

No. 1

Japan International Cooperation Agency
Ministry of Health, Sports and Human Resources Development
Tuvalu

BASIC DESIGN STUDY REPORT
ON
UPGRADING AND EXPANSION OF EDUCATIONAL FACILITIES
AT MOTUFOUA SECONDARY SCHOOL
IN
TUVALU

February, 1995

JICA LIBRARY



J 1128990 (7)

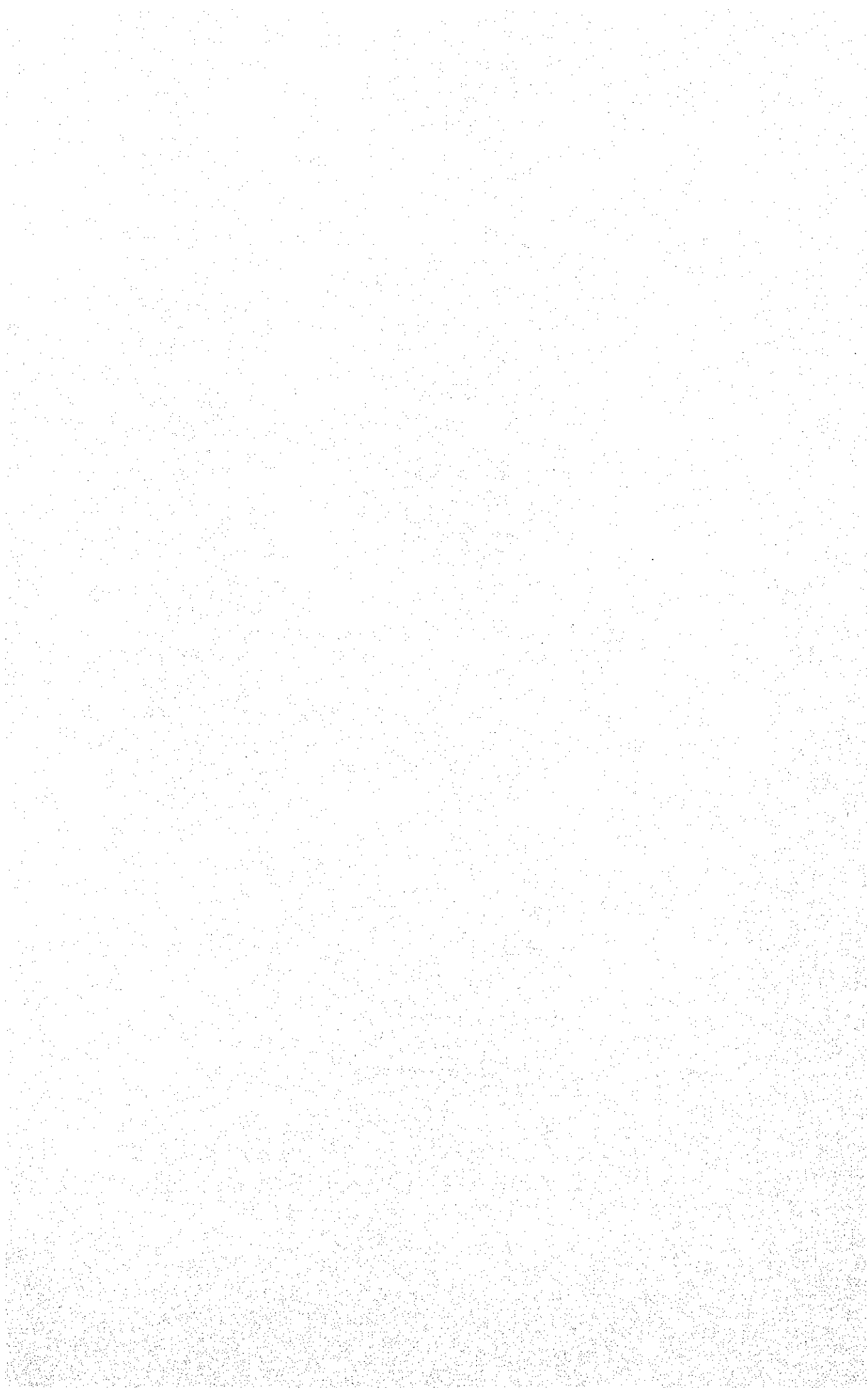
PACIFIC CONSULTANTS INTERNATIONAL

GRS
CR(5)
95-002

JICA BASIC DESIGN STUDY REPORT ON UPGRADING AND EXPANSION OF EDUCATIONAL FACILITIES AT MOTUFOUA SECONDARY SCHOOL IN TUVALU

February, 1995 PACIFIC CONSULTANTS INTERNATIONAL

JICA
209
246
GRS
BRARY







1128990 [7]

マイクロ
フィルム作成

No.

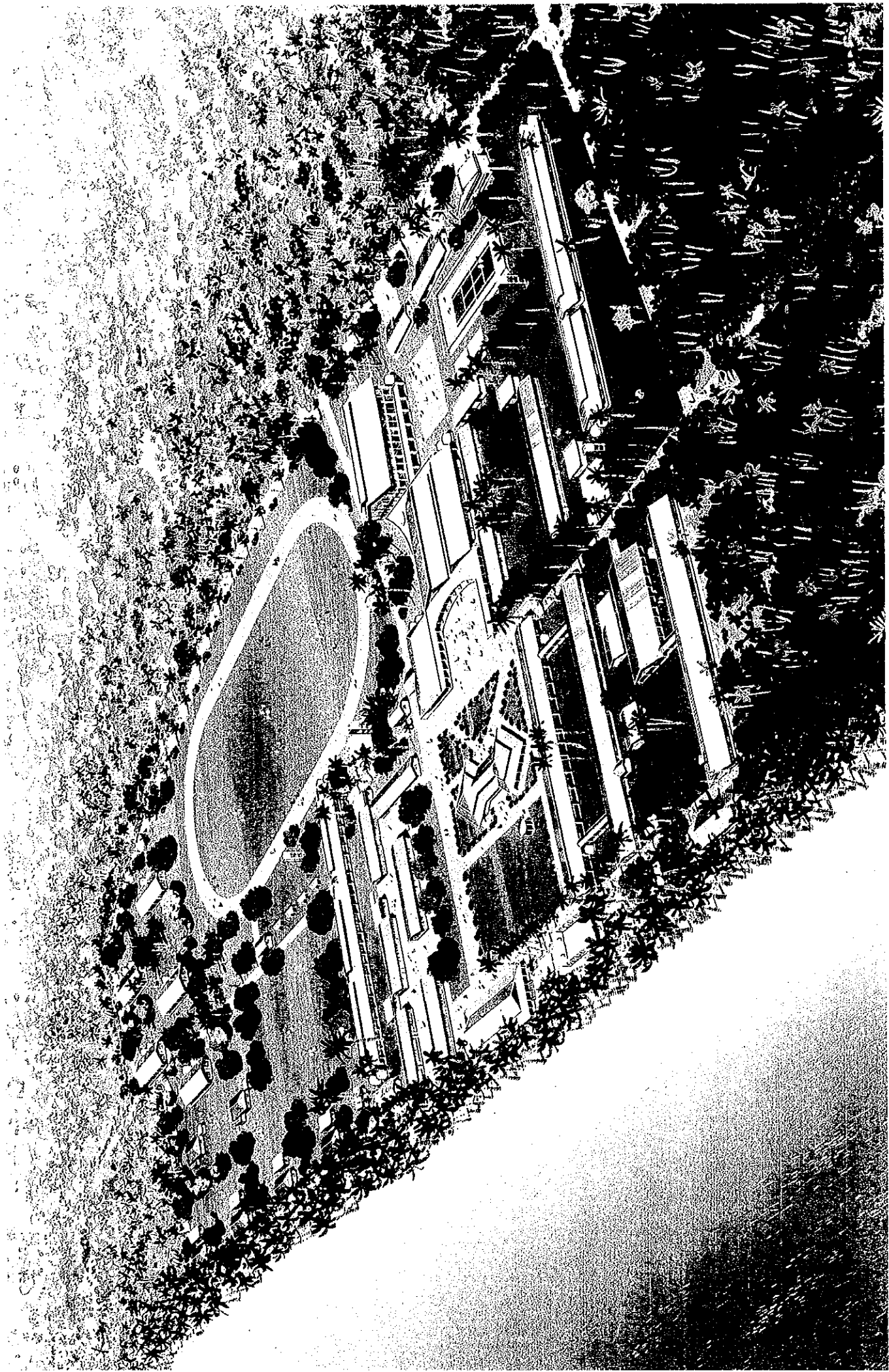
**Japan International Cooperation Agency
Ministry of Health, Sports and Human Resources Development
Tuvalu**

**BASIC DESIGN STUDY REPORT
ON
UPGRADING AND EXPANSION OF EDUCATIONAL FACILITIES
AT MOTUFOUA SECONDARY SCHOOL
IN
TUVALU**

February, 1995

PACIFIC CONSULTANTS INTERNATIONAL

GRS
CR(5)
95-002



Motufoua Secondary School Project

Pacific Consultants International

Exterior Perspective

PREFACE

In response to a request from the Government of Tuvalu, the Government of Japan decided to conduct a basic design study on the Project for Upgrading and Expansion of Educational Facilities at Motufoua Secondary School and entrusted the study to the Japan International Cooperation Agency (JICA).

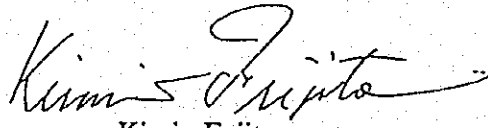
JICA set to Tuvalu a study team headed by Mr. Ichiro Mukai, Second Basic Design Study Division, Grand Aid Study and Design Department, JICA and constituted by members of Pacific Consultants International, from 18 July to 13 August, 1994.

The team held discussions with the officials concerned of the Government of Tuvalu, and conducted a field study at the study area. After the team returned to Japan, further studies were made. Then, a mission was sent to Tuvalu in order to discuss a draft report, and as this result, the present report was finalized.

I hope that this report will contribute to the promotion of the project and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned to the Government of Tuvalu for their close cooperation extended to the teams.

February, 1995



Kimio Fujita
President

Japan International Cooperation Agency

February, 1995

Mr. Kimio Fujita
President
Japan International Cooperation Agency
Tokyo, Japan

Letter of Transmittal

We are pleased to submit to you the basic design study report on the Project for Upgrading and Expansion of Educational Facilities at Motufoua Secondary School in Tuvalu.

This study was conducted by Pacific Consultants International, under a contract to JICA, during the period 12 July to 6 February. In conducting the study, we have examined the feasibility and rationale of the project with due consideration to the present situation of Tuvalu and formulated the most appropriate basic design for the project under Japan's grant aid scheme.

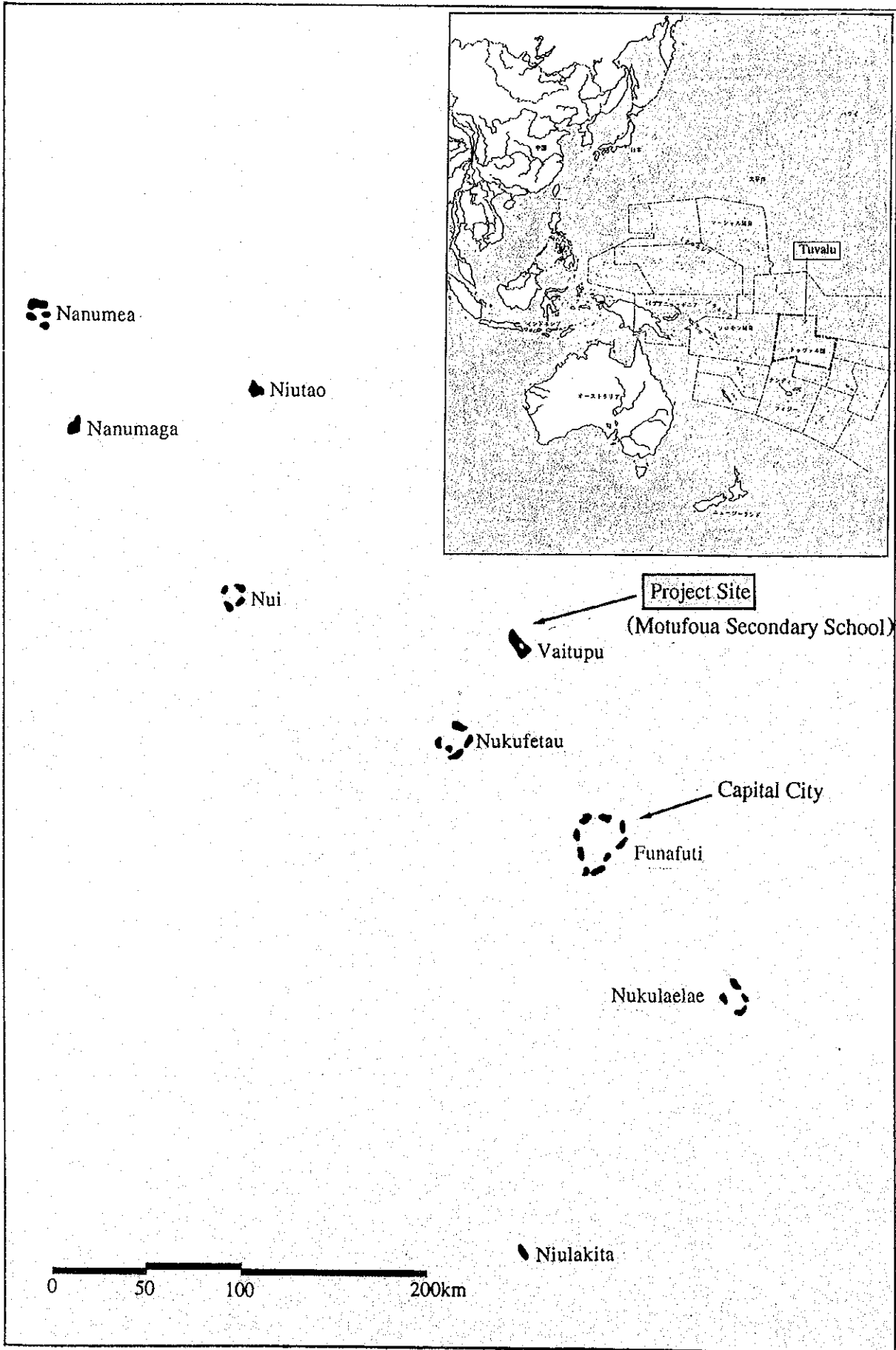
We wish to take this opportunity express our sincere gratitude to the officials concerned of JICA and the Ministry of Foreign Affairs. We would also like to express our gratitude to the officials concerned of the Ministry of Foreign Affairs and Economic Planning, the Ministry of Health Sports and Human Resources Development, the JICA Fiji Office and the Embassy of Japan in Fiji for their cooperation and assistance throughout our field survey.

Finally, we hope that this report will contribute to further promotion of the project.

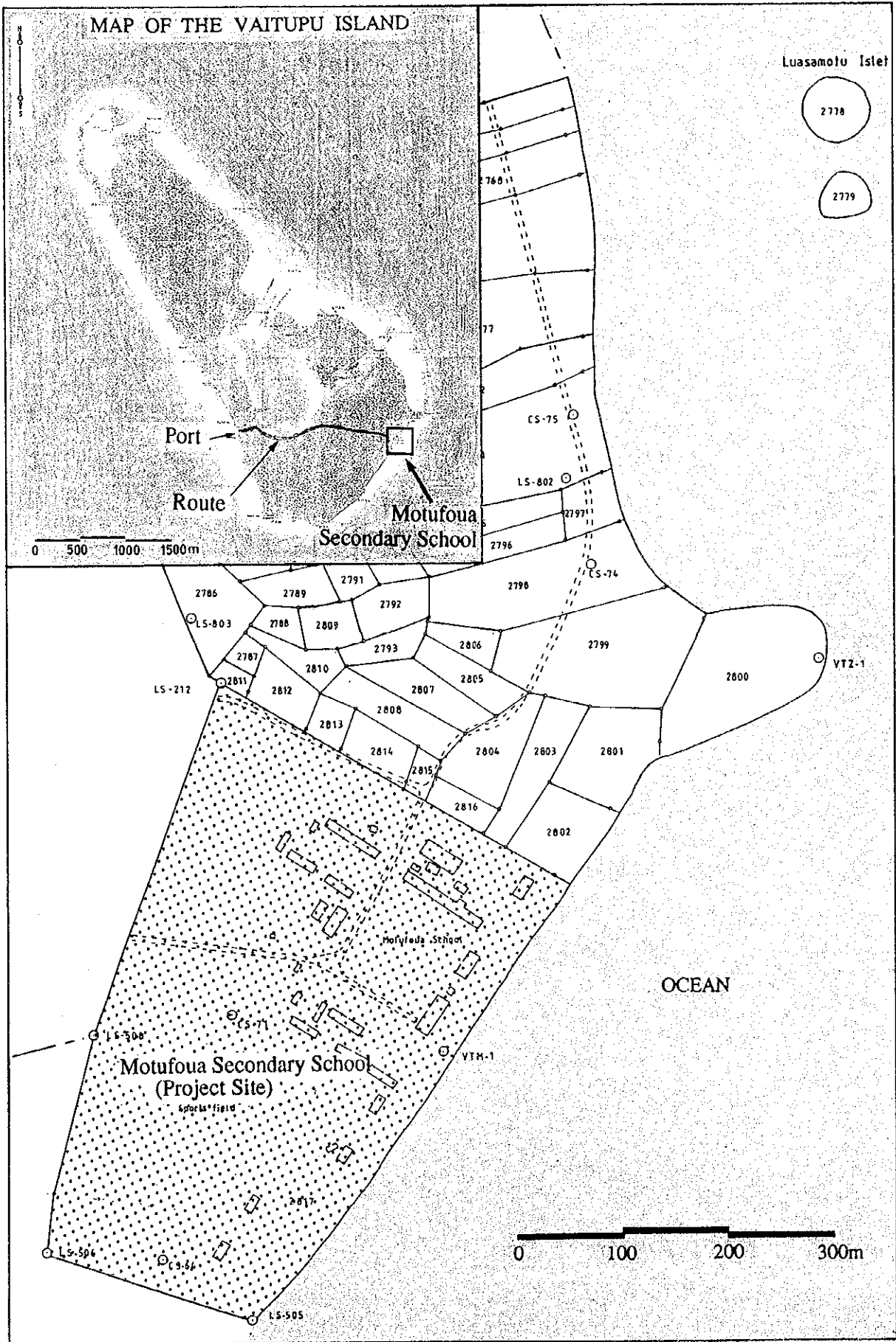
Very truly yours



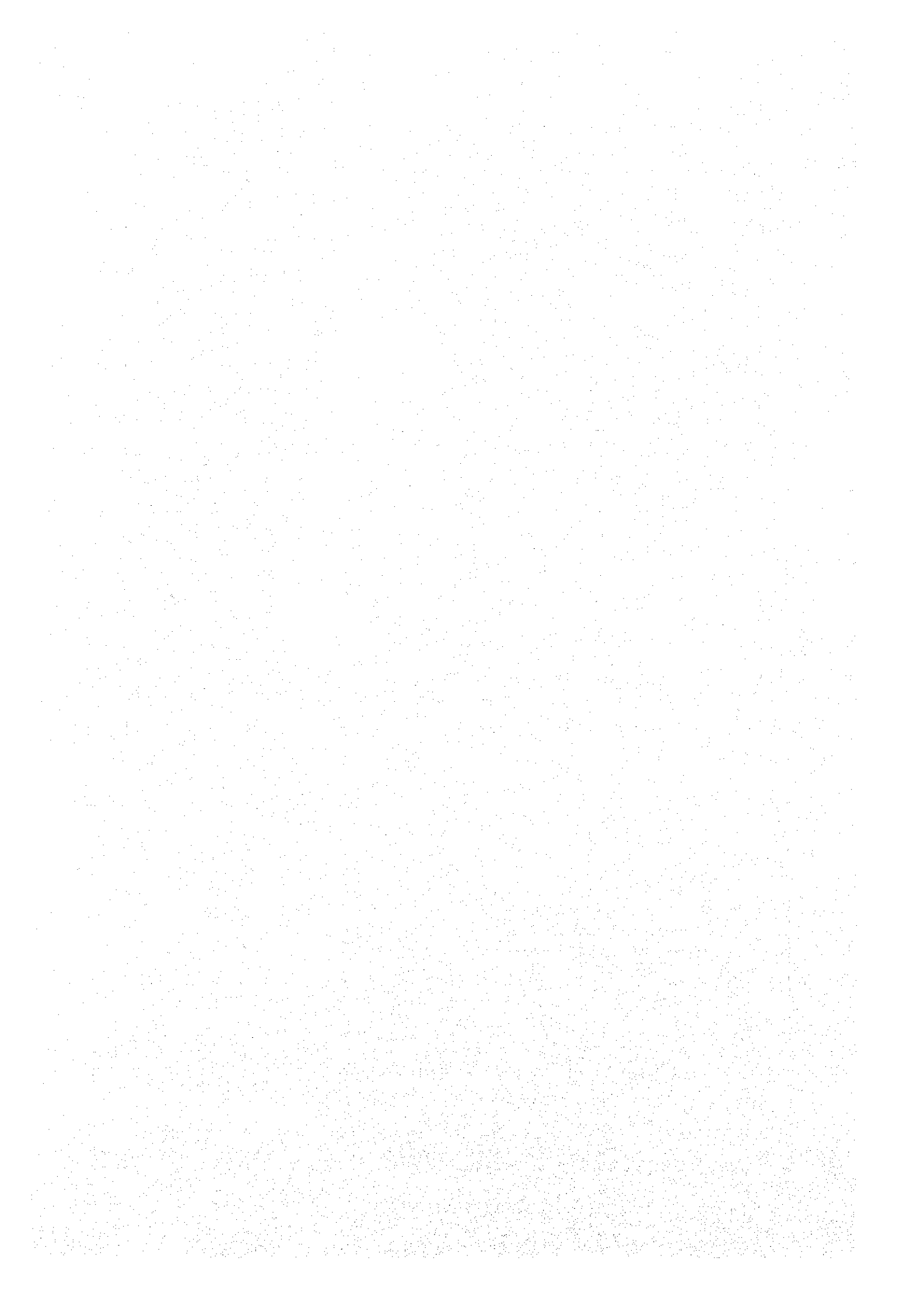
Tetsuji Hatano
Project Manager
Basic design study team on
Upgrading Expansion of Education Facilities at
Motufoua Secondary School in Tuvalu
Pacific Consultants International

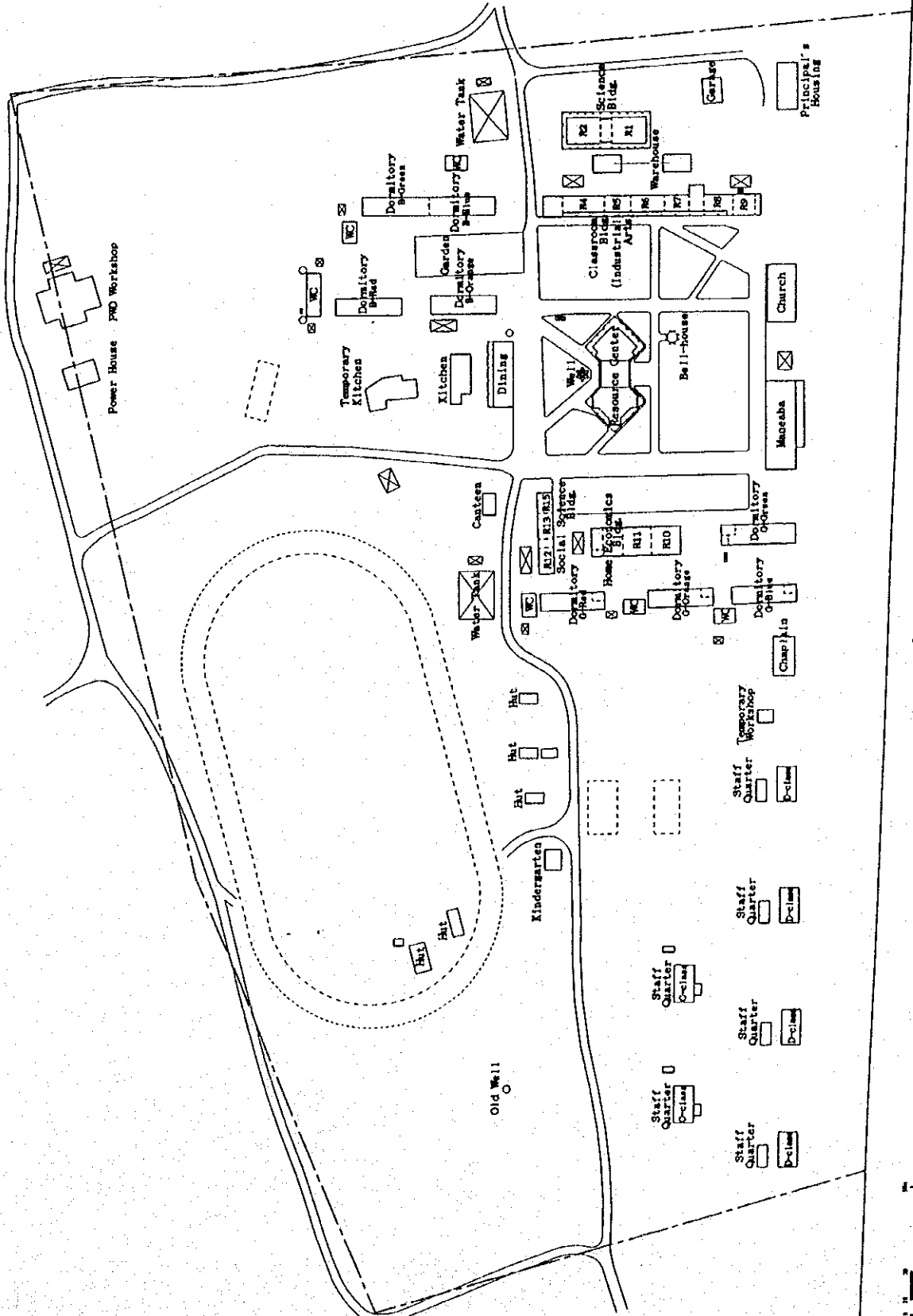


Map of Tuvalu



Map of Project Site





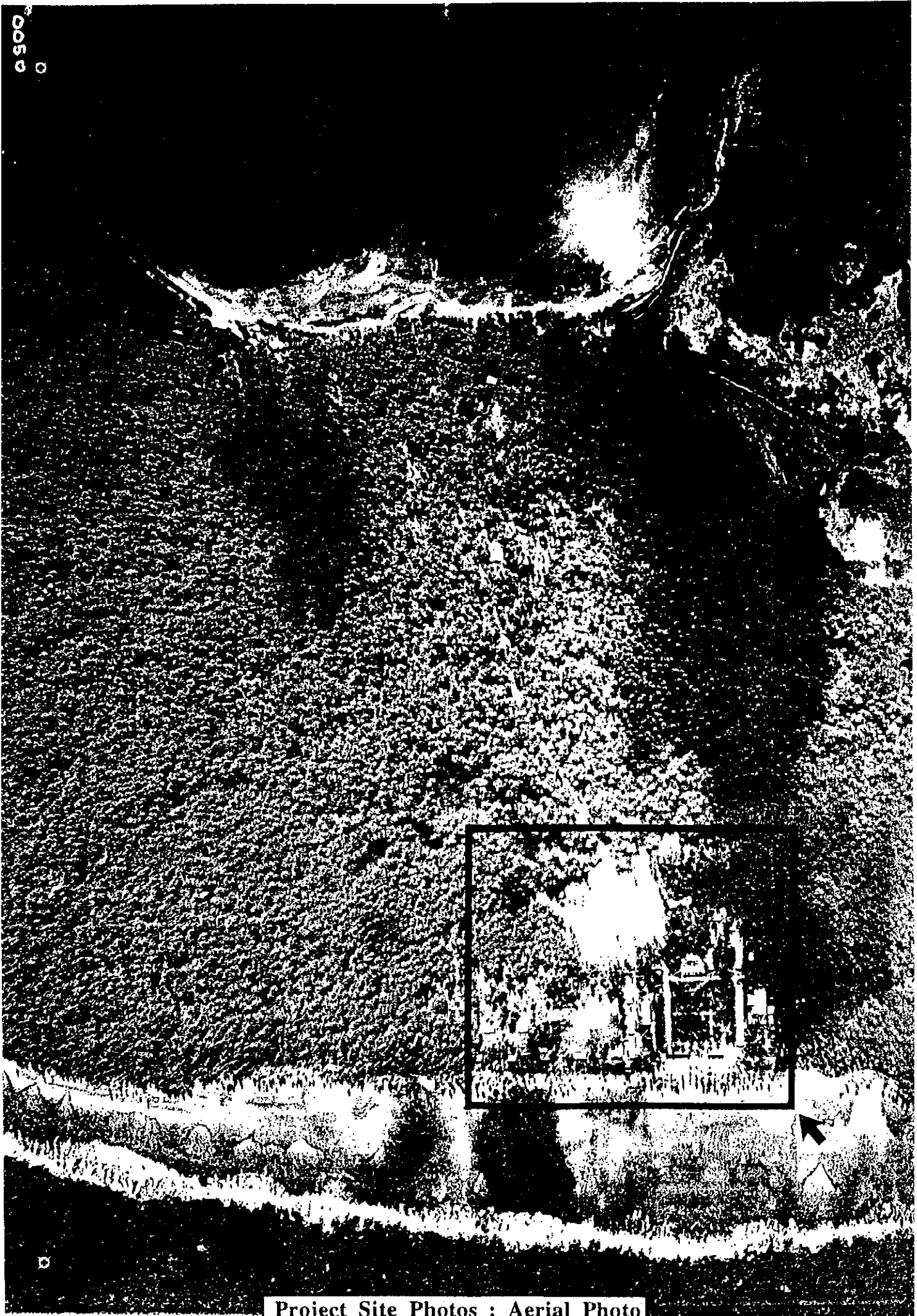
Ocean

UPGRADING AND EXPANSION OF EDUCATIONAL FACILITIES
AT MOTUFOUA SECONDARY SCHOOL

PACIFIC CONSULTANTS INTERNATIONAL

EXISTING FACILITY LAYOUT
Date: 94.10.28
Dwg. No.

0500
0



Project Site Photos : Aerial Photo

PWD Work Shop Power House

Resource Center Canteen

Sport Field



General View from Campus Entrance

Temporary Kitchen

Boy's Dormitory

Kitchen

Dining Hall

Resource Centre

Maneaba



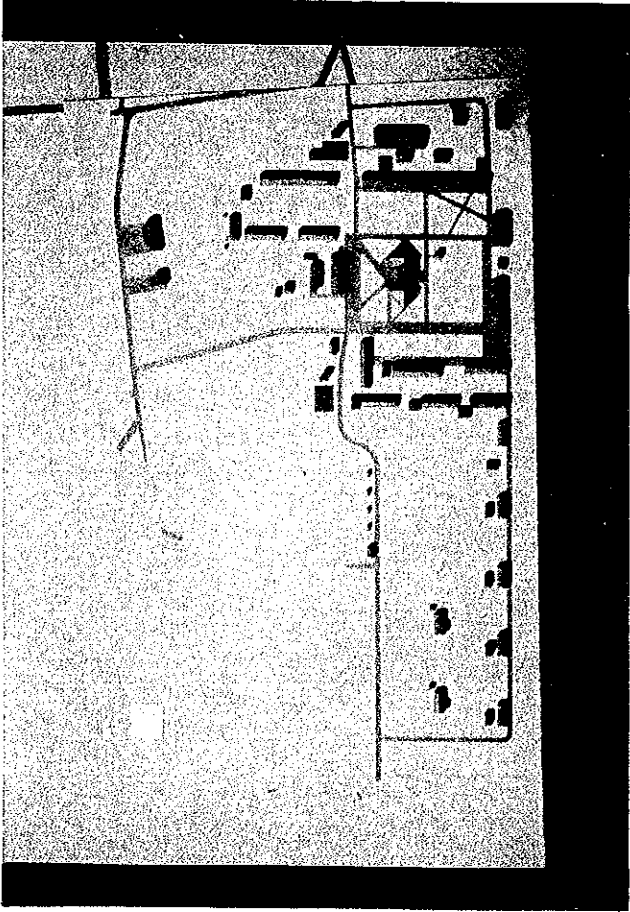
View of Campus from Entrance Road - 1



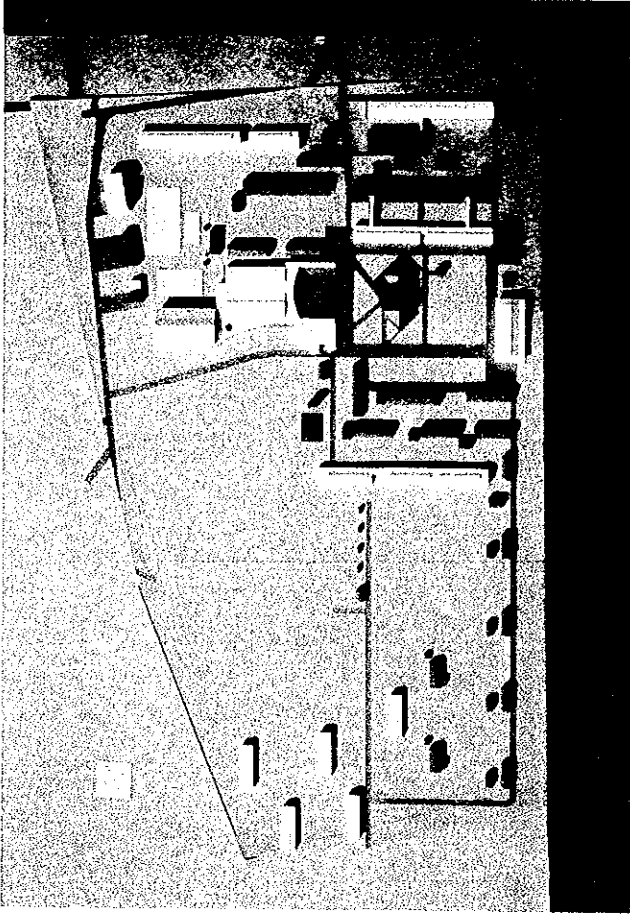
View of Campus from Entrance Road - 2



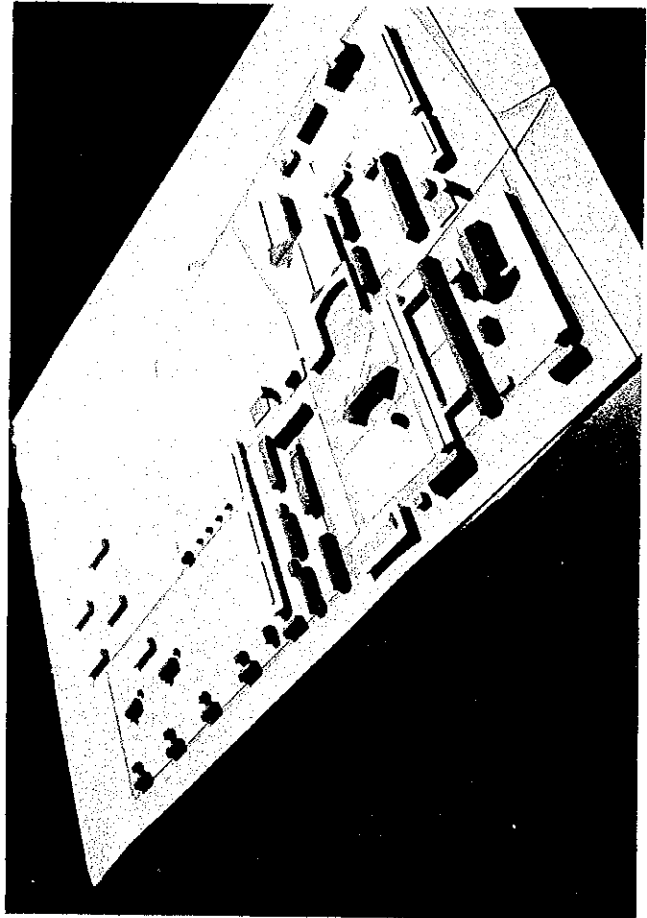
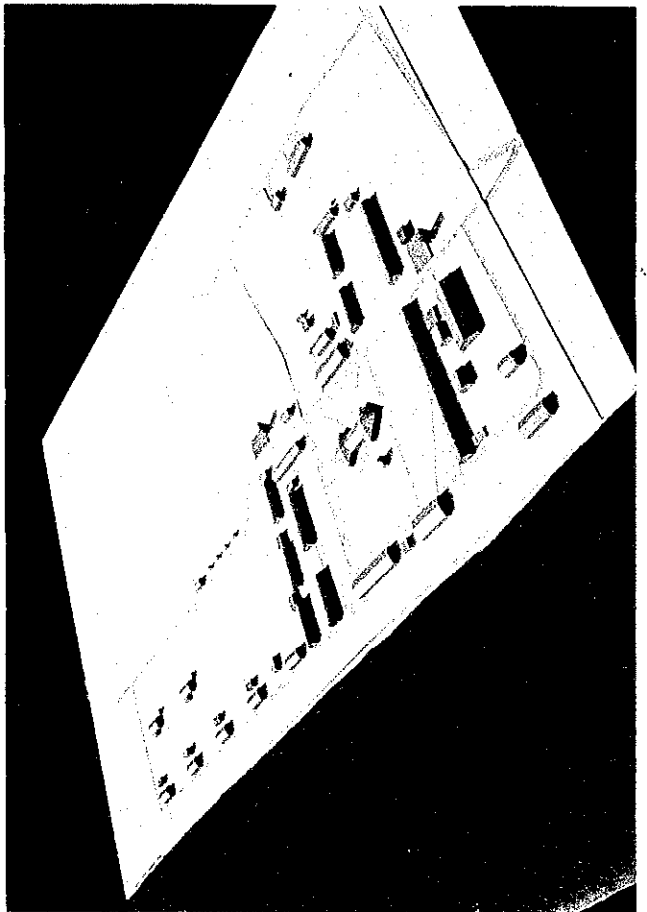
View of Campus from the Front of Dining Hall

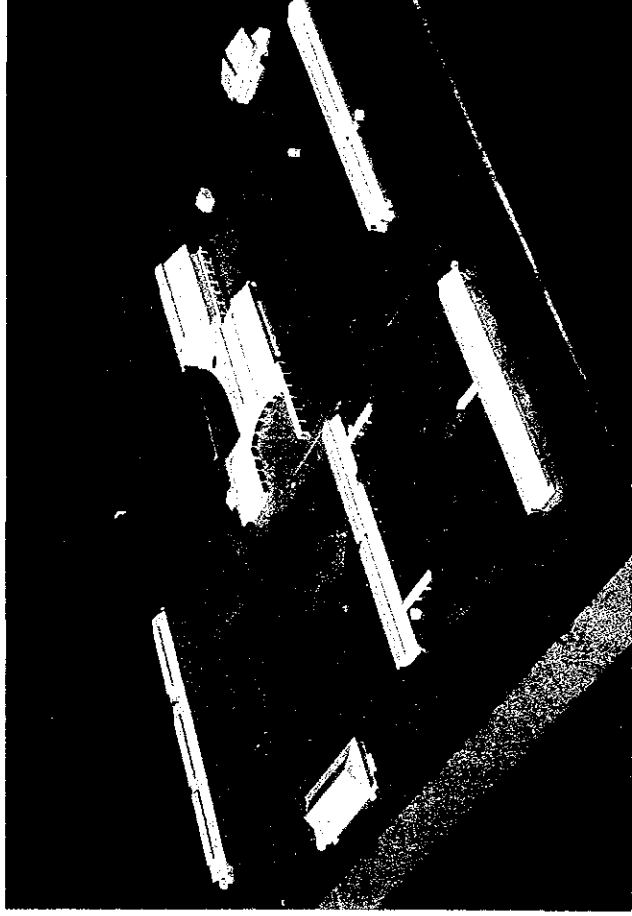
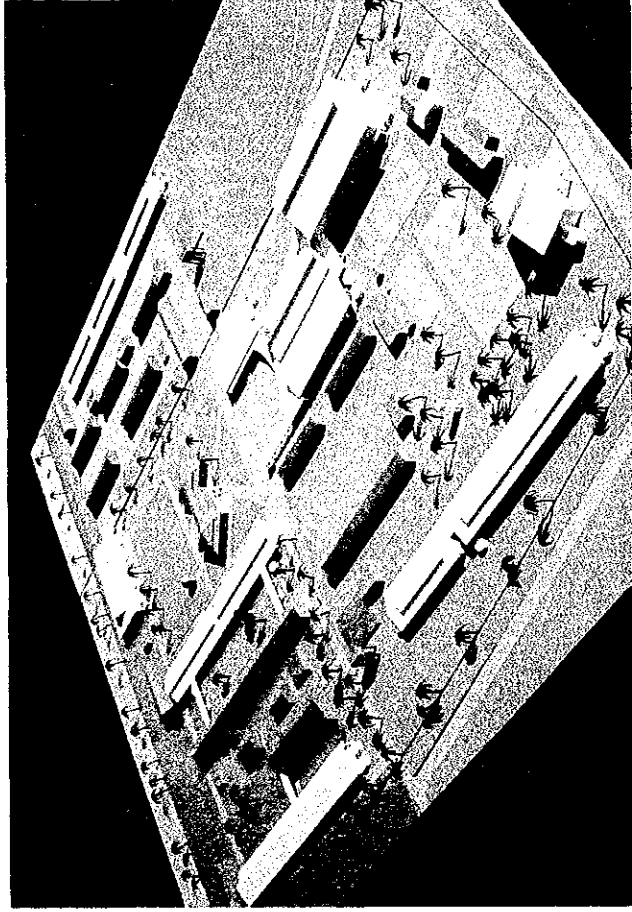
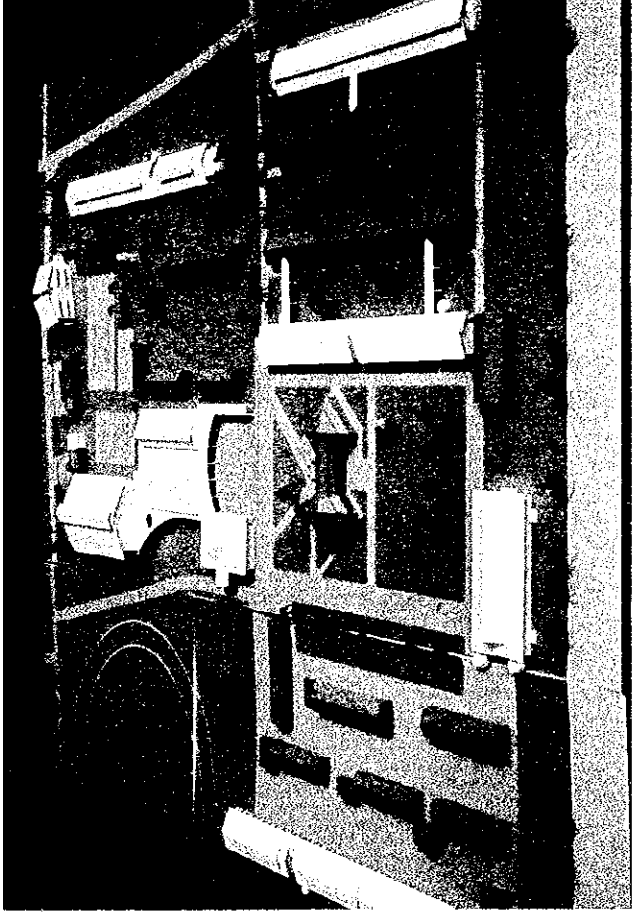
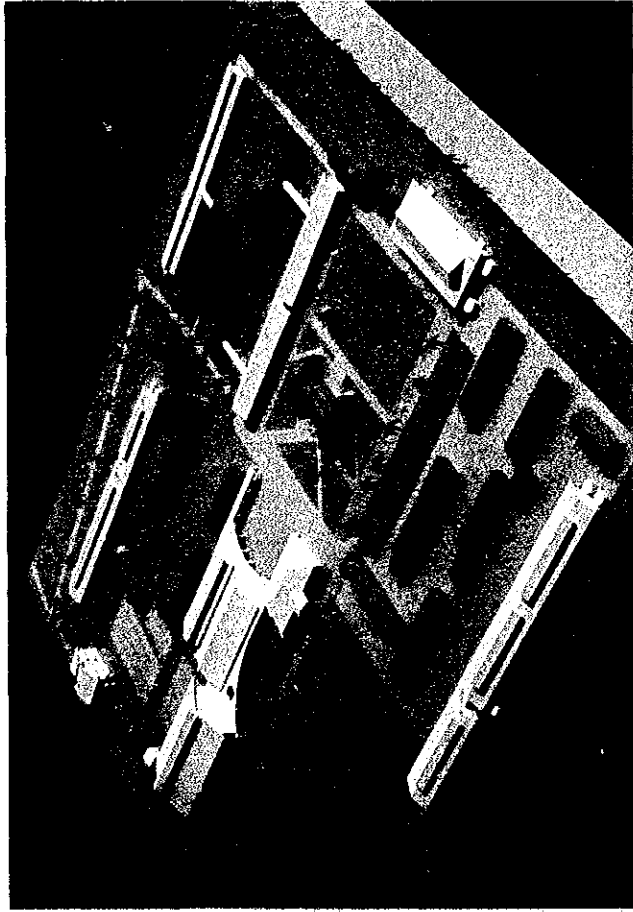


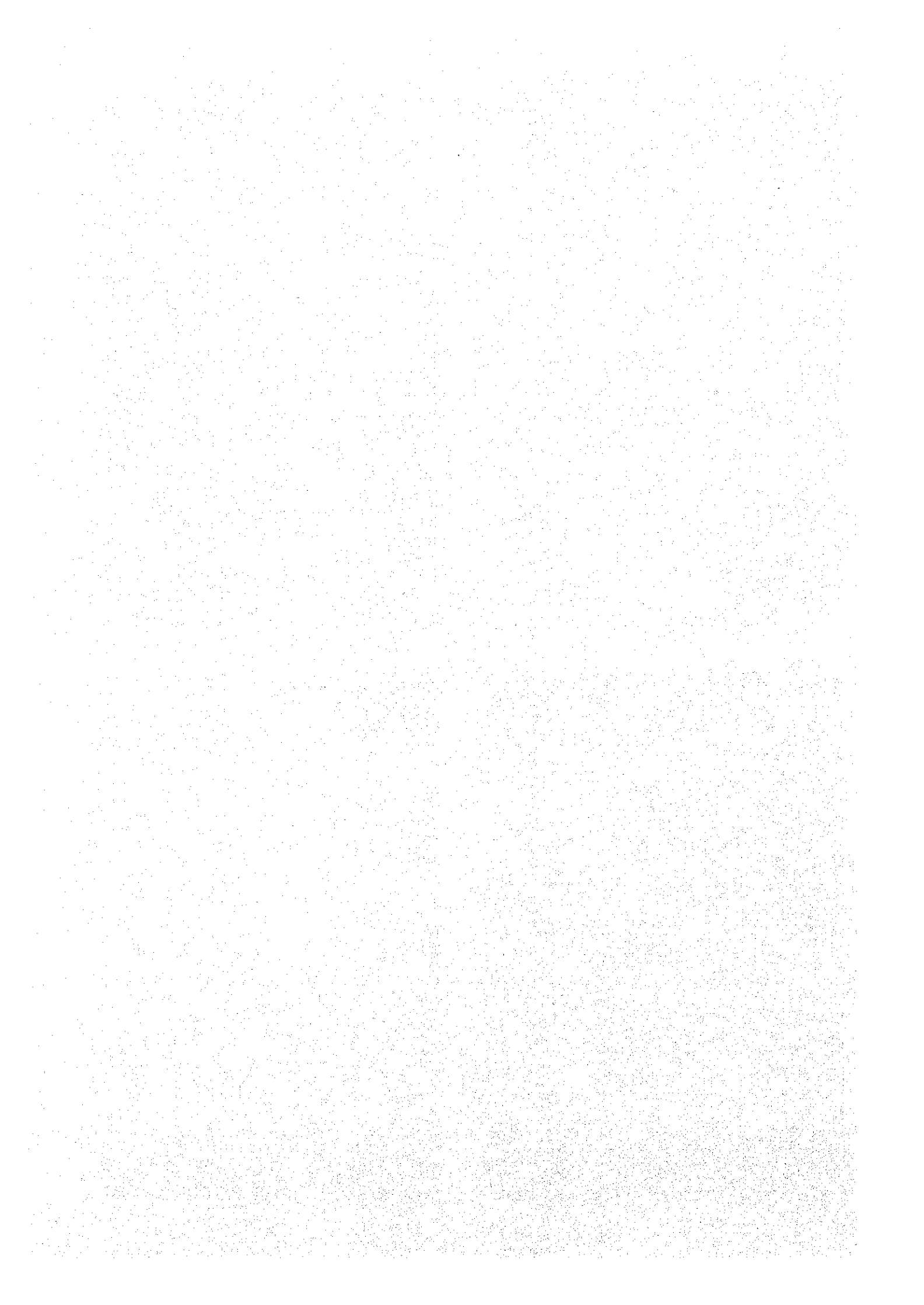
Existing Facilities



Proposed Plan







SUMMARY

Tuvalu is situated south of the equator in the South Pacific Ocean, lying between 5° and 11° south latitude and between 176° and 180° east longitude. It is an archipelago country, composed of six atolls and three small reef islands, with a total land area of only 26 km² (square kilometers) and the population of 9,405 people (1991 census data), and has one of the smallest land areas and population amongst the islands in the region.

Tuvalu became independent from the UK in 1978, and as it is composed of small islands with limited land and poor soil conditions, there has been no distinctive industrial development yet. Therefore, the country is largely financially dependent on foreign aid. Together with these circumstances, the socio-economic growth of Tuvalu is severely hindered by a shortage of sufficiently educated and trained people. In this regard, the Government of Tuvalu is convinced that human resource development has a key role to play in the evolvement of the whole nation. At present the Medium-Term Economic Framework Programme (1992 - 1994) is being applied, and the following five specific sectors are mainly anticipated to be reinforced by the Programme:

- Human resource development;
- Physical infrastructure development;
- Private sector development;
- Rural/outer island development; and
- Natural resource development.

Especially in human resource development, the Programme regards that the enhancement of social and economical development can be achieved by the upgrading of people's education on Tuvalu. In order to achieve and sustain this objective, the Government has decided to implement the "EFL (Education for Life) Programme".

In the EFL Programme, the improvements of the educational sector; the provision of a minimum of 10 years compulsory education, the renewal and reformation of curriculums, etc., are incorporated and as a part of the Programme the new education system has been introduced. By enforcement of the programme reformation in 1991, Motufoua Secondary School has been required to open to all applicants. The School therefore, has consequently found it necessary to upgrade and extend its facilities.

The duration of education in Tuvalu was six years in primary education (free schooling) and another six years in secondary education. There are 12 primary schools on Tuvalu and the percentage of primary school attendance is almost 100%. However there are

only two secondary schools; one is Motufoua Secondary School (a public school); and the other is Fetuvalu Secondary School (a church-run school). Despite the fact that there are many children who wish to attend Motufoua Secondary School, only about 25% of the 200 applicants are allowed to enter the School, due to the limited facility space and the restricted financial support, through the entrance examination.

However, since the implementation of the EFL Programme, the education system has been changed. The new education system provides 8 years of Primary schooling (originally it was 6 years) and 4 years of Secondary schooling (the preceding two years are regarded as compulsory education); and therefore, the children, who have completed their primary schooling, should be able to enter Motufoua Secondary School at their wish. The School has consequently found it necessary to upgrade and extend its facilities to overcome the increase of the student population.

In concern with this, the Government of Tuvalu has requested Japan's Grant Aid assistance, as a project for the "Upgrading and Expansion of the Educational Facilities at Motufoua Secondary School".

In response, the Japanese Government decided to examine the project, and the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team from 18 July to 13 August, 1994.

As a result of the study and through a series of discussions with the Tuvalu side, the mutually agreed items between the Tuvalu and Japanese sides were arranged into the Minutes of Discussion on 27 July, 1994, which were signed by both the leader of Basic Design Study team of JICA and the Minister of Ministry of Health, Sports and Human Resources Development, Tuvalu.

Returning from Tuvalu, the Study team prepared the Basic Design Study Report as a draft, based on the following studies:

1. Study on the appropriate site of facilities and arrangement of equipment;
2. Study on the selection of equipment;
3. Cost estimation of the project;
4. Scheduling of the implementation plan;

JICA subsequently dispatched the Study team again from 22 September to 6 October, 1994, and as a result of the explanation of the Draft Report and a series of discussions with the Tuvalu side, the contents of the Report have been confirmed and accepted by the

Government of Tuvalu. The Basic Design Team, JICA and Government of Tuvalu signed the Minutes of Discussion on 28 September, 1994.

The immediate objective of this project is the upgrading and expansion of Motufoua Secondary School. The result of the implementation of this project will contribute to an increase in school attendance as well as an improvement of the quality of Secondary schooling.

The basic policy of the project is to re-utilize the existing deteriorated facilities as much as possible in order to minimize the new facilities that need to be constructed and the equipment that needs to be procured.

Due to the reformation of the educational system and also simply because of an increase in the children's population, the number of students attending Motufoua Secondary School is estimated to increase from the present number of approximately 330 to 600 within the next 7 years. Accordingly it is expected that the increase in the number of teachers will be from the 20 at present to 27 (more than 20 trainees have currently been sent to overseas for teacher training).

As a result of the discussions (the draft final explanations) with the Tuvalu side, the following facilities were excluded from the list of the originally requested facilities:

- Church;
- Sea-wall;
- Multi-purpose Hall (Maneaba);
- Tennis, Volleyball and Basketball Courts;

However the Staff-quarters, which were strongly requested by the Tuvalu side during the field survey, are included in the items under the scope of Japan's Grant Aid assistance. As for the equipment, a comprehensive examination on the requested items, and a series of discussions with Motufoua Secondary School during the field survey have been performed. Further discussions were also held between the Study team and the Tuvalu side on this matter.

[Required rooms and their size]

No.	Room (Nos.)	Main Room (Nos.)	Floor area (m ²)
1.	General classrooms	Classroom (8) Preparation room (4)	771.7 m ²
2.	Special classrooms	Science (2) Home economics/Cloth & Textile (2) Technical drawing (1) Woodwork (1) Preparation room (6)	518.4 m ²
3.	Student dormitories	Dormitory (Boy) (3) Dormitory (Girl) (3) Lavatory/shower/Laundry (6) Matron room (3)	1,365.1 m ²
4.	Dining hall and Kitchen* ¹⁾	Dining hall, Kitchen, Storage, etc.	829.4 m ²
5.	Administration building	Teacher's room, Administration office, Principal's room, First aid room, Computer room, Storage, etc.	331.0 m ²
6.	Gymnasium	Arena, Storage	645.1 m ²
7.	Staff-quarters	Class-C housing (10)	770.0 m ²
8.	Multi-purpose hall* ²⁾	Multi-purpose hall	483.8 m ²
9.	Courts* ²⁾	Tennis, Volleyball and Basketball courts	827.0 m ²
10.	Other	Mechanical room, Canopy and Corridor	--
TOTAL			5,010.8 m² *³⁾

*¹⁾ In accordance with the construction of the proposed Dining hall, the existing Dining may be demolished. (The demolition cost should be allotted by the Tuvalu side.)

*²⁾ Excluded facilities from the subject items of this Grant Aid assistance.

*³⁾ The total floor area (the floor area of No. 8 and 9 are excluded) of the subject facility of this Grant Aid Assistance

[Restoration Plan]

No.	Name	Points of repair	Method of repair/Quantity
1.	Science laboratory	East side (sea side), (many small holes caused by salt damage)	Partial change (measurement: 35.0 m ²)
2.	General classroom	a. Column under corridor, (Loss of bearing capacity due to the deterioration of concrete, reinforcing bars were exposed)	Chipping, change of steel, re-concrete (Concrete: 0.15 x 0.15 x 1 m x 3 nos.)
		b. Glass louver, Jalousie window (Lost 50% of glass louver and lost 30% of metal fitting)	Supplement and repair (Ceiling area 720 m ² x 2.5)
		c. Interior and exterior painting (Peeling and Cracking, etc.)	Re-paint all
		d. Roof (Loss of many nails)	Partial repairing (patching)
		e. Ceiling and plancier (Defect, hanging down and some holes)	Change all to silicic acid calcium board (9 m x 80 m = 720 m ²)
		f. Lighting instrument (corroded by salt)	Change all

[Planned equipment]

No.	Field	Items	Contents
1	Mathematics Equipment	9	Models, set squares, etc.
2	English Equipment	3	Video teaching materials, etc.
3	Social Science Equipment	5	World globes, etc.
4	Science Equipment	88	Laboratory tables, demonstration equipment, etc.
5	Drawing Equipment	5	Drawing boards, drawing tools, etc.
6	Technical (Industrial Art) Equipment	45	Circular saw, grinder, etc.
7	Home Economics Equipment	35	Freezer, pedal sewing machine, etc.
8	Physical Education Equipment	11	Volleyball goods set, etc.
9	Gardening Equipment	14	Wheel barrow [one wheel truck], shovels, etc.
10	Musical Instrument	1	Keyboard
11	Furniture	4	Desks & chairs for students, etc.
12	Library Equipment	2	Card cabinet, etc.
13	Administration & General Equipment	22	Copy machine, computer, etc.
14	First aid Equipment	16	Autoclave, first aid set, etc.
15	Kitchen Equipment	11	Electric oven, rice cooker, etc.
16	Dining Hall Equipment	3	Dining tables & chairs, etc
Total	16 fields	274	

The estimated project cost is approximately 857.9 million yen in total. The portion to be dealt with by the Japanese side is approximately 852.0 million yen in total and by the Tuvalu side is approximately 5.9 million yen in total.

Because Motufoua Secondary School is a public school, the expenses of the school are appropriated (the schooling operation and maintenance costs are estimated approximately seven hundred seventy thousand US dollars: US\$770,000 annually) in the budget of the Ministry of Health, Sports and Human Resources Development.

By the implementation of this project, the accommodating capacity of facilities at the Motufoua Secondary School will be improved from 330 students to 600. The Project will also provide the opportunity of Secondary education for all the students who have finished their primary education in Tuvalu. Thus, the project will be able to accomplish the Government's objective in the education sector which is formulated to improve Secondary education as the first priority rating within the EFL Programme.

The improvement of Secondary education will enhance the provision of the appropriate education and training systems as well as an improvement of human resources for the further development of Tuvalu, and as a result it will contribute to the nation's social and economic progress.

In accordance with the result of the study on the necessity, validity, propriety and effectiveness of the Project, it is anticipated that the implementation of this project under Japan's Grant Aid will have a positive effect.

Basic Design Study Report on Upgrading and Expansion of Educational Facilities at
Motufoua Secondary School in Tuvalu

Contents

Perspective

Preface

Letter of Transmittal

Location Map and Photographs

Model Photographs

Summary

	<u>Page</u>
CHAPTER 1 INTRODUCTION	1-1
CHAPTER 2 BACKGROUND OF THE PROJECT	2-1
2-1 Background of the Project	2-1
2-1-1 Overview of Tuvalu	2-1
(1) Physical Conditions (Geography • Climate)	2-1
(2) Demographic Conditions (Population • Race • Religion)	2-2
(3) Politics	2-3
(4) Economy and Industry	2-6
2-1-2 Outline of Related National Development Policy	2-8
(1) National Development Objectives	2-8
(2) Medium-Term Economic Framework Programme	2-8
(3) EFL (Education for Life) Programme	2-9
2-1-3 Educational Sector Overview	2-11
(1) Organization of the Administration of Educational Sector	2-11
(2) Education System	2-12
(3) Present Situation of Teaching Staff	2-16
(4) The Present Conditions in Each Educational Sectors	2-16
2-1-4 Present Situation of Motufoua Secondary School	2-20
(1) Overview	2-20
(2) Number of Students and Teaching Staff	2-20
(3) Curriculum	2-21
2-2 Outline of the Request and Main Components	2-23
2-2-1 Background of the Requests	2-23
2-2-2 Contents of the Requests	2-23
2-3 Project and Program of Other Donors	2-24

	<u>Page</u>
CHAPTER 3 OUTLINE OF THE PROJECT	3-1
3-1 Objectives of the Project	3-1
3-2 Study and Examination on the Request	3-1
3-2-1 Propriety and Necessity of the Project	3-1
3-2-2 Study on the contents of the project	3-1
(1) Examination on the Project Components	3-1
(2) Conditions of determination of the proposed facilities scale	3-2
(3) Study of the requested facilities and equipment	3-4
3-3 Project Description	3-9
3-3-1 Execution Agency and Operational Structure	3-9
(1) Implementation body of the Project	3-9
(2) Maintenance and Management System	3-10
(3) Maintenance and Management Budget	3-11
3-3-2 Location and Condition of Project Site	3-12
(1) Present Conditions of Facilities at Motufoua Secondary School	3-12
(2) Present Conditions of Infrastructure and Utilities	3-16
3-3-3 Outline of the Existing Equipment and Furniture	3-20
3-3-4 Schooling expense/Operation and Maintenance Costs	3-22
CHAPTER 4 BASIC DESIGN	4-1
4-1 Design Policy	4-1
4-2 Study and Examination on Design Criteria	4-2
4-2-1 Determination Policy of the Scale of the Project	4-2
4-2-2 Estimation of Number of Classes	4-2
4-2-3 Calculation of Room Sizes	4-4
4-2-4 Rooms Required and Their Floor Area	4-13
4-3 Basic Plan	4-15
4-3-1 Site Layout Plan	4-15
4-3-2 Architectural Designs	4-16
(1) Floor Plan	4-16
(2) Elevation and Cross-section Plan	4-17
(3) Structural Plan	4-18
(4) Building Facilities Plan	4-20
(5) Restoration Plan	4-23
(6) Building Material Plan	4-24
4-3-3 Equipment Plan	4-25
4-3-4 Basic Design Drawing	4-30

	<u>Page</u>
4-4 Implementation Plan	4-31
4-4-1 Construction Condition in Tuvalu and Points to be Considered	4-31
4-4-2 Implementation Method	4-32
4-4-3 Construction and Supervisory Plan	4-34
4-4-4 Construction Equipment and Materials Procurement Plan	4-34
4-4-5 Transportation Schedule	4-36
4-4-6 Implementation Schedule	4-38
4-4-7 Scope of Works	4-38
 CHAPTER 5 EFFECTS OF THE PROJECT AND CONCLUSION	 5-1
5-1 Effects of the Implementation of the Project	5-1
5-2 Conclusion	5-1

APPENDICES

- Appendix-1 MEMBER LIST OF SURVEY TEAM
- Appendix-2 SURVEY SCHEDULE
- Appendix-3 MEMBER LIST OF CONCERNING PARTY WITH RECIPIENT COUNTRY
- Appendix-4 MINUTES OF DISCUSSION (Basic Design Survey)
- Appendix-5 MINUTES OF DISCUSSION (Basic Design Survey, Draft Report Explanation)
- Appendix-6 PRIME MINISTER'S SPEECH
- Appendix-7 RESTORATION PLAN
- Appendix-8 EQUIPMENT LISTS
- Appendix-9 MAINTENANCE AND OPERATION COSTS (ESTIMATED)
- Appendix-10 MAINTENANCE AND OPERATION COSTS (ACTUAL)
- Appendix-11 TEACHER'S TRAINING PLAN
- Appendix-12 LETTER FROM PWD
- Appendix-13 LIST OF REFERENCE MATERIALS

List of Figures

	<u>Page</u>
Figure 2-1	Tuvalu Population Census Results 2-2
Figure 2-2	Government of Tuvalu 2-3
Figure 2-3	Organization Chart of Ministry of Health, Sports and Human Resource Development 2-11
Figure 2-4	Results of Fiji Junior & New Zealand Examinations 2-13
Figure 2-5	Changing of Education System 2-15
Figure 3-1	Organization of the Ministry of Health, Sports and Human Resource Development and Motufoua Secondary School 3-9
Figure 3-2	Existing Facility Layout
Figure 3-3	Existing Electrical Wiring
Figure 3-4	Existing Layout of Water Tank and Septic Tank
Figure 4-1	General Classroom 4-5
Figure 4-2	Special Classroom 4-6
Figure 4-3	Students' Dormitories 4-7
Figure 4-4	Dining Hall and Kitchen 4-8
Figure 4-5	Administration Building 4-9
Figure 4-6	Gymnasium 4-10
Figure 4-7	Site and Layout Plan 4-16
Figure 4-8	Elevation and Cross-section Plan 4-17
Figure 4-9	Implementation Organization 4-33
Figure 4-10	Time Required for whole Transportation Process 4-37

List of Tables

		<u>Page</u>
Table 2-1	Monthly Climatic Data in Funafuti (1991)	2-1
Table 2-2	The Spread of Population on Tuvalu	2-2
Table 2-3	ODA to Tuvalu	2-4
Table 2-4	Japanese Aid by Type and Year	2-5
Table 2-5	Gross Domestic Product and Some Allied Aggregates	2-6
Table 2-6	Gross Domestic Product by Industrial Origin.	2-7
Table 2-7	Summary Statistics of Educational Institutions - 1990	2-13
Table 2-8	Number of Students in Primary Schools	2-16
Table 2-9	Number of Students	2-17
Table 2-10	Students in Amatuku Maritime School	2-18
Table 2-11	Students in Motufoua Secondary School	2-20
Table 2-12	Curriculum of Motufoua Secondary School	2-21
Table 3-1	Projected Population of Students in Motufoua Secondary School	3-2
Table 3-2	Actual Result and Budget of Maintenance and Management Expenses	3-11
Table 3-3	Condition of Existing Buildings.....	3-14
Table 3-4	Overseas Aids to Motufoua Secondary School	3-22
Table 4-1	Number of Students and Classes per Level.....	4-2
Table 4-2	Number of Students and Classes per Level in 2001.....	4-2
Table 4-3	Estimation of Required Number of General Classrooms Calculated from the Planned Number of Classes Based on the Existing Curriculums	4-3
Table 4-4	Estimation of Required Number of Special Classrooms Calculated from the Planned Number of Classes based on the Existing Curriculums	4-4
Table 4-5	Floor Area of General Classroom	4-5
Table 4-6	Number of Closets and Urinals Required	4-11
Table 4-7	Estimation of the Floor Area of Projected Facilities Rooms Based on the Similar Projects by Japan's Grant Aid	4-12
Table 4-8	Rooms Required and Their Floor Area	4-13
Table 4-9	The Facilities Required Restoration Work	4-23
Table 4-10	Procurement Situations of Construction Materials	4-35
Table 4-11	Procurement Situations of Construction	4-36
Table 4-12	General Project Schedule	4-38
Table 4-13	Extent of Works	4-38

List of Basic Design Drawings

A-1	Site Plan
A-2	Roof Plan
A-3	General Classroom
A-4	Special Classroom
A-5	Boys Dormitory
A-6	Girls Dormitory
A-7	Dining Hall and Kitchen
A-8	Administration Building
A-9	Gymnasium
A-10	Staff Quarter
A-11	Multi-purpose Hall
P-1	Rain Water Collection System
P-2	Septic Tank and Soak Pit
E-1	Site Plan of Electrical
E-2	Lighting & Socket Outlet Plan - 1
E-3	Lighting & Socket Outlet Plan - 2
E-4	Wiring Scheme

THE HISTORY OF THE

ROYAL SOCIETY OF LONDON

FROM ITS ORIGIN TO THE PRESENT TIME

BY JOHN HENRY MADDISON

ESQ. OF THE SOCIETY

AND OF THE UNIVERSITY OF OXFORD

AND OF THE SOCIETY OF FRIENDS

IN LONDON

PRINTED BY RICHARD CLAY AND COMPANY

LONDON AND BUNGAY

1910

THE SOCIETY'S OFFICE

1, BEDFORD SQUARE, LONDON, W.1.

AND THE UNIVERSITY OF OXFORD

1, BRIDGE STREET, OXFORD.

AND THE SOCIETY OF FRIENDS

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

1, BRIDGE STREET, OXFORD.

1, BEDFORD SQUARE, LONDON, W.1.

CHAPTER 1 INTRODUCTION

At present, the socio-economic growth of Tuvalu is severely hindered by a shortage of sufficiently educated and trained people. In this regard, the Government of Tuvalu is convinced that human resource development has a key role to play in the evolvement of the whole nation and rates the creation of employment as well as education and training opportunities as the top priority in their Policy. In order to achieve and sustain this objective, the Government has decided to implement the "EFL (Education for Life) Programme".

Before the reformation of the education system based on the EFL Programme, the duration of compulsory education (free teaching fee) was only six years of Primary schooling. Although the percentage of Primary school attendance was almost 100% (a total of twelve Primary schools exist on Tuvalu), the number of children who had the opportunity to go on to Secondary schooling was very limited, primarily due to insufficient Secondary schooling facilities (only one each of public and church-run Secondary schools exist on Tuvalu). For example, Motufoua Secondary School, the only public Secondary school, is able to admit only a quarter of its applicants.

In the EFL Programme, the improvements of the educational sector; the provision of a minimum of 10 years compulsory education, the renewal and reformation of curriculums, etc., are incorporated, and as a part of the Programme the new education system, which provides 8 years of Primary schooling and 4 years of Secondary schooling (the preceding two years are regarded as compulsory education), has been introduced. By enforcement of the programme reformation in 1991, Motufoua Secondary School, the subject school of this project, has been required to open to all applicants. The School therefore, has consequently found it necessary to upgrade and extend its facilities as follows:

- Extensive restoration works on the existing buildings which have been allowed to deteriorate;
- Provision of sufficient facilities to satisfy the implementation of the new curriculums;
- Extension of the School facilities to serve the increased number of students (although the capacity of the school is 300 students, the number of students is currently 330 and it is expected to need enough space for 600 students for the future);
- Improvement of teachers' accommodation (the existing teachers' accommodation has deteriorated and some of them are unable to live-in) for the enhancing of teaching environment.

Under these circumstances, the Government of Tuvalu has formulated a project for the "Upgrading and Expansion of the Educational Facilities at Motufoua Secondary School" and given it the highest priority rating within the National Development Plan IV and the Medium-Term Economic Framework Programme (1992 - 1994), as a very important and urgent project to be implemented in order to accomplish the aims of the EFL Programme. In concern with this, the Government of Tuvalu has requested Japan's Grant Aid assistance.

In response, the Japanese Government decided to examine the project, and the Japan International Cooperation Agency (JICA) hence dispatched a Basic Design Study team from 20 July to 9 August, 1994 to confirm the background of this project and to evaluate the contents of the Requests from the Government of Tuvalu.

The major contents of the study points by the Study team and the Tuvalu side are described as follows:

1. Study on the appropriate size of facilities for the projected number of students;

Through the discussion with the Tuvalu side, the Study team has found that the number of students attending Motufoua Secondary School is estimated to increase from the present number of approximately 330 to 600 within the next 7 years due to the reformation of educational system and also simply because of an increase in the children's population. In this regard, the Study team has decided to examine the appropriate expansion size based on this assumption.

2. Study on the reinforcement of the teaching situation;

In accordance with the increase of students' population, a reinforcement plan for teaching staff has been designed within the EFL Programme (increasing the number of teachers from 21 to 27), and subsequently more than 20 trainees have been sent to overseas for teacher training. The Study team has recognized that the School has a strong intention to reinforce its teaching situation as mentioned above.

3. Study on the operation and maintenance of facilities and equipment;

At present, the source of water is dependent upon rainwater and the electrical supply is generated by independent power generator sets on the site. In order to maintain a sufficient water, electrical and fuel supply after the proposed expansion of the School facilities and equipment, the Tuvalu side has already considered concrete measures and has confirmed that the supply of these utilities should be adequate.

4. Study on the management system of the School;

The team has confirmed that the School has already planned a reinforcement of the teaching and management staff as well as having formulated a budget for future maintenance and management. For the future management system, the Education Department will undertake the administration of the system with the support of the PWD (Public Works Department).

5. Study on the content of the Requests;

- The Study team and the Tuvalu side have confirmed and examined each Request by putting a priority rating to those facilities to be improved (see Annex-2 in the Minutes of Discussion).
- Teacher's accommodation has been included in the subject facilities by the strong request of the Tuvalu side in order to retain a sufficient number of teachers.
- Regarding the seawall, which was included in the original request, the Study team and the Tuvalu side have decided to delete this item from the subject facilities.

- The team has decided to consider the restoration of the existing facilities in order to minimize the construction of new facilities. However it has been recognized that the extent and method of the restoration works should be determined carefully in order to match with local construction conditions and the budget condition of the Government of Tuvalu.
- Although there was no specific request regarding educational equipment, Motufoua Secondary School requested this during discussions with the Study team. Consequently, a draft list of subject equipment has been prepared through further discussions with the Education Department.

6. Study on the relationship with other aid projects;

According to meetings with the AIDAB and UNDP, there is no prominent aid project or plan for Motufoua Secondary School at this moment or in near future, and so therefore it is not necessary to consider the duplication of this project with other aid projects. Although there is some aid from other donors such as teacher's training and curriculum development by AIDAB, in general, the aid projects for the educational sector in Tuvalu are minimal.

7. Consideration of necessary measures to be taken prior to the project implementation;

- Japanese engineers, for the construction and supervisory works will be obliged to work under severe environmental conditions, especially concerning medical, food and daily life matters, because of the location of the project site; the site being located to the northwest of the capital, Funafuti, 8 hours distant by boat. Therefore, because of these circumstances the construction schedule should be shorten by adapting rational and efficient methods.
- Construction methods should be considered to be suitable for the local construction conditions and climate, and the building design should be adjusted to suit with local conditions in order to achieve durability and reduce maintenance of the building in the long term.

Based on the above conditions, the propriety of the Project and the determination and evaluation as to the extent and contents of the Project were examined. The results of the study in detail were described in the Draft Report on Basic Design Study on Upgrading and Expansion of Educational Facilities at Motufoua Secondary School in Tuvalu.

The Agency dispatched the Study team for the explanation of the Draft Report and the final confirmation of the project with the Tuvalu side from 22 September to 6 October, 1994, and the contents of work and equipment to be procured by this Grant Aid Programme as described in the Draft Report have generally been agreed and confirmed by the Tuvalu side, including the exclusion of the Multi-purpose hall and Tennis, Volleyball and Basketball Courts from the scope of this Grant Aid, in order to enhance Tuvalu's self-help effort.

This Final Report, has been prepared based on the above procedures and results, and contains the most reasonable facility size and plan, as well as required equipment, the basic design, the implementation schedule and plan, the project evaluation and conclusion, for the materialization of this Grant Aid Programme.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that proper record-keeping is essential for the success of any business and for the protection of the interests of all parties involved.

It is noted that the records should be kept in a secure and accessible location. The document also mentions that the records should be reviewed regularly to ensure their accuracy and to identify any potential issues or discrepancies.

The second part of the document discusses the importance of maintaining accurate records of all transactions.

It is noted that the records should be kept in a secure and accessible location. The document also mentions that the records should be reviewed regularly to ensure their accuracy and to identify any potential issues or discrepancies.

The third part of the document discusses the importance of maintaining accurate records of all transactions.

It is noted that the records should be kept in a secure and accessible location. The document also mentions that the records should be reviewed regularly to ensure their accuracy and to identify any potential issues or discrepancies.

The fourth part of the document discusses the importance of maintaining accurate records of all transactions.

It is noted that the records should be kept in a secure and accessible location. The document also mentions that the records should be reviewed regularly to ensure their accuracy and to identify any potential issues or discrepancies.

The fifth part of the document discusses the importance of maintaining accurate records of all transactions.

It is noted that the records should be kept in a secure and accessible location. The document also mentions that the records should be reviewed regularly to ensure their accuracy and to identify any potential issues or discrepancies.

CHAPTER 2 BACKGROUND OF THE PROJECT

2-1 Background of the Project

2-1-1 Overview of Tuvalu

(1) Physical Conditions (Geography • Climate)

Tuvalu, lying between 5° and 10° south latitude and between 176° and 180° east longitude, is situated south of the equator in the South Pacific Ocean, slightly west of the international date line, at a distance of approximately 1,000 km north of Fiji. Tuvalu is a country of an archipelago composed of six atolls and three small reef islands including Funafuti Atoll where the capital of Tuvalu is situated. The total area of land is only 26 km² (square kilometres), but the area of territorial waters extend approximately 900,000 km². All islands are only just above sea level; the height of Funafuti, the capital, is only two meters above sea level.

Because the archipelago is situated just below the equator, the climatic conditions are characterized by the tropical-marine climate with a hot and humid atmosphere throughout the year. The winds are affected by the north-east trades and the south-east monsoon with the prevailing east wind. The temperatures range between 25 ~ 32 °C (degrees centigrade), with the hottest month in November and the coolest month in July. The annual rainfall is around 3,064 mm (millimetres). There is no distinctive change in the precipitation throughout the year, but slightly increased rainfall is usually expected between the months of January through March.

It should be noted that islands in this region are prone to disasters cause by cyclones which normally form during November through April around the Gilbert Islands and occasionally brew down south near Tuvalu. Although Tuvalu is less prone to such a natural disaster compared to other locations, when the occasional cyclone hits the Islands, serious damage by the gusty winds and high waves occurs. Therefore, for the building design of this project such matter should be considered.

We have obtained precise climatic data from the Funafuti Meteorological Bureau, and so in order to show this important aspect of the Islands, we have summarized this data as shown in Table 2-1.

Table 2-1 Monthly Climatic Data in Funafuti (1991)

Item	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Average Maximum Temperature (°C)		29.5	29.1	28.8	29.9	29.9	29.8	29.8	28.3	28.3	29.9	30.4	29.9
Average Minimum Temperature (°C)		28.0	28.0	27.0	27.3	27.6	29.2	27.7	28.1	27.4	27.7	28.0	27.9
Precipitation (mm)		317	459	439	334	261	293	241	432	225	197	199	476
Rainy Days (day)*		23	28	21	28	22	23	26	27	19	25	21	20
Average Humidity (%)		77	78	78	77	75	74	79	82	78	77	76	77

* Days ≥ 100 mm/day

Source: Statistical Abstract of Tuvalu 1984 - 1990

(2) Demographic Conditions (Population • Race • Religion)

The total population of Tuvalu is 9,405 people (1991 census data - the latest available statistical data for Tuvalu), and 42% of these people reside in the capital, Funafuti Atoll. The population of Tuvalu is gradually increasing year by year, with the rate of increase at 1.7% per annum, which is comparatively high compared to regional averages (see Table 2-2 and Figure 2-1). If this situation continues, it is projected that the population of Tuvalu will double by the year 2030. Another notable characteristic is that the age group of under fifteen years old is the largest generation group in Tuvalu.

Ninety-six percent of the population are Tuvalu people (Polynesians) and 2.2% are Micronesians. People speak usually Tuvalu language (Polynesian extraction and close to Samoan) and English.

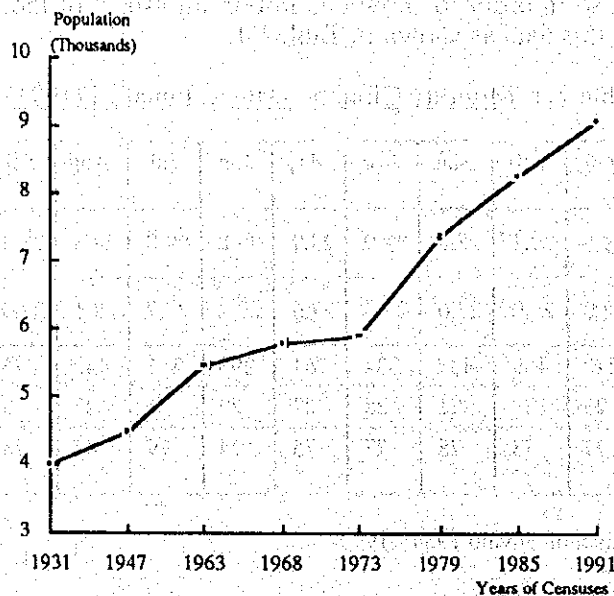
The major religious belief of the Tuvalu people is Christian (Protestant), and 97% of people belong of the Tuvalu Church.

Table 2-2 The Spread of Population on Tuvalu

Islands	1931	1947	1963	1968	1973	1979	1985	1991
Nanumea	770	746	1,051	1,076	977	844	879	824
Nanumaga	424	524	544	585	587	605	672	644
Niutao	645	644	797	796	907	866	904	749
Nui	410	490	528	569	569	603	604	606
Vaitupu	720	728	823	876	948	1,273	1,231	1,202
Nukufetau	394	524	655	646	620	626	694	751
Funafuti	413	528	687	826	871	2,120	2,856	3,839
Nukulaelae	178	282	317	354	343	347	315	353
Niufakita	40	21	42	54	65	65	74	75
TOTAL	3,994	4,487	5,444	5,782	5,887	7,349	8,229	9,043

Source: Statistical Abstract of Tuvalu, 1984 - 1990

Figure 2-1 Tuvalu Population Census Results



Source: Statistical Abstract of Tuvalu, 1984 - 1990

(3) Politics

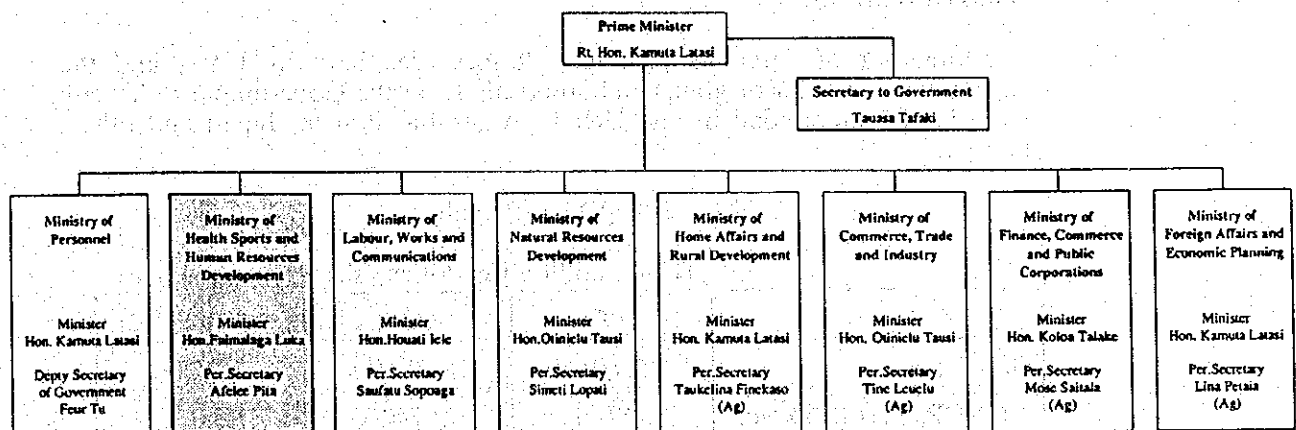
1) Domestic Administration

Tuvalu (former the Ellice Islands) and the Gilbert Islands (now Kiribati) were united and called the Gilbert-Ellice Islands under a protectorate of the United Kingdom (UK) in 1882. They became a British colony in 1915. During the years between 1942 through 1945, the Japanese army occupied the Gilbert Islands, and the US Army had a base on Funafuti in the Ellice Islands. Then, in 1975, the Ellice Islands were separated from the Gilbert Islands and became a British colony, Tuvalu. Tuvalu finally became independent from the UK on the first day of October, 1978. The present status of Tuvalu is as a member of the British Commonwealth of Nations, a constitutional monarchy with a sovereign power, Queen Elizabeth, and a Governor appointed to authorize her sovereign power.

Government in Tuvalu was by the national assembly constituted in 1975 when the Gilbert Islands separated from the Tuvalu Islands. This government has continued as the present government, the Government of Tuvalu (GOT), since independence from the UK. GOT has a legislative chamber which has 12 Parliamentarians with 4 year terms. Voting is permitted by both males and females over the age of 17 years old. The convocation and dissolution of Parliament are directed by the Governor with coordination from the Prime Minister. The Prime Minister, is elected from the Parliamentarians in the Parliament, and presides over the Cabinet with four other Ministers.

The organization chart of the GOT is shown in Figure 2-2 below.

Figure 2-2 Government of Tuvalu



Source: By field survey

As for local administration, there is a Town Council in Funafuti, and Island Councils provided on another eight islands, administer each district by the elected representatives who live there.

2) Diplomatic Relations

<Relationship with foreign countries>

On diplomacy, Tuvalu has established diplomatic relations with 19 countries including the UK and Australia, but there are no relationships with any communist countries yet. As for foreign consulates on Tuvalu, the Fijian High Commissioner's Office is the only one. Tuvalu is not a member of the UN, primarily due to its financial difficulties.

Table 2-3 shows some contributions of ODA to Tuvalu, and the conspicuous assistance from the UK is shown before 1989.

The capital investment of Government was largely dependent on the grant aids from the British Government, the former suzerain. However, in accordance with the agreement between Tuvalu and the UK at independence, the amount of grant has been diminished over the years and will be stopped in 1996. In order to support the unstable economical foundation of Tuvalu and fill the gap of the sharply decreasing British grants, the Tuvalu Trust Fund (TTF) was established in June 1987 by contributions from Tuvalu, Britain, Australia, New Zealand, Korea and Japan.

The major task of TTF was envisaged to replace the recurrent grant aid from the UK. The Fund have been appropriated for the maintenance and management expenses of various projects, and earnings of the Fund have been reserved for further investment.

Donors of capital contributions are able to select the type of investments such as national bonds, securities, etc., and are able to give advice on Tuvalu's National Budget.

The meeting of Tuvalu's principle donors was held in 1991, and the supplementary order of grants and proposals from the Government of Tuvalu were better understood by the UNDP, Australia, France, Japan and others present.

Table 2-3 ODA to Tuvalu

(Unit : million US-dollar / share in percentage)

	1987	1988	1989
Grand Total	25.7/100	14.0/100	6.9/100
UNDP, UNESCO etc.	0.8/3.1	0.7/5.0	1.2/17.4
DAC	24.9/96.9	13.3/95.0	5.7/82.6
- United Kingdom	(11.7/45.5)	(10.1/72.1)	(0.6/8.7)
- New Zealand	(6.5/25.3)	(1.2/8.6)	(1.1/15.9)
- Australia	(6.4/24.9)	(1.6/11.4)	(1.0/14.5)

Note : DAC - Development Assistance Committee

<Relationship with Japan>

Japan accepted Tuvalu's independence in 1978 and established diplomatic relations on 30 April, 1979. At present, the Japanese Embassy in Fiji concurrently administers duties on Tuvalu. Originally, Japan did not have a close relationship with Tuvalu, but by the advancement of the Japanese fishing industry (i.e., tuna and bonito fishing) into the sea around Tuvalu, a fishery agreement was concluded with Tuvalu in 1986.

Japan initially contributed A\$0.7 million to the Tuvalu Trust Fund (TTF) which was established in 1987 and participated in the Meeting of Tuvalu's Principle Donors in 1990.

As shown in Table 2-4, all Japanese financial assistance was provided by grant aid and related to fisheries; for technical cooperation, the dispatch of experts and the acceptance of trainees were made frequently.

Table 2-4 Japanese Aid by Type and Year

(Unit: million J-Yen)

Year	Loan assistance	Grant Assistance	Technical Cooperation
Cumulative Total by 1987	N/A	¥558 Fisheries promotion plan (1980: ¥400) Fishing village development plan (first quarter) (1987: ¥158)	¥203 Acceptance of trainees 9 persons Dispatch of experts 3 persons Dispatch of field survey team 12 persons Provision of equipment ¥23.2 Development study ¥2
1988	N/A	¥107 Fishing village development plan (second quarter) (¥107)	¥388 Acceptance of trainees 1 person
1989	N/A	¥146 Fishing village development plan (third quarter) (¥1.46)	¥8 Acceptance of trainees 4 persons Dispatch of experts 1 person
1990	N/A	N/A	¥18 Acceptance of trainees 3 persons Provision of equipment ¥0.6
1991	N/A	¥396 Fishing village development plan (final quarter) (1987: ¥396)	¥16 Acceptance of trainees 3 persons Provision of equipment ¥1
1992	N/A	¥3 Small scale grant assistance ¥3	¥6 Acceptance of trainees 4 persons
Total	N/A	¥1,210	¥639 Acceptance of trainees 24 persons Dispatch of experts 4 persons Dispatch of field survey team 12 persons Provision of equipment ¥24.9 Development study 2

Note: 1. Year divided by the fiscal year
2. Amount of assistance for Grant assistance is based on the exchanges of notes basis, and for technical cooperation is based on JICA disbursement basis.

Source: Japan's Grant Aid Assistance, 1993

(4) Economy and Industry

<Economic Activity>

Because Tuvalu is a small archipelago composed of small reef islands and atolls with limited land spaces and poor soil conditions which make it difficult to grow agriculture products, financial fundamentals have not been developed yet.

Private sector has not fully established yet, and therefore, while the main sources of the national revenue are generated by the export of copra and the remittance from Tuvaluans working overseas, the country is largely dependent on foreign aids, and with a quarter of GDP contributed by the capital investment of GOT.

Tuvalu's financial index is as shown in Table 2-5.

Table 2-5 Gross Domestic Product and Some Allied Aggregates
(At Current Prices)

(Value in AS'000)

Items	1988	1989	1990
A. General			
1. G.D.P. at Factor Cost	9,087.2	10,078.51	1,649.5
2. Population Projection	8,669.0	8,848.0	9,045.0
3. G.D.P. per Capita at Factor Cost	1,048.2	1,139.1	1,287.9
4. Funafuti Consumer Price Index (1983=100)	127.4	128.6	131.2
B. Less Compensation to Expatriates			
1. G.D.P. at Factor Cost	7,905.1	9,269.0	11,099.4
2. Population Projection	8,588.0	8,727.0	8,971.0
3. G.D.P. per Capita at Factor Cost	920.5	1,062.1	1,237.2

Source: National Account of Tuvalu, 1988-1990

<Industry>

The major industries of Tuvalu are agriculture, fisheries and forestry, and these sectors contributed 24.4% of the Gross Domestic Product in 1990.

The private sector has not been active yet, and therefore most people depend on the public sector, which is also very limited with the exports of copra and philatelic sales. Although philatelic sales have diminished in recent years, they contributed a quarter of the national revenue during the early 80's. In comparison with these, imports have been extended from food to machinery products, and so balances in Tuvalu's external trade have constantly been in deficit. The major trading partners (imports) are Australia (approx. 40%) and Fiji (approx. 35%), with Japan contributing for only 3% of the total. The imported commodities from Japan were mainly industrial goods, machines and so forth.

Table 2-6 below shows GDP during 1989 and 1990.

Table 2-6 Gross Domestic Product by Industrial Origin.
(at Current Prices at Factor Cost)

Value: A\$'000(%)

	1989		1990	
	Value	%	Value	%
1. Agriculture, Fishing, Forestry and Hunting	2,481.1	(24.6)	2,841.0	(24.4)
2. Mining and Quarrying	316.6	(3.1)	318.5	(2.7)
3. Manufacturing	304.6	(3.0)	364.1	(3.1)
4. Electricity	196.0	(1.9)	236.7	(2.0)
5. Construction	1,799.1	(17.9)	1,934.2	(16.6)
6. Wholesale and Retail Trade, Hotels & Restaurants	808.5	(8.0)	1,612.4	(13.8)
7. Transports and Communications	695.8	(6.9)	405.5	(3.5)
8. Banking, Finance, Real Estates and Business Services	906.0	(9.0)	1,034.5	(8.9)
9. Public Administration and Other Services	2,570.9	(25.5)	2,902.3	(24.9)
10. Total G.D.P. at Factor Cost	10,078.6	(100.0)	11,649.4	(100.0)

Source: National Account of Tuvalu, 1988-1990

In the agriculture sector, besides the only exporting product of copra, taros are mainly cultivated with further plantations of copra proceeding. Because of being an insular country; as well as the enforcement of a 200 mile fishery zone, by which Tuvalu was able to secure their rich fishery resources; it is hope that the fisheries sector can support Tuvalu's economical growth. Tuvalu has a wide variety and abundance of both pelagic and coastal fish, especially bonito which has a great potential for commercial development. However, because of the lack of fishing expertise, and the limited water supply (water is mainly dependent upon rainwater) preservation and processing works are restricted, and thus these problems should be solved prior to the development.

Despite the major issues to be solved and improved in Tuvalu's industry, such as farming techniques in the agriculture sector and preservation and processing techniques in the fisheries sector, there exists a shortage of skilled workers in various fields. Therefore, improvements to the standard manpower are urgently required.

2-1-2 Outline of Related National Development Policy

(1) National Development Objectives

Tuvalu recently become independent from the UK on the first of October 1978. General principles of government policy are democracy, fairness and the encouragement of extensive participation in development planning by the people of Tuvalu.

Long term objectives in social and economical development are as shown below:

- Sustained long term growth of the Tuvaluan economy without undue corruption of social and cultural values;
- Improvement in the distribution of income through the diversification of the economic base, by enhancing private sector initiative, improving infrastructure and increasing economic activity without harming the environment;
- Establishing macro-economic policies and strategies within the public sector to direct and manage financial, economic and social affairs (Tuvalu, Medium-Term Economic Framework Programme, 1992).

In order to achieve these development objectives, the following four areas of policy are regarded as prime importance:

- Economic development planning;
- Fiscal policy, through enhanced financial planning and management;
- Foreign and international relations;
- Environmental conservation and protection (ibid., 1992).

(2) Medium-Term Economic Framework Programme

Based on the long term development planning objectives as mentioned above, GOT has been implementing Medium Term Development Planning in recent years. Now, in succession to the National Development Plan IV (1989 - 1991), the Medium-Term Economic Framework Programme (1992 - 1994) is being applied, and the following five specific sectors are anticipated to be reinforced by the Programme:

- Human resource development;
- Physical infrastructure development;
- Private sector development;
- Rural/outer island development; and
- Natural resources development (ibid., 1992).

Especially in human resource development, the Programme regards that the enhancement of social and economical development is achieved by the upgrading of people's education on Tuvalu.

Despite the fact that the human resource is regarded as the most important asset in Tuvalu, the educational situation and the standard of living are currently in an undesirable situation, and largely depend on aid from the donor countries. GOT therefore, has recognized that human resource development should be necessary and achieved in long term.

With commencement of the medium-term development, GOT plans to focus on education and training, manpower planning, and the improvement of health services.

Amongst these, the objectives of manpower education and training are; improvement of the educational system by the enforcement of the "Education for Life Programme," and through this, improving living standards, enhancing people's independence, and contributing the development of human resources in the whole nation. The restructuring of the education system will be done based on the following assumptions:

- As the principal resource and asset of Tuvalu, it is imperative that human resources be nurtured through appropriate investment in education;
- Appropriate education content and structure can align aspirations with opportunities;
- Education is necessary to raise the productivity of the subsistence sector which occupies about seventy percent of the total human energy of Tuvalu;
- Improvements in human resource development must coincide with measures to improve the effective utilization of human resources and creation of job opportunities (ibid., 1992).

(3) EFL (Education for Life) Programme

The undesirable situation in the social and economical development of Tuvalu is largely influenced by a lack of intellectual and skilled people who have completed sufficient education and training for various fields of industry.

Some problems lying in the primary and secondary education of Tuvalu are as follows:

- An acute miss-match between the "outputs" of the system and the needs of individuals and the country.
- A restricted access to schooling and higher education.
- A curriculum which is over-academic and which does not give technical vocational study an important role.
- A sub-system of assessment which is fragmented and does not progressively monitor either individual or national standards.
- A lack of official educational provision for pre-school children, adults and for those people with disabilities.
- A lack of basic education resources.
- A need for more houses for teachers, especially in the outer islands (ibid., 1993).

In view of the above, GOT is implementing the EFL Programme as the top priority in the development policy with the creation of various employment, as well as educational and training opportunities.

This EFL Programme is based on the report, "Education for Life; A Review of Manpower, Education and Training Needs of Tuvalu" prepared by the Government of Australia, New Zealand and the United Kingdom in 1988. The EFL 1988 was revised as the "EFL Implementation Appraisal" in 1991, from which time GOT decided to implement this Programme.

The objective of the EFL Programme is to offer various opportunities for the people to obtain some knowledge on technical skills, and thus contribute to the improvement of productivity while still conserving Tuvalu's tradition and culture. The following activities have been formulated with 17 planned projects on each education sector:

- 1) Re-designing the administration of Tuvalu's education so that overall control rests with the Department of Education in Funafuti;
- 2) Providing a minimum of ten years compulsory education for all children between ages 6 to 15 (Years 1 to 10);
- 3) Providing pre-school education for 3 year old children linked with the Primary sector;
- 4) Establishing an Adult Education network;
- 5) Improving facilities and services for the education and rehabilitation of disabled people;
- 6) Increasing the provision of technical and vocational education following Year 10 through the establishment of a new Tuvalu Technical Education Centre;
- 7) Renewing and reforming the curriculum at all levels so that technical/vocational courses and Tuvalu culture are given appropriate prominence;
- 8) Setting an assessment mechanism which will regularly monitor individual achievements and national standards;
- 9) Setting an in-country teacher upgrading system in order to ensure the required supply of trained, quality teachers;
- 10) Establishing a Careers Advisory Committee to guide students paths following Year 10 in harmony with individual preferences and national needs;
- 11) Carrying out extensions, refurbishment and rehabilitation of education buildings in order to meet the increased demands made on the system (EFL Programme, Round Table Meeting on Development Assistance Requirements, 1993).

In order to provide desirable facilities for implementing the above-mentioned activities (i.e., provision of a minimum of ten years compulsory education and improvements in the curriculum), GOT has requested the upgrading and expansion of educational facilities at Motufoua Secondary School. By implementing these activities and projects, as well as the improvement of the educational environment, the advancement of educational effects are anticipated. GOT is rating the improvement of secondary education as the first priority in the development policy.

For the establishment and implementation of the EFL Programme, financial assistance by UNDP (United Nations Development Program), enforcement by UNESCO (United Nations Educational, Scientific and Cultural Organization), technical support by SPBEA (South Pacific Board for Educational Assessment) and USP (University of South Pacific) and aid assistance from donors including AIDAB (Australian International Development Assistance Bureau)

have been arranged. GOT is also expecting further assistance from various countries for the execution of the EFL Programme. Because the system for primary education has been extended from a 6 school year system to an 8 school year system, an improvement to primary school facilities is also necessary. The French Government therefore is currently appraising assistance cooperation on this point. For the improvement of the Secondary School facilities for Japan's Grant Aid assistance has been requested.

2-1-3 Educational Sector Overview

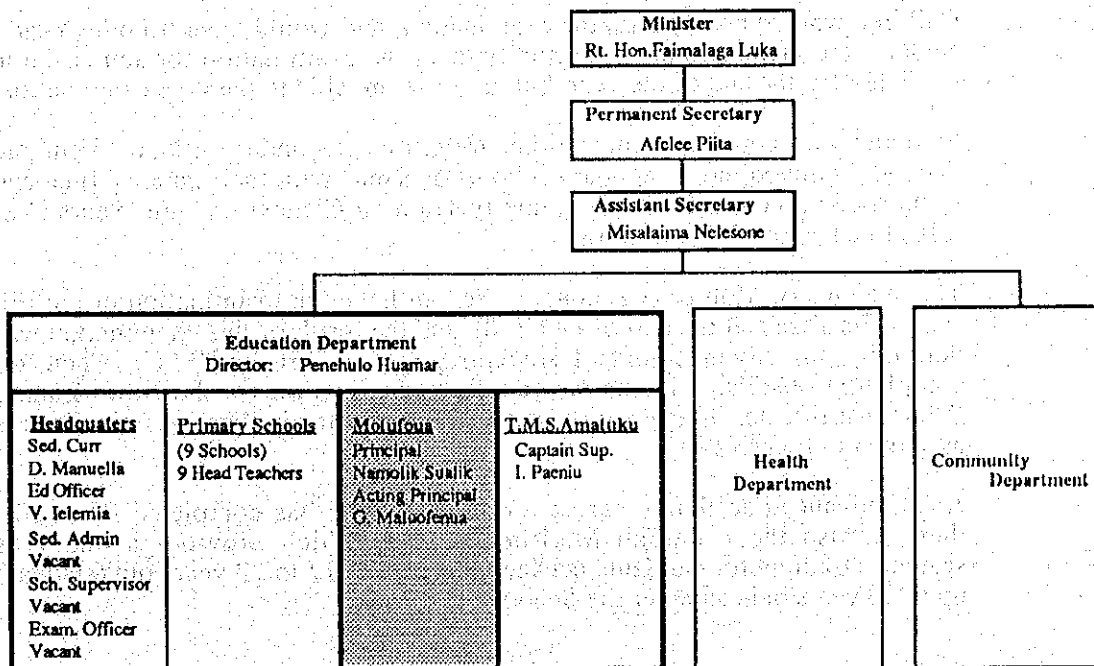
(1) Organization of the Administration of Educational Sector

The development of human resources is governed by various Ministers. Amongst of these, particularly the Ministry of Health, Sports and Human Resource Development (MHSHRD) is entrusted, and for Adult Education and Higher Education in oversea, the Office of the Prime Minister (OPM) is entrusted.

The organization chart of MHSHRD is as shown in Figure 2-3 below, with the Education Department (ED) in charge of educationally related matters. The ED used to have only jurisdiction over primary education, with the secondary school and other educational facilities being administered by themselves.

In terms of the EFL Programme, responsibility for the coordination between the organizations and enforcement and management of the programme are entrusted to ED and MHHRD. The director of ED is the general manager of the EFL Programme with the support of the EFL programme manager.

Figure 2-3 Organization Chart of Ministry of Health, Sports and Human Resource Development



(2) Education System

The former Education System was established in 1982 and provided guidance up until the submission of the EFL report in 1988. The EFL Programme is being implemented with the goal of improving the education system. The EFL Programme is currently being executed, and as such an upgrading and extension project for Motufoua Secondary School is requested as a part of the EFL Programme.

Changes in the educational system and the allocation of Motufoua Secondary School within the overall education system are as shown in Figure 2-5.

1) The educational system before the implementation of the EFL Programme

Compulsory education was established in 1982 and was exercised for the ages of 6 through 15. Duration of education is six years in primary education (Y1 - Y6; no fees) as compulsory and another six years in secondary education (F1 - F4 in junior secondary schooling and F5L and F5U in senior secondary schooling) with the four years of the preceding period as compulsory.

There are 12 primary schools (public schools : 9, church-run schools : 3) scattered on various islands. The percentage of school attendance is almost 100%. In contrast with this, there are only two secondary schools; one is Motufoua Secondary School on Vaitupu Island (a public School); and another one is Fetuvalu Secondary School on Funafuti Atoll (a church-run school). Although there are many children who wish to attend Motufoua Secondary School, the only public school on Tuvalu, only about 25% of the applicants are allowed to enter the School through the entrance examination. Because of the limited facility space and the restricted financial support, the School needs to control the number of students that can attend.

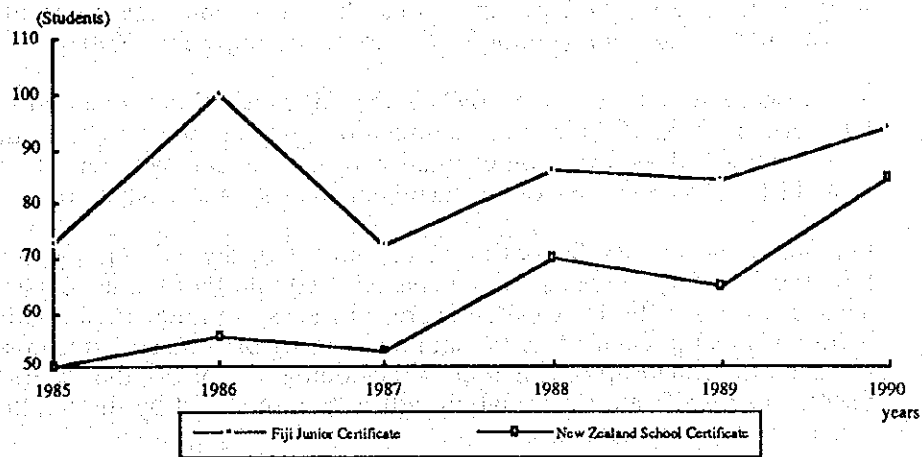
Children who could not pass the examination, and would have become Year 7 students are given another opportunity to sit the examination for admission to the School at the end of the year, but only few are able to pass the examination.

Students who could not enter either Motufoua Secondary School, Fetuvalu Secondary School nor secondary schools overseas with their parents' financial support can go on to CTC (Community Training Center) for three years (Y8-Y10) to take vocational training.

The students of Motufoua Secondary School have the examination of the Fiji Junior Certificate at the end of F4 (Y10), and the result of this examination will determine the advancement of students going to F5L and F5U. Then, on completion of F5U, students take another examination for the New Zealand School Certificate. The result of successful applicants in these examinations is as shown in Figure 2-4.

As an advanced academic career for students who has completed F4 (Y10), there is also the Amatuku Maritime School, which provides a one year seamen's training for students between the ages of 17 to 22 years old (students up to 30 years old can enter the School).

Figure 2-4 Results of Fiji Junior & New Zealand Examinations



Source: Statistical Abstract of Tuvalu, 1984 - 1990

As there is no tertiary level education on Tuvalu, students who have completed secondary school education and want to go on to university can only go on to overseas universities including most dominantly USP (University of South Pacific), or USP Extension Centre in Funafuti. However, the opportunity to study in foreign countries is dependent on their financial situation or the availability of a scholarship.

The advancement of students' education in Tuvalu is shown in Table 2-6 as below.

Table 2-7 Summary Statistics of Educational Institutions - 1990

Type of Institutions	No.	Enrollment Students	Teaching Staff		Student/Teacher Ratio
			Established	In Post	
1. Kindergarten*	13	614	37	37	17
2. Gov't. Primary School	9	1,485	55	48	31
3. Non-Gov't. Primary School	2	N/A	N/A	N/A	N/A
4. Community Training Centre	8	271	18	16	17
5. Secondary School	1	308	21	N/A	15
6. Maritime School	1	58	10	11	5
7. USP Extension Centre	1	60	2	4	15

*Note: Information is for the year 1987 only

Source: Education for Life, 1988

2) Education System after the implementation of the EFL Programme

By the EFL Programme, the prospective education system of Tuvalu has been planned as follows:

Compulsory education will be provided for children from the age of 6 to 15 for 10 years, with 8 years in Primary schooling (Y1 - Y8) and 4 years in Secondary schooling (Y9 - Y12 or F3 - F6: both Y and F classes are mixed).

On completion of Primary schooling, students will sit the National Year 8 Monitoring Examination; although regardless of their results, students who wish to advance their education will be allowed to enter the proceeding term for secondary education (Junior Secondary schooling) (Y9 - Y10 or F3 - F4).

Then, on completion of Year 10 (F4), the Education Department will execute the National Year 10 Selection Examination by themselves. The result of the Examination will be based on evaluation of the students who wish to go on to Year 11 (F5), with the rate of advancement controlled at around 70%.

For Senior Secondary Schooling (Y11 and Y12), the existing curriculum of F5L and F5U for two years will be consolidated into F5 for one year and as for Year 12, F6 will be provided. There will be a National Examination held before advancing from F5 to F6, and the number of successful students will be screened to around 60%. Then after the completion of F6, the Pacific Senior Secondary Certificate Examination will be administered by the South Pacific Board For Educational Assessment.

In regard to the Amatuku Maritime School, the facility and curriculum of the School will be extended and improved, and it will be called the Tuvalu Technical Education Centre (this improvement has not yet been started at the time of our survey). There will be three courses available for students. Seamen's and vocational training courses will commence in Amatuku and a secretarial course will be held at the USP Extension Centre in Funafuti.

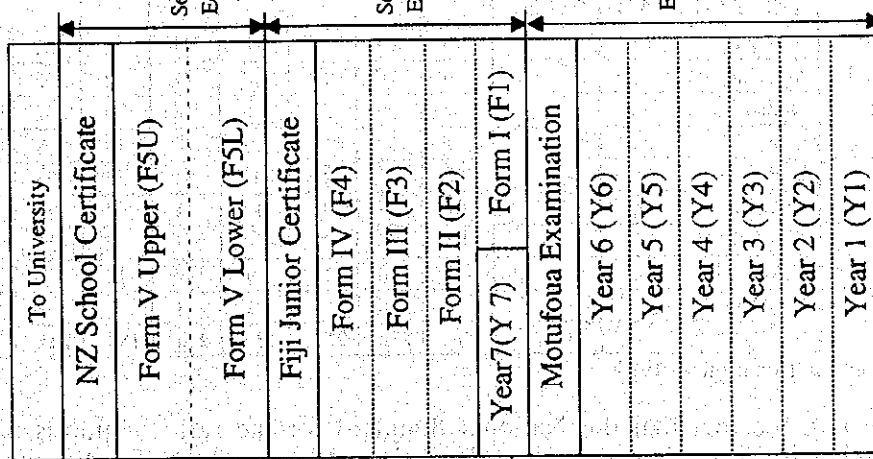
3) The existing education system in 1994

At present, the state of the education system in Tuvalu is somewhat integrated in character, because it is shifting from the old system to the proposed system based on the EFL Programme. Form 1 and 2, which used to be held in Secondary schooling, are transferred to Primary schooling, and all students, who have completed the compulsory education of eight years in Primary schooling, are able to enter the compulsory Junior Secondary Schooling for two years (Y9 and Y10). Another two years are available to the students who have passed the selection examination for Senior Secondary school (Y11 and Y12). The Community Training Centre was consequently abolished in 1993.

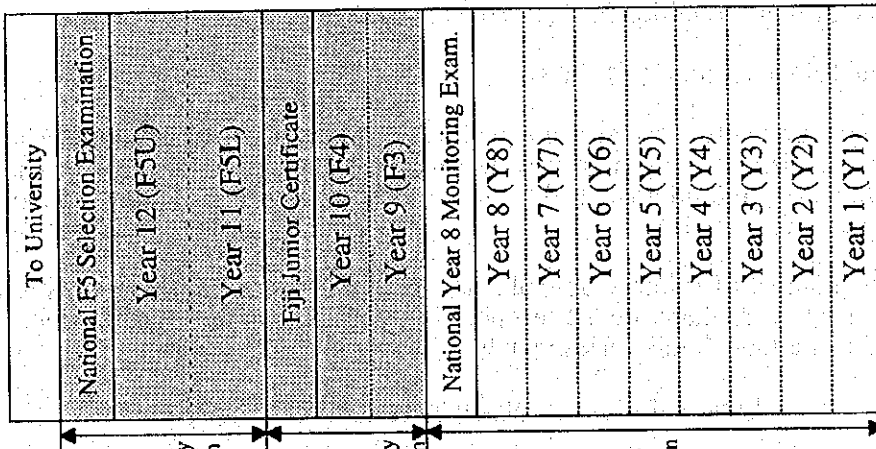
Senior Secondary schooling for two years (Y11 and Y12) still remains as F5L and F5U, however these classes will be consolidated as F5 and F6 and will be added next year (1995).

The Tuvalu's education systems before and after the implementation of the EFL Program are summarized as shown in Figure 2-5.

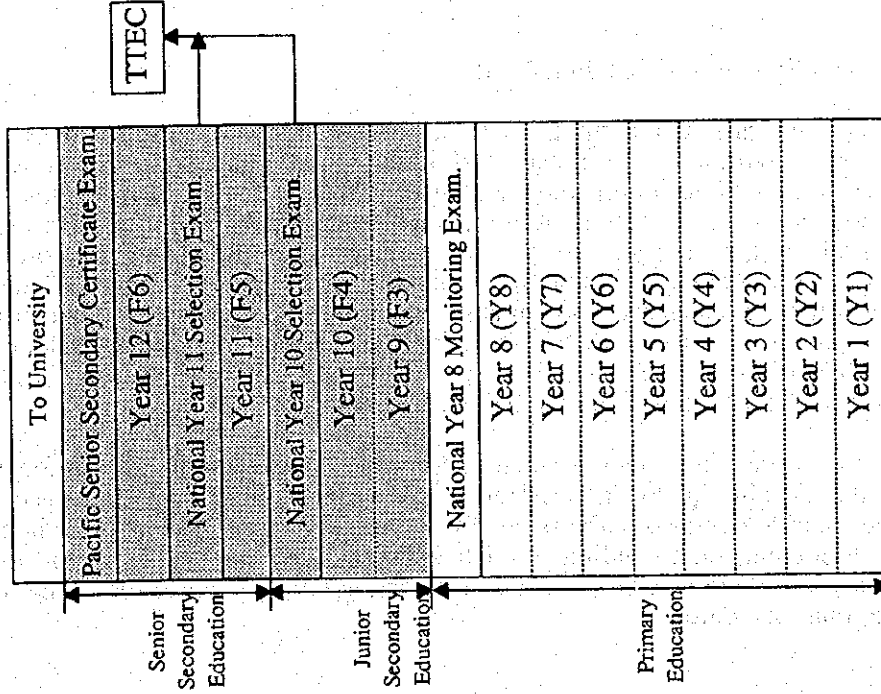
Education System before the implementation of the EFL Programme



Existing education system in 1994



Education system after the implementation of the EFL Programme



- Notes :
- 1 Motufoua Secondary School
 - 2 AMS : Amatuku Maritime School
 - 3 CTC : Community Training Centre
 - 4 TTEC : Tuvalu Technical Education Centre

Figure 2-5 Changing of Education System