment covered by this project are delivered to the Government of Kiribati. Accordingly, the implementation schedule for this project is planned to be about 20 months from the signing and exchanging of the official notes.

5-7 Approximate Project Cost

5-7-1 Approximate Project Cost

Cost of work to be borne by the Government of Kiribati

Site development	A\$ 10,000
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CHAPTER 6

OPERATION AND MAINTENANCE PLAN

CHAPTER 6 OPERATION AND MAINTENANCE PLAN

6-1 Personnel Plan

Basically, the facilities of this project will not entail any excessively large operation and maintenance costs. The largest item in the present budget of the Ministry of Health and Family Planning is manpower costs. In order to prevent soaring manpower costs, the Ministry of Health and Family Planning is coping with its yearly growing medical services by having its present staff perform a number of duties concurrently instead of increasing the number of its personnel. In this project, recruiting of new personnel for the Central Hospital (TCH) which is to be reconstructed will not be planned in principle since the required manpower for it, it is judged, can be adequately met by reshuffling a part of the existing personnel.

6-2 Operating Expenses

The operating expenses (based on the budget) of the Ministry of Health and Family Planning are as shown in Table 2-7.

The Ministry's expenditures for maintenance and repair of facilities, light and heat, etc., in 1986 and 1987 were as shown below.

(Units in A\$)

	1986	1987
Electric charges	} 124,380	64,484
Water charges		4,159
Fuel cost		51,357
Telephone & telegraph	14,510	20,000
Maintenance & repair of facilities	12,843	10,000

6-3 Operation and Maintenance Plan

(1) Operation and Maintenance Plan for Facilities

1) Buildings

The service life of buildings varies greatly according to whether or not routine maintenance and cleaning have been enforced. Thoroughgoing enforcement of routine maintenance and cleaning will not only foster a feeling of attachment to the facilities so that they are handled with care, but will also facilitate early discovery of problems and thus minimize repair costs. Maintenance and cleaning can be carried out by the staff and hired workers of the Ministry of Health and Family Planning.

Periodic inspection and repairs of the buildings are required as follows:

(Exterior)

- Repairs and repainting of exterior facing : Once every five years
- Inspection and repairs of roof tiles : Inspection once a year, repairs once every five years
- Periodic cleaning of gutters and drainage systems : Once a month
- Inspection and repairs of seals around outside fittings : Once a year
- Periodic inspection and cleaning of side ditches and manholes : Once a month
- Periodic trimming of vegetation : As necessary

(Interior)

- Repairs and repainting of internal walls : As necessary
- Replacement of interior ceiling materials : As necessary
- Adjustment of tightness of fittings and replacement of hardware : Once a year, and as necessary

2) Utilities and mechanical systems

What is necessary in maintaining and operating utilities and mechanical systems is to have full knowledge of their makeup and operation. They can be properly operated, inspected and repaired in the event of failures by fully instructing and training the electrical engineers of the Ministry of Health and Family Planning on how to operate and handle them.

As periodic inspection and reconditioning as well as replacement of spare parts are necessary for utilities and mechanical systems, a periodic inspection schedule must be prepared and enforced.

The service lives of general utilities and mechanical systems are considered to be approximately as follows. Their terms, however, vary greatly depending on the preciseness of inspection and maintenance.

(Electrical system)

- Generator : 15 - 20 years
- Power distribution board : 20 - 30 years
- Fluorescent lamp : 5,000 - 6,000 hours
- Incandescent lamp : 1,000 - 1,500 hours
- Telephone exchange : 40 years
- Public Announcement System : 10 -20 years

(Water supply and drainage system)

- Pump : 10 - 15 years
- Tank : 15 - 20 years
- Piping, valve : 10 - 15 years
- Sanitary porcelain : 25 years
- Fire extinguisher : 20 years
- Gas fixture : 6 years
- Sewage treatment equipment : 7 years

(Air conditioning system)

- Piping : 10 - 15 years
- Blower : 10 - 15 years
- Air conditioner : 10 - 15 years
- Package air conditioner : 5 - 10 years
- Refrigeration device : 5 - 10 years

(2) Operation and Maintenance Plan for Equipment

Generally speaking, if the success or failure of a project is decided only with respect to medical equipment, it ought not to be judged merely by the equipment's actual installation but by whether it is properly and efficiently used and by the manner in which it is operated and maintained. In other words, it is only when the equipment is smoothly operated now and in the future that a grant-aid program can be said to have any meaning at all. The operation and maintenance of equipment therefore is important in this project.

In reality, however, it is also a fact that there are a number of factors that interfere with the smooth operation of equipment which is a difficult problem that is always associated with the provision of medical equipment.

What are particularly important in terms of operation and maintenance, in view of the foregoing, are the following two points: one is to provide the cost of operating the equipment so as to

not exert pressure on the sound management of the hospital, and the second is to be able to take prompt measures in the event of equipment failure and to assist future operation and maintenance from all sides.

The new equipment planned for inclusion in this project is limited, most of it being to replace the worn out existing equipment, and as the adoption of the same size and same level of equipment is being considered, it is considered unlikely that the operation and maintenance costs will drastically rise.

The following lists the equipment which will require special maintenance and upkeep in the future.

Equipment	New or Replacement	Expendables/Parts	Maintenance
Copying machine	Replacement	Have procured them in the past. Addition of 1-year supply of parts	Locally possible
Truck	Replacement	Addition of 1-2 year supply of parts	"
X-ray unit	Replacement	Addition of 1-2 year supply of parts	If irreparable internally, request repair to agent in Australia or New Zealand through contractor
Automatic developing machine	New	Addition of 1-year supply of developing solution, fixing solution and parts	If irreparable internally, request repair to maker or agent through contractor

Equipment	New or Replacement	Expendables/Parts	Maintenance
Automatic blood cell counter	New	Addition of 1-year supply of reagent	If irreparable internally, request repair to maker or agent through contractor
Hemoglobin meter	New	Have procured reagent in the past. Addition of 1-year supply of reagent.	"
Spectro-photometer	Replacement	Have procured reagent in the past. Addition of 1-year supply of reagent.	"
Flame photometer	Replacement	"	"
High voltage sterilizer/autoclave	Replacement	Addition of 1-year supply of parts	"
Ultrasonic cleaning device	New	Addition of 1-year supply of detergent	"

(3) Incremental Operation and Maintenance Expenses of Equipment

Judging from the current number of examinations and manipulations being carried out, the additional annual operating expenses (for equipment only) that will be required by the adoption of new equipment will be as follows:

Automatic development machine	Additional expense is unnecessary as it is for replacing the existing manual developing machine.
Automatic blood cell counter	A\$ 1,202 (3,000 specimens/year)
Hemoglobin meter	A\$ 185 (2,000 specimens/year)
Ultrasonic cleaning device	A\$ 1,480 (once a day)
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Total	A\$ 2,867

6-4 Maintenance Cost

It is anticipated that the annual maintenance cost for the facility will increase following the completion of the project. Based on current prices (December, 1988), the actual increases are given below for each maintenance-related item.

Maintenance-related Items for which Annual Cost Increase is Anticipated

(1) Facility operation cost	A\$ 49,689
(2) Facility maintenance check and repair cost	0 (for 1st year) A\$ 40,631 (from 3rd year onwards)
(3) Equipment maintenance cost	A\$ 2,867
(4) Land rent	A\$ 3,839 (Budget for Ministry of Internal Affairs)
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Total	A\$ 56,395 (1st year)

(1) Facility Operation Cost

Assuming actual operation, the annual facility operation cost, i.e., electricity cost, water cost and fuel cost for the generator is calculated as follows:

1) Electricity Charge

Electricity Consumption Volume

Loads:	1. Lighting	= 56 kW
	2. Ceiling Fan	= 19 kW
	3. Plug & Socket	= 57 kW
	4. A/C	= 60 kW
	5. Pump	= 20 kW

1. Lighting

$$56\text{kW} \times \{(0.5 \times 7\text{H} + 0.3 \times 5\text{H}) \times 20 \text{ days} + 0.3 \times 5\text{H} \times 10 \text{ days}\} \\ = 6,440 \text{ kWh/month}$$

2. Ceiling Fan

$$19 \times \{(0.5 \times 7\text{H} + 0.1 \times 5\text{H}) \times 20 \text{ days} + (0.3 \times 7\text{H} + 0.1 \times 5\text{H}) \\ \times 10 \text{ days}\} = 2,014 \text{ kWh/month}$$

3. Plug & Socket

$$57 \times \{(0.3 \times 7\text{H} + 0.1 \times 5\text{H}) \times 20 \text{ days} + 0.1 \times 12\text{H} \times 10 \text{ days}\} \\ = 3,648 \text{ kWh/month}$$

4. A/C

$$60 \times \{(0.9 \times 7\text{H} + 0.3 \times 5\text{H} + 0.2 \times 12\text{H}) \times 20 \text{ days} + \\ (0.3 \times 12\text{H} + 0.2 \times 12\text{H}) \times 10 \text{ days}\} = 15,840 \text{ kWh/month}$$

5. Pump

$$20 \times \{(0.1 \times 12H + 0.02 \times 12H) \times 20 \text{ days} + (0.05 \times 12H + 0.02 \times 12H) \times 10 \text{ days}\} = 744 \text{ kWh/month}$$

$$\text{Total: } 28,686 \text{ kWh/month} = 29,000 \text{ kWh/month}$$

Annual Electric Bill

$$29,000 \text{ kWh/month} \times 12 \text{ months} \times \text{A\$ } 0.32/\text{kWh} = \text{A\$ } 111,360$$

Consequently, the increase in the electric bill will be A\$ 46,876.

$$\text{A\$ } 111,360 - \text{A\$ } 64,484 \text{ (fiscal 1987)} = \text{A\$ } 46,876$$

2) Water Charge

Water Consumption Volume

20m³/day (based on present consumption volume of 15-20m³/day)

$$20\text{m}^3 \times 20 \text{ days} = 400\text{m}^3$$

$$10\text{m}^3 \times 10 \text{ days} = 100\text{m}^3$$

$$\text{) Total: } 500\text{m}^3/\text{month}$$

Annual Water Charges

$$500 \text{ m}^3/\text{month} \times 12 \text{ months} \times \text{A\$ } 1.0/\text{m}^3 = \text{A\$ } 6,000$$

Consequently, the increase in the water bill will be A\$ 1,841.

$$\text{A\$ } 6,000 - \text{A\$ } 4,159 = \text{A\$ } 1,841$$

3) Generator Fuel Cost

The fuel cost is calculated on the basis of the number of power failures and their duration in the last year.

(summer) 2 hours x 30 times x (long time) 10 hours
x 3 times + (short time) 1 hour x 10 times = 100 hours

Fuel Cost: 27ℓ/hour x 100 hours x A\$ 0.36/ℓ = A\$ 972

In conclusion, the total increase in the facility operation cost will be A\$ 49,689.

A\$ 46,876 + A\$ 1,841 + A\$ 972 = A\$ 49,689

(2) Facility Maintenance Check and Repair Cost

The repair cost of a building generally increases with time. However, the cost should be negligible in the first 5 years after its completion.

With regard to building equipment, the cost of parts replacement, overhauls and machine replacement will be zero for the 1st year and will be 3-5% of the total building equipment cost from the 3rd year onwards.

3rd Year Onwards: A\$ 1,687,732 x 0.03 = A\$ 50,631

Consequently, the increase in the facility maintenance check and repair cost will be A\$ 40,631 from the 3rd year onwards.

A\$ 50,631 - A\$ 10,000 = A\$ 40,631

(3) Equipment Maintenance Cost

Given the present testing and operation workload, the annual increase in the equipment maintenance cost following the introduction of new equipment will be as follows:

Automatic processor	no increase in maintenance cost as it replaces existing manual developer
Automatic blood counter	A\$ 1,202 (3,000 specimens/year)
Hemoglobin meter	A\$ 185 (2,000 specimens/year)
Ultrasonic washer	A\$ 1,480 (once daily)
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Total	A\$ 2,867

(4) Land Rent

$$3.7 \text{ ha} \times \frac{1 \text{ acre}}{0.447 \text{ ha}} \times \text{A\$ } 420/\text{acre}\cdot\text{year} = \text{A\$ } 3,839/\text{year}$$

Since the project intends the rebuilding of part of the existing facility without a large increase of the facility size and the adding of several new pieces of equipment, the anticipated increase in the electricity and water bills can be offset by the facility repair cost reduction as well as the personnel cost reduction due to the improved personnel use.

CHAPTER 7

PROJECT EVALUATION

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The existing condition of health care and medical services in Kiribati is improving yearly due to the steady efforts of the Ministry of Health and Family Planning to promote them. The roles played by Tungaru Central Hospital (TCH) as the only referral hospital in Kiribati that offers tertiary medical services in the country and also as the central organization that offers health education are enormous and its responsibility is great. The Ministry of Health and Family Planning is striving to contain its manpower costs which account for almost half of the budget for Tungaru Central Hospital by formulating an efficient manpower assignment plan which calls for assigning concurrent duties and hiring part-time helpers. It is also trying to save energy by centralizing the facilities and using the rooms for more than one purpose.

However, the facilities of Tungaru Central Hospital are more than 30 years old and are already worn out or damaged, and their equipment is either limited in kind or out of order. The hospital is thus greatly hampered in carrying out its necessary medical service activities. Also, the maintenance and repair cost for facilities and equipment which is increasing yearly is exerting pressure on the hospital's budget for medical activities. To urgently remedy this situation, therefore, would contribute greatly to the furtherance of the country's national health program.

As the activities of the Ministry of Health and Family Planning are not only diverse but extend to every part of the country, it would be impossible to cooperate in all of them.

This project aims to improve the health care and medical services in Kiribati by further invigorating the activities of Tungaru Central Hospital by reconstructing all of its facilities with the exception of the Dental Clinic Building and Psychiatric Building, and by reinforcing its existing inventory of medical equipment.

In concrete terms, the following effects may be anticipated by the smooth implementation of this project.

(1) Improved Services for Patients

- 1) The demarcation of the clean zone and the dirty zone according to the layout plan of the various facilities planned for reconstruction will allow hospital infection, which is the largest drawback of the existing hospital, to be avoided.
- 2) Separation of the Emergency Department from the General Outpatient Department and improvement of its facilities will allow it to offer prompt and accurate medical services for emergency patients who are increasing yearly.
- 3) Improvement of the Operating Department, particularly the provision of two operating rooms, will allow clean and dirty operations to be carried out in separate rooms. Also, improvement of the Central Sterilization Department would reduce the time required for preparing for operation and increase the number of operations which could be performed in each day. It would also become easier to plan obstetric operations which is difficult to do so with the present facilities.
- 4) Improvement of the Laboratory Department would allow prompt and accurate diagnosis to be made, and thereby contribute to the qualitative improvement of medical services.
- 5) Improvement of the Pharmacy Department will improve efficiency of pharmaceutical work and allow the quality of drugs and medical supplies to be better preserved and also facilitate shipment to outer islands.
- 6) Improvement of the Wards in terms of a more efficient layout plan and isolation of infectious patients will improve the nursing environment.

(2) Improvement of Services to those Requesting Health Examinations

The augmentation of various examination facilities will allow prompt and accurate medical examinations to be made.

(3) Conveniences to the Medical Staff, Nursing Students and Trainees from Outer Islands

Attempts will be made to improve the quality of the medical services and reduce the labor burden of the staff, nursing students and trainees by improving the facilities, and reinforcing and replenishing medical equipment. Augmentation of the laboratory function is expected to expand the scope of accurate therapeutic activities and the provision of a comfortable working environment to further enhance their willingness to work and research.

(4) Improvement of Services to Nursing Students and Trainees from Outer Islands

Improvement of the educational environment such as classrooms and library is expected to further enhance their willingness to learn.

(5) Extension of Public Health Education to Inhabitants on Outer Islands

Expansion and improvement of the health education facilities will allow teaching materials for enlightening inhabitants on outer islands on health and sanitation to be more easily prepared, and help promote the primary health care policy.

The aforementioned effects can be anticipated by the smooth implementation of this project and thus contribute greatly to the improvement of the health and medical services of the country. The incremental budget of the Government of Kiribati necessary for this project corresponds to about 2.5% of the budget appropriated for the Ministry of Health and

Family Planning for the initial year. As the Government of Kiribati has already secured the necessary fund for this project, there should be no hindrance to its implementation.

CHAPTER 8

CONCLUSION AND RECOMMENDATIONS

CHAPTER 8 CONCLUSION AND RECOMMENDATIONS

8-1 Conclusion

The Tungaru Central Hospital Construction Project is expected to strengthen overall the existing functions of Tungaru Central Hospital which is where the activities of the Ministry of Health and Family Planning of the Government of the Republic of Kiribati are centered, and thereby create the effects and benefits mentioned in the Project Evaluation. This project is very closely related to Kiribati's national task which is the securing of appropriate, healthy and contented workers. This constitutes the very basis for the preservation of culture, economic development to become self-supporting, population containment, local decentralization of authority, promotion of outer island development, and expansion and improvement of education and infrastructure development, all of which are among the important goals of the National Development Plan. Therefore it is both quite opportune and meaningful that such a project should be proposed at a time when Kiribati is in a period of low economic growth.

8-2 Recommendations

The following recommendations are made in order to ensure prompt realization of this project and smooth operation of the facilities upon their completion.

- (1) It is requested that the Government of Kiribati secure the necessary construction site and promptly execute ground leveling and all other works for which it is responsible.
- (2) The contents of this project are what were considered best for Kiribati based on the accomplished results of the activities of the Ministry of Health and Family Planning. The sizes of the facilities and equipment were determined so that they can be maintained and operated by the existing maintenance staff, and in order to ensure

long lasting success of the intent of this project, it is considered necessary to secure the necessary budget for maintenance and operation as well as competent personnel not only for now but for the future.

- (3) In this project, both the Dental Clinic Building and the Mental Ward Building will utilize their existing facilities but underground piping works for water supply and drainage and distribution of electricity will be readied on the new site where they will be relocated in the future. When relocating them, the nursing system of the Mental Ward which hospitalizes patients for as long as 10 years or more seems to need reconsideration.
- (4) The acceptance of radiographers and operating theater nurses for training in Japan, the dispatching of Japanese experts and other technical cooperation by the Government of Japan are anticipated to make this project even more effective.

APPENDICES

APPENDICES

- APPENDIX I MINUTES OF DISCUSSIONS
- APPENDIX II ORGANIZATION OF STUDY TEAM
- APPENDIX III ITINERARY OF THE STUDY TEAM
- APPENDIX IV COOPERATIVE OFFICIAS IN THE STUDY
- APPEDIX V SITE PLAN OF EXISTING FACILITIES

APPENDIX I

MINUTES OF DISCUSSIONS
ON
THE PROJECT FOR THE CONSTRUCTION OF NEW TUNGARU CENTRAL HOSPITAL
IN
THE REPUBLIC OF KIRIBATI

In response to the request made by the Government of the Republic of Kiribati, the Government of Japan decided to conduct a basic design study on the Project for the construction of new Tungaru Central Hospital (hereinafter referred to as "the Project") and the Japan International Cooperation Agency (JICA) sent a basic design study team headed by Dr. Yukio Matsutani, Deputy Director, Medical Economics Division, Health Insurance Bureau, Ministry of Health and Welfare from September 21 to October 22, 1988.

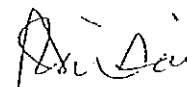
The team had a series of discussions with the authorities concerned from the Government of the Republic of Kiribati, headed by Dr. Tetava Taitai, Secretary for Health and Family Planning, and also conducted a field survey in Tarawa Island.

As a result of the discussions both parties agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.

October 7, 1988.



Yukio Matsutani, Team Leader
Basic Design Study Team
Japan International
Cooperation Agency

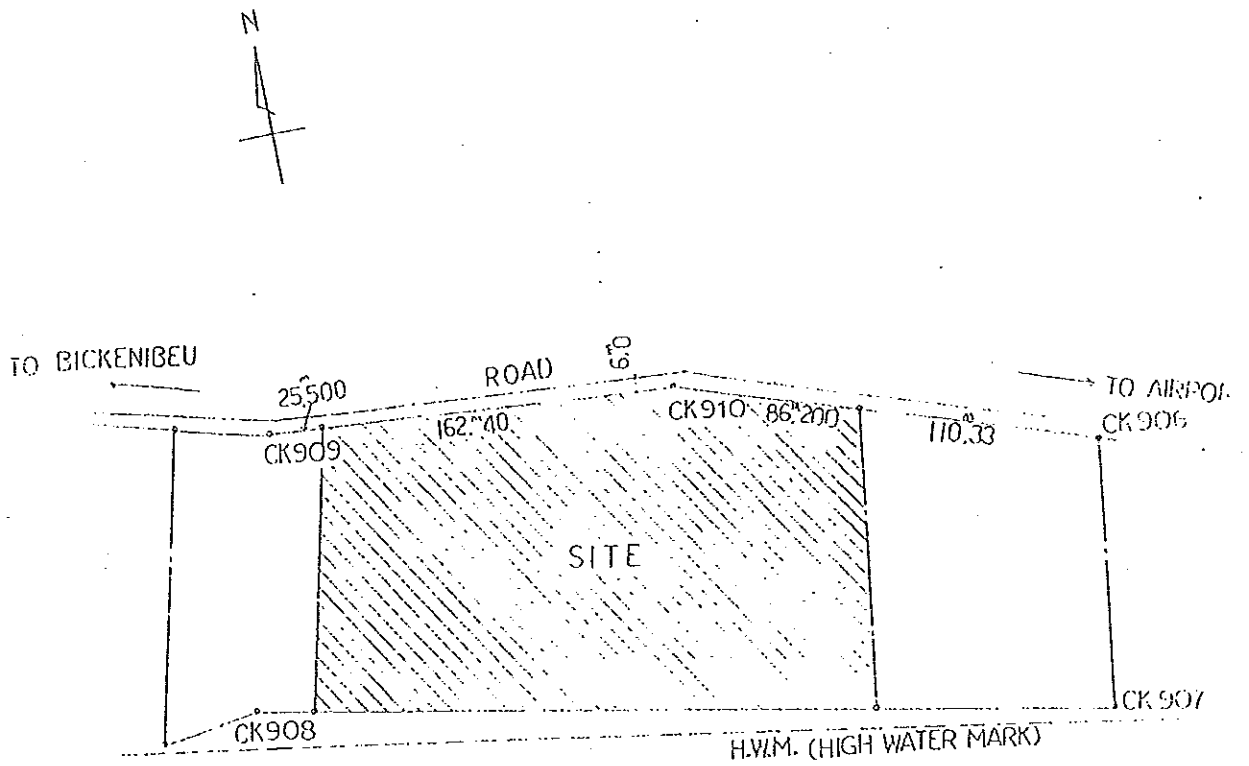


Tetava Taitai,
Secretary for Health and
Family Planning
Government of Kiribati

ATTACHMENT

1. The objective of the Project is to provide efficient health care services to the population through reconstruction of the Tungaru Central Hospital (TCH).
2. The project site is in Nowerewere, Tarawa, as shown in Annex I. The Government of Kiribati will lease the land for a period of 99 years before the construction starts.
3. The executing organization of the Project is the Ministry of Health and Family Planning. The Ministry of Health and Family Planning will be responsible for the coordination of the Project as well as its implementation in association with other relevant Ministries of the Government of Kiribati.
4. The team will convey to the Government of Japan the request of the Government of Kiribati that the former take necessary measures to cooperate by providing the facilities and equipment listed in Annex II under the scheme of Japan's Grant Aid.
5. The Kiribati side has understood Japan's Grant Aid System explained by the Team which includes a principle of use of a Japanese consultant firm and Japanese contractors for the implementation.
6. The Government of the Republic of Kiribati will take necessary measures listed in Annex III on condition that the Grant Aid would be extended to the Project.

Annex I
PROJECT SITE



SCALE 1:3000

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Annex II
OUTLINE OF THE REQUEST

1. Buildings

- 1) General Outpatient Department
- 2) Emergency Room
- 3) Specialty Clinics
- 4) Pharmacy and Medical Storage
- 5) Blood bank
- 6) Laboratory
- 7) X-ray
- 8) Operation Theater
- 9) Central Supply and Sterilization Department
- 10) Ob-Gyn Ward with Delivery Room
- 11) Surgical Ward
- 12) Medical Ward
- 13) Pediatric Ward
- 14) TB Ward
- 15) Other Wards
- 16) Mortuary
- 17) Administration
- 18) Health Education Section
- 19) Classrooms and Library
- 20) Kitchen and Dining Room
- 21) Laundry and Sewing Room
- 22) Carpentry and Workshop
- 23) Dormitory for Nursing Students
- 24) Connecting Corridors
- 25) Haneaba

2. Equipment

- 1) Medical Equipment
- 2) Stand-by Generator
- 3) Water Pumps
- 4) Incinerator
- 5) Other Necessary Equipment and Facilities

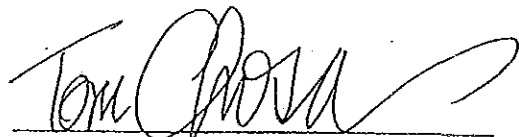
Annex III
UNDERTAKING BY THE GOVERNMENT OF KIRIBATI

1. To secure the land for the project and clear, level and reclaim the site if necessary.
2. To provide facilities for distribution of electricity, water supply, drainage, gas and telephone and other incidental facilities.
3. To ensure necessary budget and personnel for proper and effective operation and maintenance of facilities and equipment provided under the grant.
4. To ensure prompt unloading, tax exemption, customs clearance at the port of disembarkation in Kiribati and prompt internal transportation of materials and equipment provided under the grant.
5. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the verified contracts such facilities as may be necessary for their entry into Kiribati and stay therein for the execution of the Project.
6. To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the Republic of Kiribati with respect to the supply of the products and services under the verified contracts.
7. To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment.
8. To bear the commissions to the Japanese foreign exchange bank for the banking services based upon the banking arrangement.

MINUTES OF DISCUSSIONS
ON
THE BASIC DESIGN STUDY
ON
THE PROJECT FOR THE RECONSTRUCTION
OF
NEW TUNGARU CENTRAL HOSPITAL
IN
THE REPUBLIC OF KIRIBATI

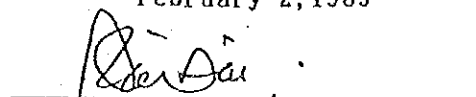
In response to the request made by the Government of the Republic of Kiribati, the Government of Japan decided to conduct a basic design study on the Project for the Reconstruction of New Tungaru Central Hospital, (hereinafter referred to as "the Project") and the Japan International Cooperation Agency (JICA) sent a basic design study team headed by Dr. Yukio Matsutani, Deputy Director, Medical Economics Division, Health Insurance Bureau, Ministry of Health and Welfare, from September 21 to October 22, 1988. As a result of the study, JICA prepared a Draft Final Report and dispatched a team headed by Dr. Toru Chosa, Medical Officer, Division of International Cooperation, National Medical Center, Ministry of Health and Welfare, to explain it and discuss with the relevant authorities of the Government of Kiribati from January 26 to February 7, 1989.

As a result of the discussions both parties agreed to recommend to their respective Governments that the major points of understanding reached between them, attached herewith, should be examined towards the realization of the Project.



Dr. Toru Chosa
Leader
Basic Design Study Team
Japan International Cooperation
Agency

February 2, 1989



Dr. Tetava Taitai
Secretary for Health and
Family Planning
Government of Kiribati

ATTACHMENT

1. The Kiribati side has ,in principle, agreed to the basic design proposed in the draft final report.
2. The Government of the Republic of Kiribati will complete the necessary legal formalities to rent the project site and notify the Government of Japan by the end of March, 1989.
3. The Kiribati side has reconfirmed that the necessary measures to be taken by the Kiribati side for the realization of the Project shown in Annex-III as agreed upon in the Minutes of Discussions dated October 7, 1988.
4. The final report (10 copies) will be submitted to the Government of Kiribati by the end of April, 1989.

T.C.

18. TT.

APPENDIX II

ORGANIZATION OF STUDY TEAM

(1) List of the Basic Design Study Team Members

Team Leader	Yukio Matsutani	Deputy Director, Medical Economics Division, Health Insurance Bureau, Ministry of Health and Welfare
Hospital Planner	Toru Chosa	Medical Officer, International Department of Cooperation, National Medical Center, Ministry of Health and Welfare
Project Coordinator	Harumi Kitabayashi	First Basic Design Study Division, Grant Aid Planning and Survey Department, Japan International Cooperation Agency
Architectural Planning	Kazuo Ito	Architect, Architectural Department, Raymond Architectural Design Office, Inc.
Architectural Design	Nobuaki Miyata	Architect, Architectural Department, Raymond Architectural Design Office, Inc.
Utilities Planning	Hiroshi Sugimoto	Engineer, Utilities Department, Raymond Architectural Design Office, Inc.
Medical Equipment	Taiji Nakatani	Hospital Equipment Planner, Raymond Architectural Design Office, Inc.

(2) List of the Draft Report Explanation Team Members

Team Leader	Tohru Chosa	As shown above
Architectural Planning	Kazuo Ito	As shown above
Medical Equipment Planning	Taiji Nakatani	As shown Above

APPENDIX III

ITINERARY OF THE STUDY TEAM

Basic Design Study

No.	Date	Time	Study Activities
1	Sept. 21 (Wed)		Tokyo ---- (JL941) ---- Guam
2	22 (Thu)	AM10:00-AM12:00	Guam ---- (CO956) ---- Majuro Visit to Majuro Hospital for observation
3	23 (Fri)		Majuro ---- (CW001) ---- Tarawa
4	24 (Sat)		Inspection of proposed sites
5	25 (Sun)	PM1:00-PM4:00	Inspection of the construction site of a refrigerator under Japan's grant aid
		PM4:00-PM5:30	General price survey (supermarkets)
6	26 (Mon)	AM9:00-PM0:30 PM2:00-PM5:30	Courtesy calls on TCH, Ministry of Foreign Affairs, Ministry of Home Affairs & Development, Public Works & Utilities Division, TCH
7	27 (Tue)	AM9:00-AM10:00	Ministry of Finance & Economic Planning, Inception Report
		PM1:00-PM5:30	TCH, study on current conditions
8	28 (Wed)	AM8:30-PM0:15	TCH, study on current conditions
		PM2:00-PM5:00	Survey of new site and infrastructure
9	29 (Thu)	AM8:30-PM0:15	TCH
		PM2:00-PM5:00	Tel. Communication Services
10	30 (Fri)	AM8:30-PM1:00 PM2:00-PM5:00	PUB, PWD, Land survey, estimation of infrastructure requirements for the new site
11	Oct. 1 (Sat)	AM8:30-PM2:00	TCH new site, survey on infrastructure, compilation of data
12	2 (Sun)	AM8:30-PM3:00	Compilation of data, inspection of construction sites, arrival of team members representing the Government of Japan

No.	Date	Time	Study Activities
13	Oct. 3 (Mon)	AM8:30-PM1:00	TCH, Ministry of Foreign Affairs, PUB, Ministry of Finance & Economics Planning
		PM2:00-PM5:00	Inspection of Betio Dispensary
14	4 (Tue)	AM8:30-PM1:30	Inspection of current conditions of TCH, Confirmation of the contents of request
		PM1:30-PM10:00	Internal conference
15	5 (Wed)	AM8:45-PM1:00	Visits to TCH, WHO, Red Cross
		PM2:00-PM5:00	Discussion on details of facilities, conference on draft minutes
16	6 (Thu)	AM9:30-PM1:00	Conference on draft minutes
		PM2:00-PM4:00	Final conference on minutes
17	7 (Fri)	AM10:00-PM1:00	Internal conference, compilation of data
		PM2:00-PM3:00	Signing of the Minutes of Discussions
18	8 (Sat)	AM10:00-AM12:00	Visit to a local trading company
		PM1:00-PM5:00	Compilation of data, internal meeting
19	9 (Sun)	AM10:00-PM4:00	Compilation of data, preparation of materials for meeting
20	10 (Mon)	AM9:30-PM5:00	National Library, MTIL, TTI, MOHA, South Pacific University
21	11 (Tue)	AM9:00-AM12:00	TCH, conference on facilities plan and materials & equipment plan
		PM1:00-PM5:00	Team meeting
22	12 (Wed)	AM9:00-AM12:00	TCH, conference on facilities plan
		PM1:30-PM4:30	Visit to solar house for observation
23	13 (Thu)	AM9:30-PM5:00	Visits to Housing Corp., PUB, PVU, Shipping Corp., TTI, Supply Division, PWD, TUC

No.	Date	Time	Study Activities
24	Oct. 14 (Fri)	AM9:00-AM12:00 PM1:30-PM5:00	Final conference at TCH, Secure the site through land survey. Arrangement for building permit at TUC, confirmation of Fire Code at AG
25	15 (Sat)		Tarawa --- (CW001) --- Nadi --- (FJ143) --- Suva
26	16 (Sun)		Visits to Laotoka Hospital, fishing port, Singatoka Hospital for inspection
27	17 (Mon)	AM9:00-AM12:00	Report on survey to the Embassy of Japan and JICA Office, Conferences with WHO and B.D.D.P. Suva --- (FJ136) --- Nadi --- (QF094) --- Sydney
28	18 (Tue)	AM9:30-AM10:30 AM11:00-PM5:00	Report to JICA Office Survey on materials and equipment
29	19 (Wed)	AM11:00-PM1:00 PM1:00-PM6:00	Visit with Quality Surveyor of Australia, survey on materials and equipment
30	20 (Thu)	AM9:00-PM6:00	Survey on materials and equipment
31	21 (Fri)	AM9:00-AM12:00 PM2:00-PM3:30	Survey on materials Courtesy call on JICA Office
32	22 (Sat)		Sydney --- (JL772) --- Tokyo

Draft Final Report

No.	Date	Time	Study Activities
1	Jan. 26 (Thu)		Tokyo --- (JL771) --- Sydney
2	27 (Fri)		--- (FJ913) --- Nadi
3	28 (Sat)		Internal meeting
4	29 (Sun)		Nadi --- (CW002) --- Tarawa
5	30 (Mon)	AM9:00-AM12:00	Presenting the draft final report at TCH
		PM1:00-PM2:00	Presenting the draft final report at PWD
		PM3:00-PM5:00	Explanation of the draft final report at TCH
6	31 (Tue)	AM9:00-AM12:00	Visit to Ministry of Trade Industry and Labour, Ministry of Home Affairs and Decentralization, Ministry of Finance and Economic Planning, Land Surveys and explanation of the draft final report. Collection of data at Kiribati Insurance Corporation, National Provident Fund.
		PM1:00-PM5:00	Discussion on details of the draft final report at TCH
7	Feb. 1 (Wed)	AM9:00-PM6:00	Discussion on details of the draft final report, conference on draft minutes at TCH
8	2 (Thu)	AM9:00-AM12:00	Final conference on minutes Signing of the Minutes of Discussions at TCH
		PM1:00-PM5:00	Discussion on details of the draft final report at TCH
9	3 (Fri)		Tarawa --- (CW001) --- Nadi
10	4 (Sat)		Compiling contents of discussion
11	5 (Sun)		Nadi --- (FJ139) --- Suva
12	6 (Mon)	AM9:00-AM12:00	Report to the Embassy of Japan and JICA Office, Conferences with WHO and B.D.D.P. Suva --- Nadi
13	7 (Tue)		Nadi --- (CP003) --- Sydney --- (JL772) --- Tokyo

(5) Ministry of Trade Industry and Labour
(Labour Development)

Mr. Uriam Reiti Assistant Labour Officer

(6) Ministry of Transportation and Communication
(Shipping Corporation of Kiribati)

Mr. Tom D. Murdoch General Manager

(Telecommunication)

Telecom Kiribati Ltd.

Mr. Inatio Teanako Co. Managing Director

(7) Ministry of Health and Family Planning

Mr. Rotaria Ataia Minister

Dr. Tetaua Taitai Secretary

Dr. Eritane Kamatie Chief Medical Officer

Dr. John Tekanene (Surgery)

Dr. Tere (Gynecology, Obstetric)

Dr. Janet (Medicine)

Dr. Airam (Medicine, Psychiatry)

Dr. Neete (Out Patient)

Dr. Takeieta Kienene (Pediatric, Anaesthesia)

Dr. Teimone Teaching Dr. of Medical
Assistant School

Dr. Baua Tebau (Betio Hospital)

Dr. David Howarth (from England) Senior Dental Officer

Mrs. Akee Rotaria Principal Nursing Officer

Mrs. Rena Tekanene Principal Nursing Officer

Mrs. Toka Teia Senior Nursing Officer

Mr. Kanimako Ieremia Laboratory Technician

Miss. Ata Timau Radiographer

Miss. Katirina Teaeki Radiographer

Mr. Ioelu Tatapo Medical Health Statistician

Mr. Kotii Torite Health Education Officer

(8) Office of the Attorney General

Mr. Alex Senior State Advocate

(9) Kiribati Insurance Corporation

Mr. Teairo T. Tooma

Betio Resident Manager

(WHO)

Dr. M.C. Swaminathan

Short Term Consultant
(Nutrition)

Mr. Paul Hedrick

Statistician WHO Suva

Dr. R.S.K. AHN

Action WHO Representative
Medical Officer, Primary,
Health Care, Suva

(British Development Division in the Pacific)

Mr. J.W. Hodges

Head of Division, Suva

Mr. David Taylor

Assistant Head of Division,
Suva

(Others)

Mr. Robin R. Rectchford

FRAIA Architect

Japanese Officials Concerned

(1) Embassy of Japan in Fiji

Mr. Toshio Isogai

Ambassador extraordinary and
plenipotentiary

Mr. Shunji Nishimura

Counsellor

Mr. Katsuyuki Ozawa

Second Secretary

Mr. Takumi Ueshima

Second Secretary

(2) Japan International Cooperation Agency in Fiji

Mr. Yoshio Yoshida

Resident Representative

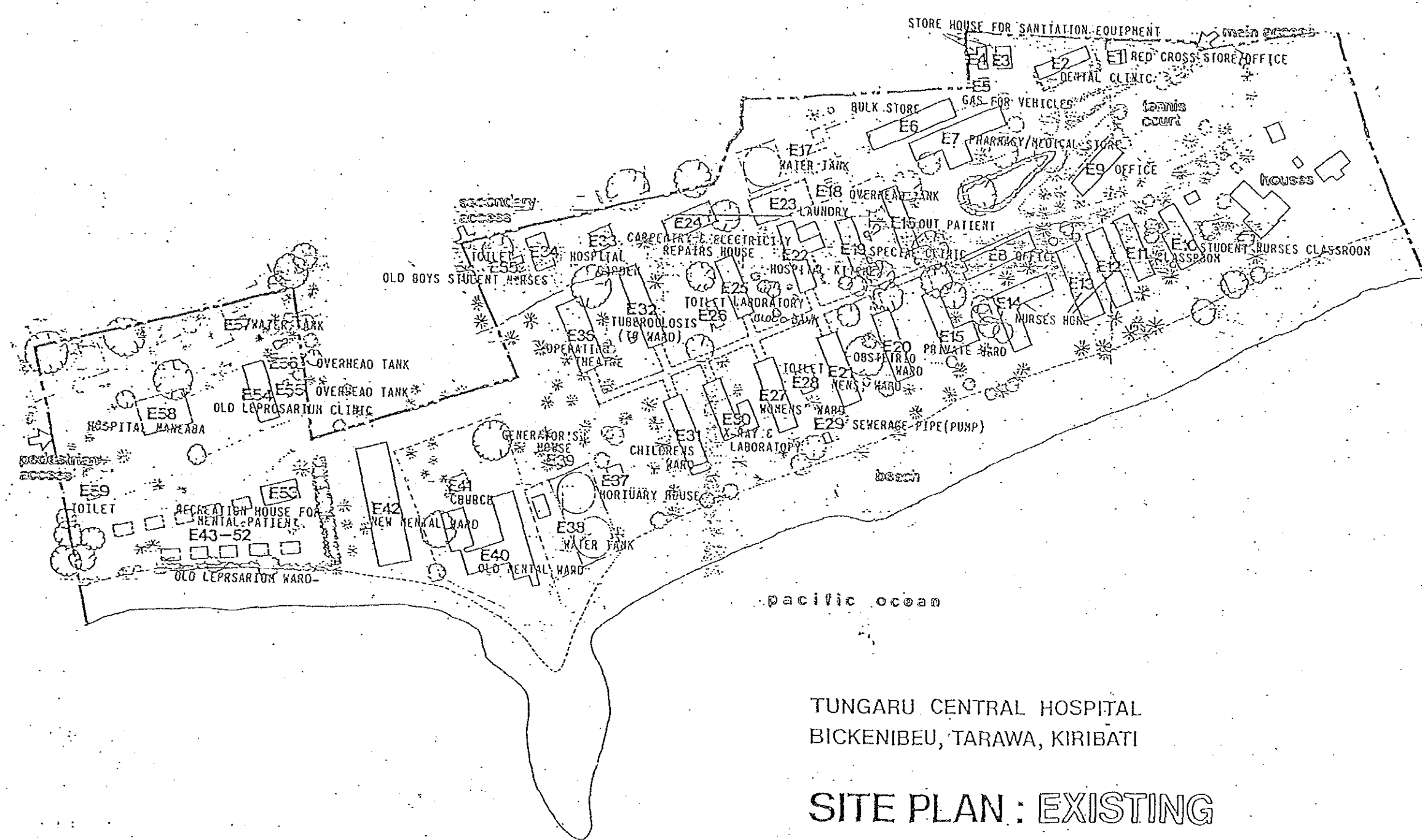
Mr. Syunichi Mizuochi

Assistant Resident
Representative

(3) Japan International Cooperation Agency in Australia

Mr. Hitoshi Sasaki

Resident Representative



TUNGARU CENTRAL HOSPITAL
 BICKENIBEU, TARAWA, KIRIBATI
SITE PLAN: EXISTING

