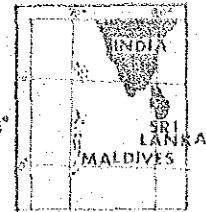
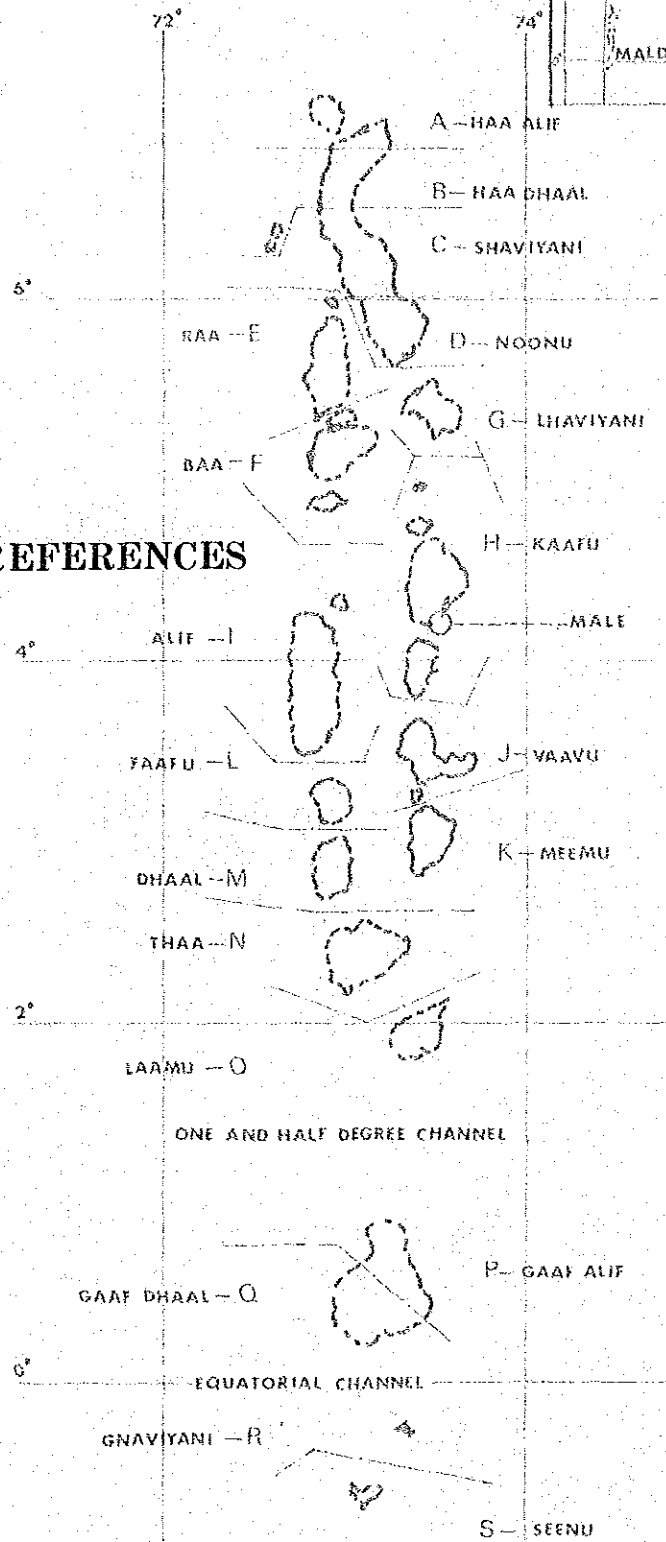


DATA SECTION

REPUBLIC OF MALDIVES



I REFERENCES



I-1 Proposal from the Government of the Republic of Maldives



MINISTRY OF EDUCATION
MALE,
REPUBLIC OF MALDIVES

Ref No:22-A/79/22:2

10th April, 1979.

His Excellency Mr. Keisuke Ochi,
Ambassador to the Republic of Maldives,
Embassy of Japan,
20, Gregory's Road,
Colombo 7,
REPUBLIC OF SRI LANKA.

Dear Mr. Ambassador,

Expansion of Primary Education in the Maldives

I refer to our letter No: 22-B/78/22:2 of 12 July 1978 to your Excellency regarding the request made by the former Minister of Education Hon. Abdul Sattar for financial aid to construct 2 Primary Schools in Male'. Accordingly correspondence have been exchanged between your Excellency's mission and this Ministry relating to the necessary information.

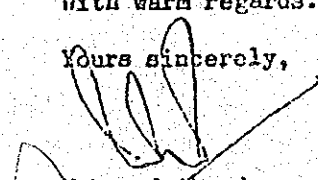
However, I take this opportunity to convey to your Excellency and through you to the Government of Japan that the present administration of Maldives gives its top priority to seek ways and means to extend primary education to the deprived majority of our children in the islands.

Your Excellency will note from the enclosed project documents that almost 90% of the children between the age group 5 - 15 are unfortunately without the very basic primary education.

Therefore, it is my sincere hope and desire that your Excellency will kindly avail priority to pursue this matter urgently.

With warm regards.

Yours sincerely,


Mohamed Ahmed
UNDER-SECRETARY.

ESTABLISHMENT OF PRIMARY EDUCATION IN THE INHABITED ISLANDS OF THE MALDIVES

INTRODUCTION

In the Republic of Maldives, there are 202 inhabited islands with a total population of 143,046 of whom almost 47,220 are within the school going age group of 2½ to 15 years. In the past, primary and secondary education has only been established in the capital island, Male'. Therefore, while the majority of the school going age population is in the islands, the government is now giving special consideration and priority to establish primary schools at a very modest standard so as to establish such school in the maximum number of inhabited islands.

OBJECTIVES

The Educational Development Centre of the Ministry of Education in conjunction with the UNDP and UNICEF has planned to establish 19 community schools in the atolls whereby each atoll will have one school in the most densely populated island. These schools will only be able to cater for a total enrolment of 200 students. This project will be completed by 1982 and yet this educational component cannot share more than 6% of the demand for the basic education in the atolls.

The present day Government, on its part, will also undertake to establish 20 community level primary schools in another 20 more islands of the remaining 183 islands whereby leaving a balance of 163 islands without schools for basic primary education.

While considering the fact that the regular school enrolment rate is approximately 10% of the total school going age of 2½ to 15 years old in the Maldives, this pressing demand is considered the priority of the administration.

Considering the fact that an extension of the government sponsored primary education must aim at latent talents for equal opportunity so as to contribute to their own development and that of the community as a whole. The opportunity for primary education for all the children on a fair basis is an unavoidable target. Further more this form of primary education in the atolls will almost be the only solution for the terminal stage of education for the vast majority. This will provide a foundation upon which young people will be able to adjust to change and participate intelligently in social and economic development which is most seriously lacking in the atolls at present. Therefore it is the sincere desire of the Ministry to request the Government of Japan to enable us to divert the requested \$ 1.46238 originally intended to cover the cost of establishing 2 secondary schools in Male', for establishing 19 such primary schools as detailed

in the project document.

However, the cost for the reclamation of land for those two schools totalling to U.S. \$ 123,664,12 will not be needed if necessary approval could kindly be obtained from the appropriate authorities in Tokyo to bear the cost of this project totalling to U.S. \$ 965,200.

As it is the firm policy of the present Government to endeavour to provide basic education to the maximum number of the Maldivian youth on an equal footing, it is hoped that this project will be considered favourably as soon as possible.

WORK PLAN (AS REVISED)

EACH SCHOOL WILL CONSIST OF:

1. One hall of 110' x 21' wide.

- (a) This hall will be divided into four classrooms by room divider cupboards as in annex 4
- (b) Each class will be 26' x 21'
- (c) Each class will have 40 students so as to cater for 320 students in two sessions.

2. One Office room of 11' x 21'

3. One store room of 11' x 21'

4. Four toilets.

CONSTRUCTION DETAILS:

Each classroom with

- (a) The hall will face the west
- (b) Walls are to be built on both ends of the hall.
- (c) Low walls of 3½' height on both sides of the hall with 7 pillars (1' x 1') of 10' height.
- (d) The walls on both sides of the hall with 2 fan lights 5' x 18".
- (e) The Office room and the store room will be 11' wide and 21' long each with roofing leaning to both sides of the building with central height of 21'

FURNITURE REQUIREMENTS.

Each classroom with

- (a) 20 desks 4' x 1½' (each for two students)
- (b) 20 benches 4' x 1' x 1½'
- (c) 1 table 3' x 2'
- (d) 1 chair
- (e) 1 blackboard

Office room with

- (a) 1 table 5' x 3'
- (b) 5 chairs
- (c) 1 cupboard

I-2 Itinerary of survey

The survey team has conducted a 21-day field survey from Oct. 22, 1979-Nov. 11, 1979.

The itinerary of the survey is as follows:

<u>Date</u>	<u>Day</u>	<u>Survey Schedule</u>	<u>Lodging</u>
Oct. 22	Mon	Lv Tokyo for Colombo	Colombo
23	Tue	Conference & Courtesy to the Japanese Embassy	"
24	Wed	Lv Colombo for The Maldives Conference with the Counterparts	Male Sosunge HH
25	Thu	Courtesy visit to the Ministry of Education & conference Conference with Mr. Mizota (Officer of UNICEF)	" "
26	Fri	Moslem Holiday Tour of city Conference with the Counterparts	" "
27	Sat	Conference with Mr. Mizota (UNICEF) Conference with the Counterparts	" "
28	Sun	Internal Conference	" "
29	Mon	Leader, Minoshima: Velidhoo Island of Noonu atoll (Inspection construction site of UNICEF community school) Others: Conference with the Counter parts	Veridhoo Male
30	Tue	Islam New Year Lv. Veridhoo for Eidahafussi (UNICEF community school) Social meeting with Ambassador of Japan, Mr. Ochi at Bandos Island	Male Sosunge HH
31	Wed	Islam New Year Lv. Eidhafusi for Male Tour of city	" "
Nov. 1	Thu	Internal conference Islam New Year	" "
2	Fri	Conference with Hoko Suisan. Co, and others	" "
3	Sat	Internal conference	" "
4	Sun	Conference with NPA, MSL and Alia store Conference about Construction Plan	" "
5	Mon	Internal Conference Inspection of VTC	" "
6	Tue	Conference about Minutes at EDC	" "
7	Wed	Conference about Furniture Dinner Party under the auspices of the Ministry of Education at the ICE-GE	" "
8	Thu	For Villingili Dinnerparty under the auspices with Leader and he team member Signing of minutes	Villingili
9	Fri	Lv. the Maldives for Colombo	Colombo
10	Sat	Give a report of survey to Mr. Suzuki secretary of Embassy Lv. colombo for Singapore	Singapore
11	Sun	Lv. Singapore for Tokyo	

NOTES: NPA = National Planning Agency
MSL = Maldivian Shipping Ltd
VTL = Vocational Training Center

I—3 Counterparts of the Republic of Maldives

Mohamed Latheef	Under Secretary Aids Section Ministry of Education
Abdul Azeez Yoosuf	Under Secretary Schools Section Ministry of Education
Adbullah Rasheed	Teacher/Supervisor Ministry of Education
Abdul Sattar Hassan	Under Secretary Educational Development Centre Ministry of Education
Rifath Afeef	Architect Architectural Section President's Office
Ahmed Saleem	Architect Architectural Section President's Office

I-4 Minutes

MINUTES OF DISCUSSIONS
FOR THE BASIC DESIGN ON SCHOOL BUILDING CONSTRUCTION
IN THE REPUBLIC OF MALDIVES

Under the instruction from the Government of Japan, Japan International Cooperation Agency (JICA) organized and despatched the basic design survey team headed by Mr. Kaeru Okabe with three architectural experts to the Republic of Maldives for a period of three weeks from 22nd October, 1979. Having completed a series of meetings, data collections and field surveys to some islands in the Atolls, and in Male', both sides confirm the following points.

岡部 薫
.....
K. Okabe
Japanese Survey Team Leader

.....
Mohamed Noordeen
Deputy Minister of Education.

1. Mr. Mohamed Zahir Hussain, Minister of Education of the Republic of Maldives briefed on the educational policy of the Government of the Republic of Maldives to the survey team. They are as follows:
 - A. Expansion of primary education to the entire primary school going age population, together with the implementation of social education to the maximum number of inhabited islands in the 19 Atolls (local provinces) is considered to be a very high priority policy of the present administration.
 - B. The Government is now planning to establish a new educational system in Maldives as shown on chart I, which will be very important part of National Development Five Year Plan (1980 - 1985) under compilation at present. The Government will be formulating laws and regulations for the purpose of executing this new educational system.
 - C. Based on the new educational system, the Maldivian Government is endeavouring to establish as many government sponsored primary schools as on selected islands of each of the 19 Atolls. The first phase of the establishment program for the primary schools is shown in list II. The 19 primary schools requested for the Japanese aid will play a very important roll in the whole establishment program of government primary schools. These are the reasons for requesting the construction of all of the 19 primary schools, one in each of the 19 atolls, as soon as possible under the Economic aid of the Japanese Government.
 - D. Taking into account of the political, administrative and other social factors, 19 islands were selected from 19 atolls for the construction of primary schools to be aided by Japan. It is confirmed that the proposed islands will not be changed in the future.
2. Realizing the great importance of establishing this new educational system in Maldives, especially in the isolated islands divided by long distances of sea and difficulty of transportation within the islands, both parties agree to recommend to their own Governments that primary schools are necessary and are to be constructed by Japan's aid under its

Grant Aid Programme.

3. The survey team explained that the number of schools to be constructed and the budgetary allocation will be decided by the Japanese Government from the result of cost analysis done by the present survey within the frame of laws and regulations in relation to the budgetary system of the Japanese Government. Maldivian side fully understands the above explanation.
4. The Survey Team promised to report with sincerity to the effect that the Maldivian Government hopes strongly to have the 19 primary schools constructed in whole with the economic aid from Japan.
5. The Survey team explained the general mechanism, principles, procedures, and the measures of the grant aid program under Japan's economic cooperation as given in the annex I. The Maldivian side fully understands the above explanation.
6. Construction Plan per One Primary School was agreed by both parties as follows:

A. Conditions for the plan.

1. Academic Year starts from the 3rd week of February and ends at the 3rd week of December. Academic Year is divided into two terms with two week holidays in between the terms. Each term is divided into two quarter terms with one week holidays in between the quarter terms. Fridays and Saturdays are holidays. Working days are Sunday to Thursday in a week and 185 days a year.
2. Double shift school hour system and the number per class per grade is shown in Figure III.
3. One headmaster and 5 teachers will be attached to each school. It is planned to dispatch qualified headmasters after their training. The 5 teachers will be trained locally at the training centre in Male' from among the inhabitants of the island.
4. The extension of education to adults and those who finished the primary education of five years also considered to be necessary.

B. Tentative Site Plan is confirmed as shown in Illustration IV.

C. Tentative Architectural Plan is composed of four block of buildings for each school based on the new educational system.

1. Class Room Building I: for 1st grade to 4th grade
(Illustration V)
2. Class Room Building II: (a) for 5th grade
(Illustration VI) (b) for social education
3. Administration Building. (a) for teachers office
(Illustration VI) (b) for educational materials store.
4. Toilet Building (c) official residence of the head-master.
(Illustration V)

D. Tentative Installation Plan.

1. Water Supply Facilities.
Rain water collecting system and wells with water tank and round pumping set.
2. Sewage Disposal Facilities.

E. Tentative Furniture Plan is as shown in figure VII.

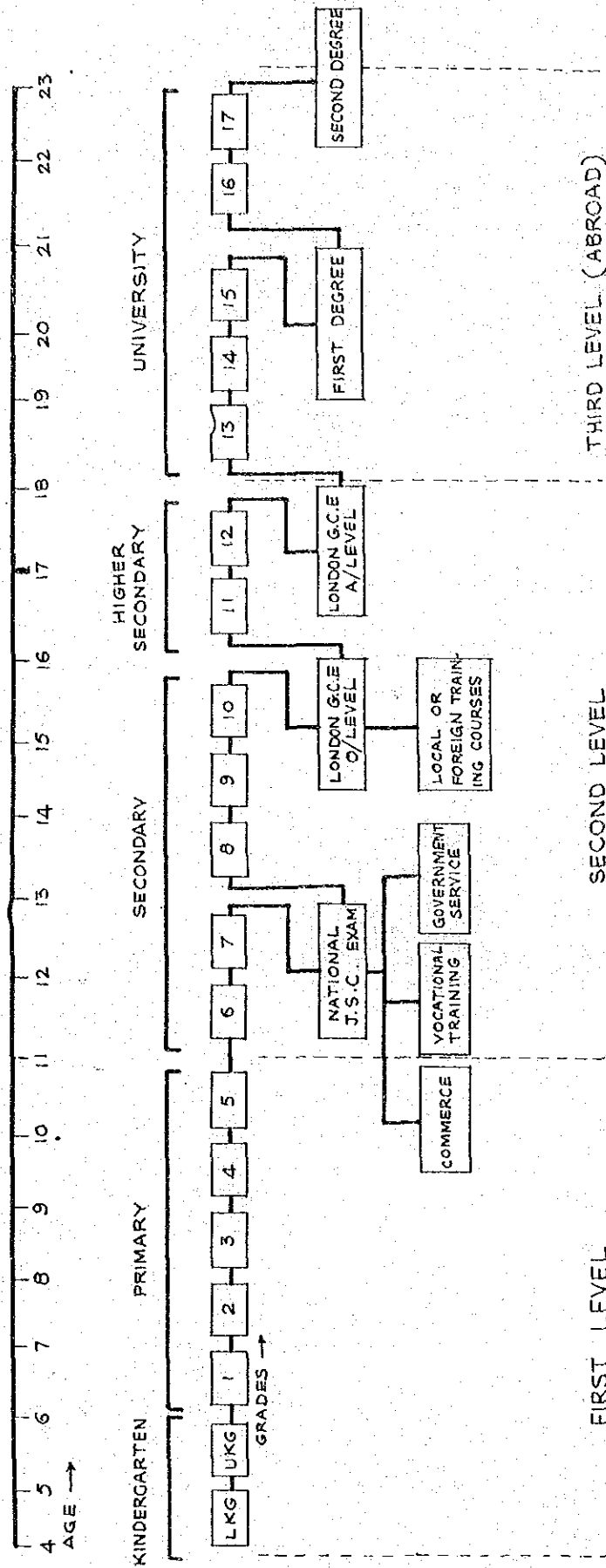
F. Tentative Construction Schedule is as shown in Chart VIII.

7. Measures to be taken by the Maldivian Government:

- A. To organize planning and steering committee for the construction project of primary school as attached in List IX.
- B. To provide enough land for construction sites, its clearing and levelling.
- C. To clear approach road to construction site, where necessary.
- D. To construct sewage disposal route outside the from construction site, where necessary.
- E. To exempt from all import duties on the imported construction materials.

- F. To exempt Japanese nationals from customs duties, the income taxes and other fiscal levies which may be imposed on those who enter and work for the project.
 - G. To transport imported construction materials from the port of disembarkation in the atolls to the construction site at her expense .
 - H. To secure enough volume of sand, stone and lime which are available locally, as soon as funds for the project are available.
 - I. To select, recommend local construction parties and to secure necessary number of forman, masons, carpenters and labourers.
 - J. To secure the cooperation of all related personnels.
 - K. To offer the benefit to utilize the government owned wireless radio communication facilities.
 - L. To take up the market rate of foreign exchange at each time of calculation of construction cost.
8. List of Japanese survey team is as shown in List X, and list of Maldivian counterparts is as shown in List XI.
9. Twenty copies of basic design report for the school construction in Maldives will be submitted by the Japan International Cooperation Agency through diplomatic channel by the end of March, 1980.

NEW EDUCATIONAL SYSTEM IN MALDIVES



File II

ATOLL	GOVT. SPONSORED COMMUNITY SCHOOLS		GOVT. SPONSORED PRIMARY SCHOOLS		JAPANESE AIDED SCHOOLS		GOVT. AIDED MADRASAS	
							Name of island	Name of school
Eaa Alif	Dhiddhoo		Huvarafushi		Huvarafushi		Dhiddhoo	Madhrasathul Ghaazee Mohamed
							Kelaa	Madhrasathul Sh. Ibrahim
Eaa Dhaal	Kulhudhuffushi		Nolhivaraafaru		Vaikaradhoo		Nolhivaram	Madhrasaa
							Neykurendhoo	Makthabul Noor
							Kulhudhuffushi	Madhrasathul Ameer Ameen
							Makunadhoo	Makthabul Hidhaayaa
Shaviyani	Komandoo		Maakadoodhoo		Ihainagu		-	
Noonu	Velidhoo		Manadhoo		Kedhikolhudhoo		Hebadhoo	Makthab
							Fodhdhoo	"
							Kedhikolhudhoo	"
							Holludhoo	Meynaa School
							Velidhoo	Madhrasathul Nahzaa
Raa	Alifushi		Ugoofaaru		Kadholhudhoo		Rasmaadhoo	Makthabul Jihaadh
							Immaadhoo	Makthabul Noor
Eaa	Eydhafushi		Dharavandhoo		Hithadhoo		Eydhafushi	Bahiyaa School
							Hithadhoo	Makthab
							Thulhaadhoo	"
Lhaviyani	Kurendhoo		Hinnavaru		Hinnavaru		Naifaru	Noraanee Makthab
							"	Madhrasathul Ifthithaah
							"	Roashanee Makthab
							Kurendhoo	Makthabul Najeebul h'abshee
Kaafu	Himmafushi		Maafushi		Kaashidhoo		-	
Alif	Maamigili		Mahibadhoo		Mahibadhoo		Dhigurah	Makthabul Ibtidhaan
							Fenfushi	Makthabul Guldhaasthaa
Vaaru	Keyodhoo		Felidhoo		Felidhoo		Omadhoo	Makthabul Virdhaa
Meemu	Mulah		Muli		Vaareyaafushi		-	
Faafu	Nilandhoo		Magoodhoo		Feelees		-	

11 (cont'd) List

<u>ATOLL</u>	<u>GOVT. SPONSORED COMMUNITY SCHOOLS</u>		<u>GOVT. SPONSORED PRIMARY SCHOOLS</u>		<u>JAPANESE AIDED SCHOOLS</u>		<u>GOVT. AIDED MATHEAS</u>	
			<u>SCHOOLS</u>		<u>SCHOOLS</u>		<u>Name of island</u>	<u>Name of school</u>
Dhaal	Kudahnvadhoo		Kudahnvadhoo		Needhoo	Ribudhoo		Makthabul Mubaarik
Thaa	Thinarafushi		Veymandoo		Guraidhoo	Kibidhoo		Makthabul Ih'thihaadh
						Hirilandhoo		Makthabul Anwaar
						Vilifushi		Makthabul Jihaadh
Laamu	Fonadhoo		Maavah		Gan	Maavashu		Miniven School
Gaaf Alif	Vilingili		Kolamaafushi		Kolamaafushi	-		
Gaaf Dhaal	Thinadhoo		Thinadhoo		Gadhdhoo	Thinadhoo		I'lmul Nooriyaa
Gaaviyani	Foamulah		Foamulah		Foamulah	Thinadhoo		Nooraaniyyaa
Seenu	Hithadhoo		Hithadhoo/Feydhoo		Hulhumeedhoo	Hithadhoo		Makthabul u'loom
						Hulhuthoo		Makthabul I'rshaadhiyyaa
						Hithadhoo		Makthab Rabbathudhiraasaa
						Feydhoo		Madhrasathul Islam
						Needhoo		Madhrasathul Hidhaayaa
						Hulhuthoo		Nasiriyyaa School
						Meradhoo/Feydhoo		Madhrasathul S'aafee

Figure III

No. per class

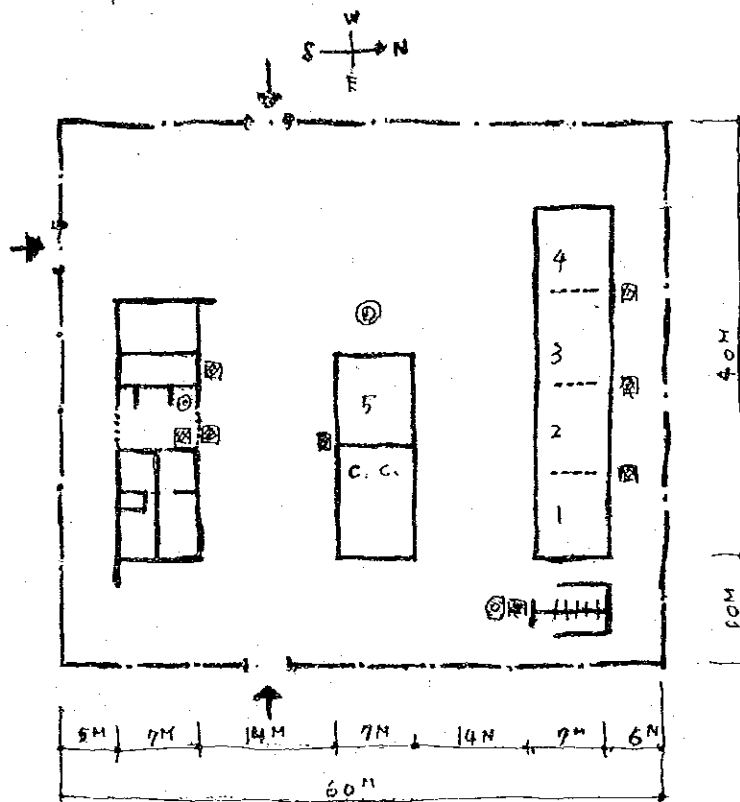
<u>Grade</u>	<u>Morning</u>	<u>Afternoon</u>	<u>Total</u>	<u>No. of teachers</u>
1	40	40	80	1
2	40	40	80	1
3	40	40	80	1
4	40	40	80	1
5	40	40	80	1
TOTAL:	200	200	400	5+1 = 6 (tendmaster)

Figure VII

<u>Grade</u>	<u>Tables</u>	<u>Chairs</u>	<u>B.B</u>	<u>Shelves</u>	<u>T.Desk</u>	<u>T. Chair</u>
1	20	40	1	1	1	1
2	20	40	1	1	1	1
3	20	40	1	1	1	1
4	20	40	1	1	1	1
5	20	40	1	1	1	1
SEC	10	20	1	1	1	1
Teachers office			1	3	6	6
TOTAL:	110	220	7	9	12	12

SITE PLAN

Illustration 16



CLASS ROOM BLOCK - I

Illustration IV

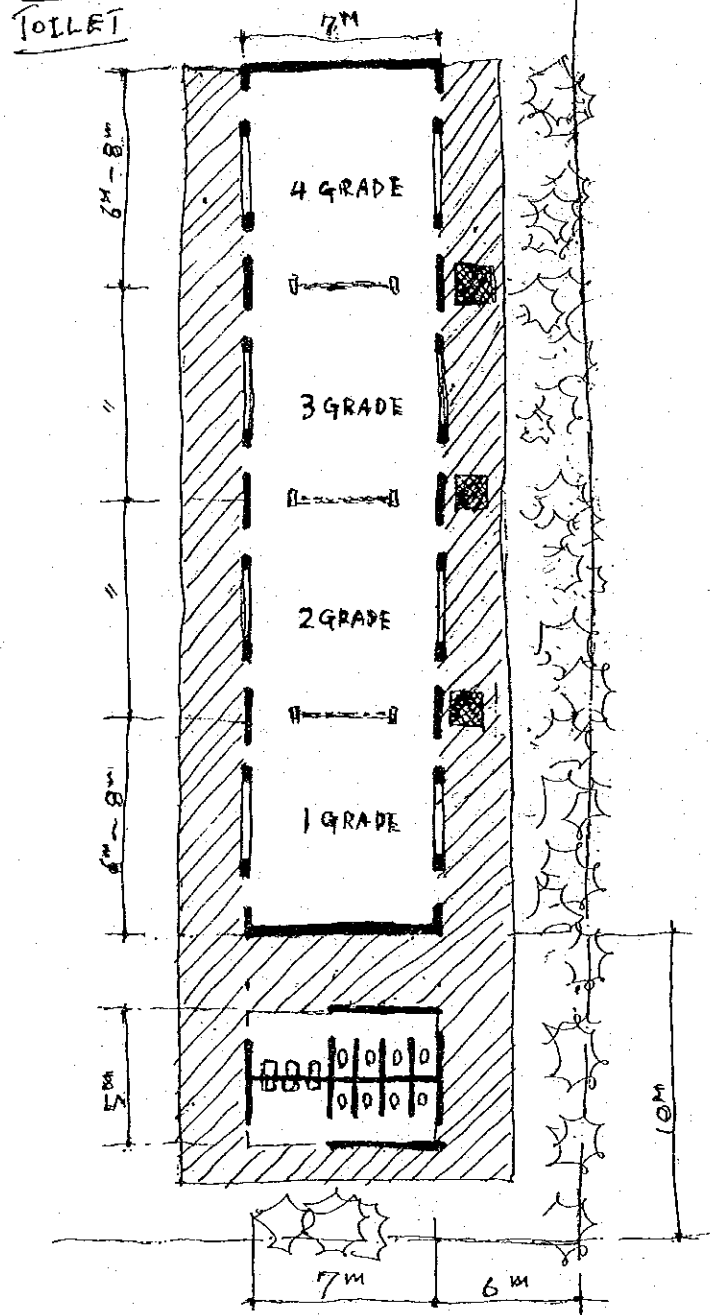
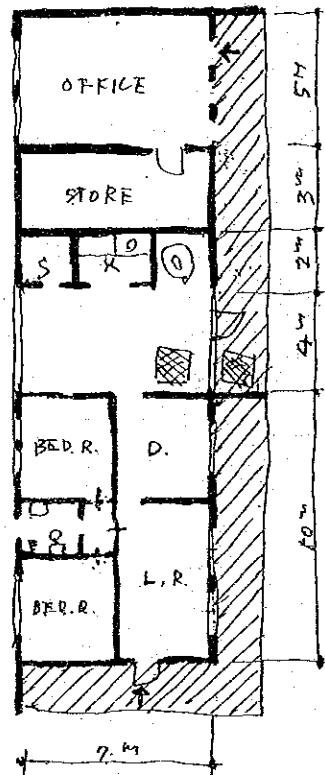
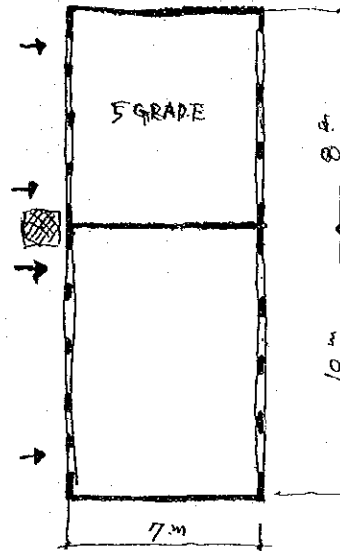


Illustration VI

ADMINISTRATION BLOCK



CLASS ROOM BLOCK II



Tentative Construction Schedule

chart VII

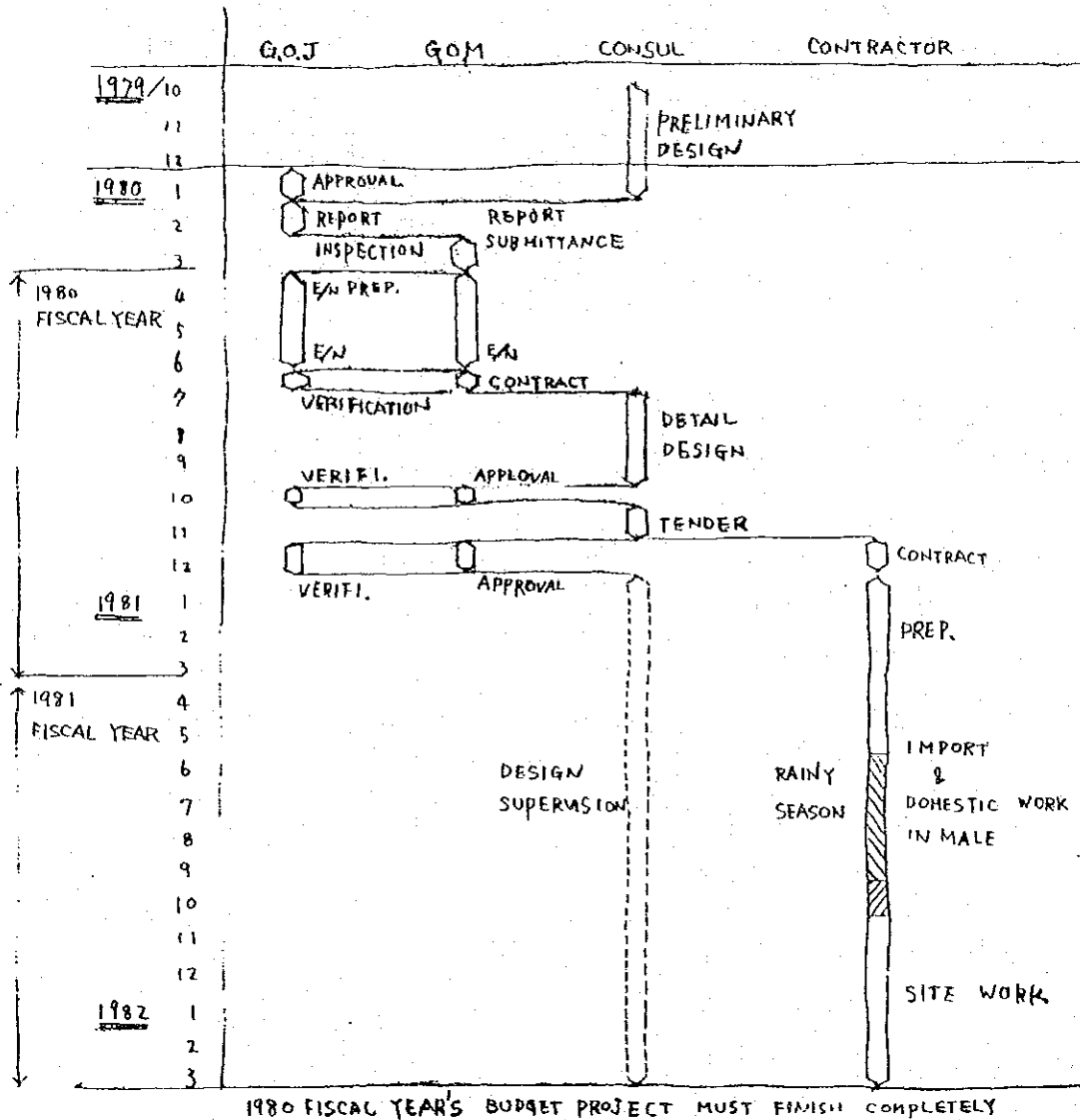


TABLE IX
STEERING COMMITTEE

1. Under Secretary
Aids Section
Ministry of Education
Male', Maldives.
2. Under Secretary,
Schools ~~Section~~,
Ministry of Education,
Male', Maldives.
3. Teacher/Supervisor
Ministry of Education
Male', Maldives.
4. Under Secretary
Educational Development Centre
Ministry of Education
Male', Maldives.
5. Construction Co-ordinator
Educational Development Centre
Ministry of Education
Male', Maldives.
6. Assistant Construction Coordinator
Educational Development Centre
Ministry of Education
Male', Maldives.
7. Architects
Architectural Section
Presidents office
Male', Maldives.

LIST X

Leader	Kaoru Okabe Chief Planning Division Social Development Co-operation Dept. Japan International Co-operation Agency.
Architect	Yasahiro Fukumoto Architect Chief Design Department T. Mohri Architect & Associates
Architect	Toshinori Minoshima Architect Director Design Department T. Mohri Architect & Associates
Architect	Akira Yokoyama Architect Design Department T. Mohri Architect & Associates

LIST XI

MALDIVIAN COUNTERPARTS

1. Mohamed Latheef
Under Secretary
Aids Section
Ministry of Education
Male', Maldives.
2. Abdul Azeez Yoosuf
Under Secretary
Schools Section
Ministry of Education
Male', Maldives.
3. Abdullah Rasheed
Teacher/Supervisor
Ministry of Education
Male', Maldives.
4. Abdul Sattar Hassan
Under Secretary
Educational Development Centre
Ministry of Education
Male', Maldives.
5. Rifath Afeef
Architect
Architectural Section
President's Office
Male', Maldives.
6. Ahmed Saleem
Architect
Architectural Section
President's Office
Male', Maldives.

Procedural details of Japanese Grant Aid
.....

1. Request from a recipient country for Japanese grant aid
2. Report and recommendation of the request from the Japanese Embassy
3. Study of the report and recommendation by the Ministry of Foreign Affairs of the Japanese Government
(Technical feasibility, beneficiaries, cost-estimation, etc.)
 1. If the proposed project is deemed appropriate enough for Japanese grant aid, a technical survey team for the confirmation of the above-mentioned study of the project is to be sent to a recipient country by the Japan International Cooperation Agency.
 2. Whenever the grant assistance aims at constructing physical facilities such as a school, research institute, hospital, etc., surveys for a preliminary designing precede the signing of the notes. The survey teams are dispatched under technical assistance by the Japan International Cooperation Agency. The team usually consists of technical experts of the Government agencies as well as of consulting firms.
4. Decision-making of the Japanese Government for the extension of the grant aid
 1. Decision by the Ministry of Foreign Affairs of the projects that are to be included in a request list for the budgetary appropriation for next fiscal year (August)
 2. Explanation of each project with data to the Ministry of Finance by the Ministry of Foreign Affairs (September)
 3. Finalization of the draft budget for next fiscal year by the Ministry of Finance and its approval by the Cabinet (December or January)
5. Approval by the Diet
 1. Introduction of the budget bill to the Lower House (End of January or February)
 2. Introduction of the budget bill to the Upper House after its approval in the Lower House
 3. Coming into force of the budget with the approval of the budget bill in the Upper House at the end of March.

6. Exchange of notes between the Government of Japan and the Government of a recipient country

1. Consultation between the Ministry of Foreign Affairs and the Ministries concerned towards a final agreement of the projects to be taken up under the Japanese Government's grant assistance

2. Consultation on the notes to be exchanged between the Government of Japan and the Government of a recipient country

(1) Draft Notes are presented by the Japanese Government to the Government of a recipient country.

(2) The notes are a kind of standard pattern under which the grant assistance is extended to a recipient country

(3) Major stipulations of the notes are as follows:

Object of a grant aid

Grant amount

Period during which a grant should be extended

eligibility : Japanese or recipient's
products and services

Banking arrangement

contract

obligations of the Government of a recipient
country

a) bearing of expenses

b) exemption of customs duties and fiscal
charges

c) ensuring of prompt unloading and customs
clearance

d) bearing of banking charges

e) embargo on the re-export from a recipient
country

etc.

3. Approval of the draft notes by the Japanese cabinet after their approval by a recipient cabinet
 4. Signature and exchange of the notes simultaneously by the both sides either in the recipient capital or in Tokyo immediately after the Japanese cabinet's approval
7. Contracts
1. The Government of a recipient country or its designated authority signs contracts with Japanese nationals or Japanese juridical persons controlled by Japanese nationals for the implementation of the notes exchanged.
 2. Japanese nationals of Japanese juridical persons controlled by Japanese nationals are able to sign subcontracts with nationals of a recipient country.
 3. In case physical facilities such as a school, research institute, hospital are to be constructed under the grant aid, the following formality is, in principle, complied with.
 - (1) Selection of an engineering consultant for architectural (or detailed) designing and supervisory services
 - a) The same consulting firm that participated in the survey team for a preliminary designing, in principle, carries out an architectural designing of the construction works.
 - b) In case another firm might be designated for the works through a normal tender, it is most probable that the firm may insist on the alteration of the designing completed by the survey team, thus resulting in an undue delay of the implementation with an additional cost for the alteration of the designing.
 - (2) Contracts on the supervisory services and architectural (or detailed) designing between the Government of a recipient country or its designated authority and the above-mentioned consulting firm

- (3) Selection of a construction firm through a tender
- (4) Contract on the construction of a facility between the Government of a recipient country or its designated authority and the Japanese construction firm

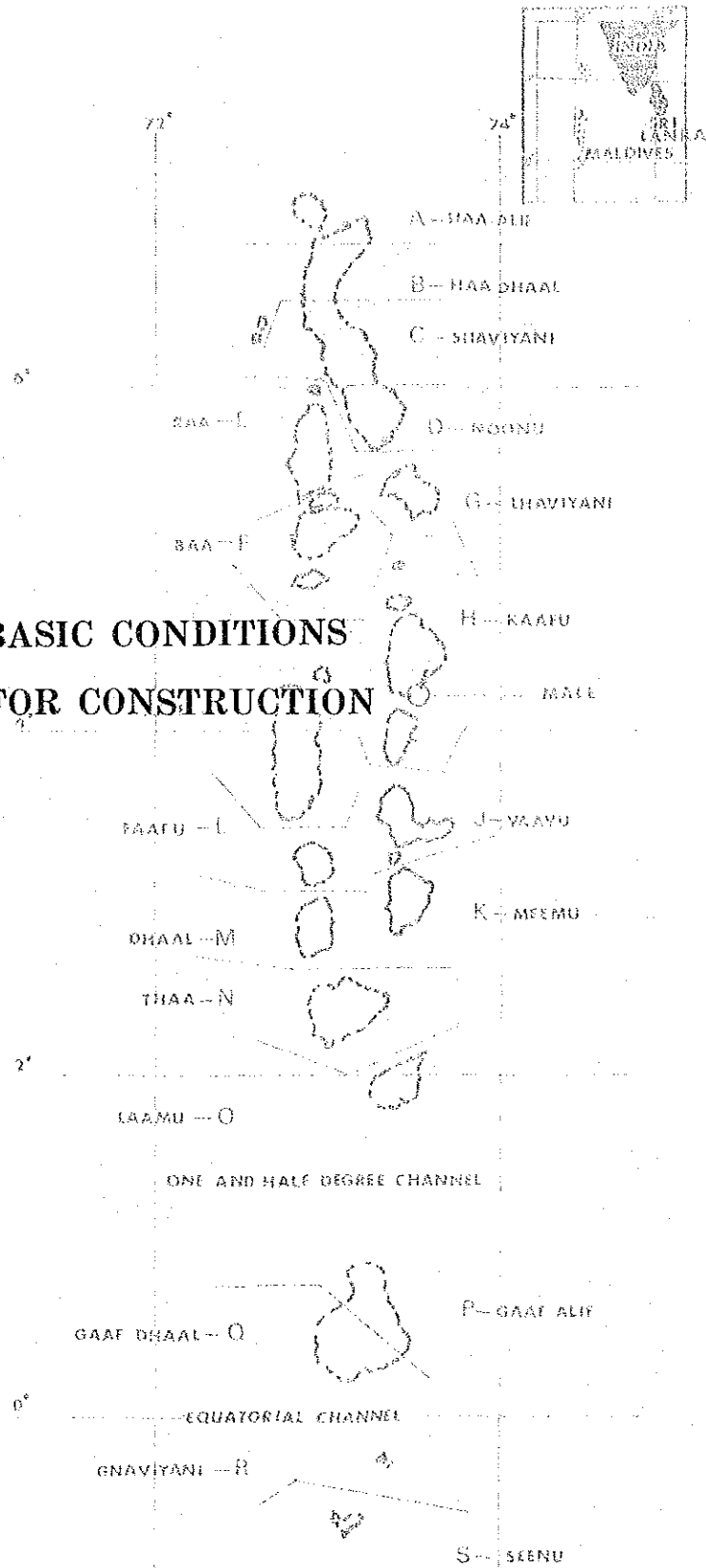
- a) If so requested, a tender may be conducted by the consulting firm on behalf of the recipient's Government. The final awarding must be given by the latter upon the recommendation of the consulting firm.
- b) In case a small-scale facility is constructed, a contract is signed both for architectural designing and for construction of a facility.)

- 8. Verification of the contracts by the Japanese Government
 - 1. The Government of a recipient country presents two original contracts to the Japanese Government for their verification
 - 2. In order to confirm that the contracts are eligible under the grant, the Japanese Government ascertains whether the contracts are in compliance with the stipulations of the Notes.
 - 3. The contracts come into force only after they are verified by the Government of Japan.
 - 4. The two verified contracts are returned by the Japanese Government to the Government of a recipient country, and one of them is handed over to the contractor by the Government of a recipient country.
- 9. The Government of a recipient country or its designated authority signs a banking arrangement with an authorized foreign exchange bank of Japan on the procedural details of the payment.
 - * The commissions described below are to be paid to the Japanese foreign exchange bank by a recipient country for the banking services.
- 1. Advising Commission of Authorization to Pay (A/P):
about Y 2,000.- for each A/P

2. Payment commission : about 1/10% of each payment
- * A/P is issued by the Government of a recipient country to authorize the Japanese foreign exchange bank to pay in behalf of the Government of a recipient country.
10. Issuance of Authorization to Pay (A/P) to the Japanese foreign exchange bank by the Government of a recipient country or its designated authority immediately after the verification of the contracts
11. Payment request to the Japanese foreign exchange bank by Japanese nationals or Japanese juridical persons controlled by Japanese nationals
12. Payment request to the Government of Japan by the Japanese foreign exchange bank and payment to the Japanese foreign exchange bank by the Government of Japan
13. Payment by the Japanese foreign exchange bank to Japanese nationals or Japanese juridical persons controlled by Japanese nationals
- * The timetable indicated above is changeable according to circumstances.

REPUBLIC OF MALDIVES

II BASIC CONDITIONS FOR CONSTRUCTION



II-1 Outline of the country

II-1-1 Location of the country

The Republic of Maldives lies in the Indian Ocean between latitudes 7°6'30" north, 0°41'38" south, and longitudes 72°32'30" west 75°45'40" east.

It consists of double-chain type atolls and island.

There are 18 definite atolls, 3 coral islands, and 1 reef with some islets.

These atolls and islands spread over an area of about 110,066.5 km² which extends 823.9 km north to south, and 130.35 km east to west.

The northernmost atoll lies about 483 km south west of Cape Comorin, the southernmost point of India about 644 km away from Sri Lanka.

Minicoy Atoll, of Indian territory, lies about 112 km north of the Maldivian archipelago and the 8 degree channel runs between them.

II-1-2 Area

Although all the islands of the Maldives has not been surveyed, the total land area is estimated to be about 298 km² and the area surrounded by atolls is estimated to be about 3,300 km².

II-1-3 Topography

The Maldives has 1800 islands, including sand banks, covering a total land area of about 298 sq. kilometres. Out of all these islands, only 219 were inhabited in 1977. All the islands are low-lying, none more than five metres above sea level. They have

white sandy beaches and crystal clear lagoons with tall coconut palms. The Maldivian islands are grouped into twenty natural atolls, each protected by faros. For administrative purposes these atolls are organized into nineteen atoll groups.

The word "atoll" itself is derived from the Maldivian language, Dhivehi, which means a ring-shaped coral island with a reef surrounding a lagoon.

The largest island is Haddummatti (a gang island) which is about 7,240 m. in length, and the nation's capital, Male, is about 1,609 m. in length and 800 m. in width.

There are no mountains, fresh water streams or rivers on these islands but because the water level is very high, about 1.0 m. below ground level, wells can usually be found on the inhabited islands. However, because the well water contains much amount of salt, it can not be used for drinking purposes. Drinking water is totally procured from the rain.

II-1-4 Population

Only 202 of the islands are inhabited, and the total population is 143,046 as of 1977, (72,273 males and 67,823 females).

20.6 % are urban inhabitants and the remaining 79.3 % are rural.

II-1-5 People

It is clear that inhabitants of the Maldivian archipelago belong to the same race as the Ceylonese.

Maldivians belong to the Indo-Aryan group which migrated to the islands of Maldives as well as to Sri Lanka in about 5th century B.C. Accordingly they are similar to the Ceylonese in frame, custom

and temper.

The language spoken in the Maldives is Dhivehi, which was derived from Eill, primitive Singhalese, and the letters are written from right to left.

Almost all the people have been converted to Moslem, because they were subjected to the invasion of Islamites in about the middle of the 11th century.

II-1-6 Data-1

The Increase in Population on Maldives

<u>Year</u>	<u>Total</u>	<u>Male</u>	<u>Female</u>	<u>Rate of Increase</u>	<u>Remarks</u>
1946	82,068				
1963	94,527	50,274	44,253	100	
1965	96,432			102%	UNESCO
1972	122,673	64,924	57,749	130%	National Census
1974	128,697	68,301	60,396	136%	
1978	143,046	75,223	67,823	151%	National Census

annual average 3.4%

DATA 2

POPULATION CENCUS 1978

NAME	TOTAL	MALE'	FEMALE
MALDIVES	143046	75223	67823
MALE'	29555	16623	12932
REST OF MALDIVES	113491	58600	54891
Haa Alif	8603	4377	4226
Haa Dhaalu	9924	5162	4762
Shaviyani	6362	3270	3092
Noonu	6282	3302	2980
Raa	7906	4061	3845
Baa	5765	3078	2687
Lhaviyani	5591	2999	2692
Kaafu	4162	2254	1908
Alif	6223	3348	2875
Vaavu	1078	582	496
Neenu	3095	1604	1491
Faafu	2012	1087	925
Dhaalu	3003	1546	1457
Thea	6224	3179	3045
Laamu	6163	3264	2899
Gaafu Alif	4978	2589	2389
Gaafu Dhaalu	7720	3817	3903
Seenu	14096	6963	7133

DATA 3

TOTAL POPULATION OF REPUBLIC OF MALDIVES (1974)

DETAILS OF CENSUS AND AGE GROUPS

	<u>Male</u>	<u>Female</u>	<u>Total</u>
Total population	68301	60396	128697
Under 15 years	29367	28450	57817
Between 15 - 19 years	7353	6774	14137
Between 0 - 5 years	13108	12873	25981
Between 6 - 10 years	9564	9267	18831
Between 11 - 15 years	8334	7825	16159
Between 21 - 16 - 20 years	6677	6097	12774
Between 21 - 30 years	7712	7268	14980
Between 31 - 40 years	9363	8190	17553
Between 41 - 50 years	6972	4895	11867
Between 51 - 60 years	3659	2159	6178
Between 61 - 70 years	2083	1140	3223
71 and above	824	327	1151

DATA 4

GOVMT RECEIPTS AND EXPENDITURE (MILLION MALDIVIAN RUPEES)

RECEIPTS

	1970	1971	1972	1973	1974	1975	1976	1977	1978
REVENUE									
a) TAXES									
i) CUSTOMS	3.524	4.668	4.964	3.991	5.324	5.005	0.457	0.140	2.235
ii) OTHERS	0.290	0.304	0.127	0.187	0.169	-	-	-	0.893
b) NET									
i) ENTERPRISES	27.476	21.092	19.682	25.725	11.827	17.333	15.928	19.818	7.735
c) OTHER									
i) RECEIPTS	0.658	0.575	0.360	0.387	1.413	0.635	0.786	0.771	0.898
TOTAL	31.948	26.659	25.133	30.290	18.733	22.973	17.171	20.729	11.761

SOURCES OF FINANCE FOR EXCESS OF EXPENDITURE OVER REVENUE

	1970	1971	1972	1973	1974	1975	1976	1977	1978
a) SURPLUS OF PAST YEARS	-	-	-	-	3.394	4.415	18.512	9.248	6.175
b) EXTERNAL ASSISTANCE	-	-	-	-	-	-	-	8.412	16.725
c) OTHER ACCOUNTS	-	-	-	-	-	-	-	-	1.260
d) ISSUING NOTES	-	-	-	-	-	-	-	-	5.257
TOTAL	-	-	-	-	3.394	4.415	18.512	17.660	29.417

EXPENDITURE

	1970	1971	1972	1973	1974	1975	1976	1977	1978
NON-DEVELOPMENTAL EXPENDITURE									
a) INTERNAL SECURITY	1,406	1,472	1,519	1,581	2,010	2,225	2,969	2,322	2,841
b) GENERAL ADMINISTRATION	4,069	3,542	4,596	4,904	5,285	5,613	5,084	5,549	5,492
c) DEBT SERVICING									3,046
d) OTHERS	2,034	2,002	3,072	2,215	2,600	1,863	1,734	1,468	3,953

DEVELOPMENTAL EXPENDITURE

a) AGRICULTURE AND FISHERIES	0,165	0,582	0,720	0,459	0,574	0,388	0,696	0,802	0,545
b) ECONOMIC SERVICES	4,782	5,852	5,787	4,705	5,662	5,742	2,808	2,046	7,361
c) TRANSPORT AND COMMUNICATION	0,896	0,697	0,861	1,341	1,759	1,885	2,705	11,868	3,300
d) EDUCATION	0,990	1,070	1,199	1,159	1,190	1,289	1,504	1,660	2,415
e) HEALTH	0,860	0,838	0,923	1,158	1,282	1,261	1,363	1,559	2,419
f) OTHERS	0,522	1,147	1,968	1,193	1,765	7,117	16,820	11,115	9,806
TOTAL	15,724	17,202	20,645	18,715	22,127	27,388	35,683	38,389	41,178

EXCESS OF REVENUE OVER EXPENDITURE

16,224	9,457	4,488	11,575	-	-	-	-	-	-
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EXCESS OF EXPENDITURE OVER REVENUE

-	-	-	-	3,394	4,415	18,512	17,660	29,417	
TOTAL	16,224	9,457	4,488	11,575	3,394	4,415	18,512	17,660	29,417

II-2 Outline of education

II-2-1 Data on education

- 1) The comparison of the 3 types of schools and the scale of islands containing them.

	more than 200 pupils	more than 400 pupils
GOVT. SPONSORED PRIMARY SCHOOLS	12 (islands)	7 (islands)
GOVT. SPONSORED COMMUNITY SCHOOLS	17	11
JAPANESE AIDED SCHOOLS	16	7

Of the 202 inhabited islands, there are 23 islands with more than 400 school children (2 1/2 - 15 years old) and 72 islands with more than 200 school children. The Government of the Maldives relies greatly on the Japanese government aid for school construction on the islands with more than 200 children of school age.

- 2) The followings are the charts of the 19 islands proposed as construction sites under the construction project aided by Japan concerning their whole population, the population of school children, and the population of illiterates.

Population of school children

Island with the largest population of school

children with in an atoll 6 islands

" second largest " 6 "

"	third largest	"	.....	4	"
"	4th largest	"	.....	1 island	(VAAVU)
"	5th largest	"	.....	1 island	(NOONU)
"	7th largest	"	.....	1 island	(SHAVIYANI)

Illiterates

Island with the largest population of

illiterates within an atoll	.....	5 islands
" second largest	"	..... 7 islands
" third largest	"	..... 4 islands
" 4th largest	"	..... 2 islands (VAAVU.FAAFU)
" 9th largest	"	..... 1 island (SHAVIYANI)

Entile population

Island with the largest population within an

atoll	.....	5 islands
" second largest	"	..... 7 islands
" third largest	"	..... 4 islands
" 4th largest	"	..... 1 island (VAAVU)
" 5th largest	"	..... 1 island (NOONU)
" 10th largest	"	..... 1 island (SHAVIYANI)

II-2-2 DATA 1

GOVT. SPONSORED COMMUNITY SCHOOLS

ATOLL	GOVT. SPONSORED COMMUNITY SCHOOLS	POPULATION	CHILDREN BETWEEN 2-1/2 - 15 YEARS	NO. OF HOUSES
HAA ALIF	DHIDHDHOO	1,873	632	252
HAA DHAAL	KULHUDHUFFUSHI	3,460	1,711	610
SHAVIYANI	KOMANDOO	857	379	163
NOONU	VELIDHOO	1,153	402	208
RAA	ALIFUSHI	1,285	478	180
BAA	EYDHAFUSHI	1,630	691	248
LHAVIYANI	KURENDHOO	885	337	146
KAAFU	HIMMAFUSHI	373	138	70
ALIF	MAAMIGILI	865	290	142
VAAVU	KEYODHOO	344	124	57
MEEMU	MULAH	673	243	101
FAAFU	NILANDHOO	674	317	102
DHAAL	KUDAHUVADHOO	949	779	157
THAA	THIMARAFUSHI	1,422	579	148
LAAMU	FONADHOO	823	237	175
GAAF ALIF	VILINGILI	1,390	448	244
GAAF DHAAL	THINADHOO	3,328	552	528
GNAVIYANI	FOAMMULAH	4,840	1,508	826
SEENU	HITHADHOO	7,051	2,708	999
TOTAL		33,875	12,553	5,356

Average 6.3

DATA 2

GOVT. SPONSORED PRIMARY SCHOOLS

ATOLL	GOVT. SPONSORED PRIMARY SCHOOLS	POPULATION	CHILDREN BETWEEN 2-1/2 - 15 YEARS	NO. OF HOUSES
HAA ALIF	HUVARAFUSHI	1,616	533	227
HAA DHAAL	NOLHIVARANFARU	364	135	56
SHAVIYANI	MAAKADODHOO	983	458	181
NOONU	MANADHOO	765	290	127
RAA	UGOOFARU	665	256	84
BAA	DHARAVANDHOO	506	45	99
LHAVIYANI	HINNAVARU	2,560	996	338
KAAFU	MAAFUSHI	443	137	76
ALIF	MAHIBADHOO	880	341	124
VAAVU	FELIDHOO	273	94	48
MEEMU	MULI	453	143	74
FAAFU	MAGOODHOO	298	115	180
DHAAL	KUDAHUVADHOO	949	779	157
THAA	VEYMANDOO	461	172	60
LAAMU	MAAVAH	827	252	145
GAAF ALIF	KOLAMAAFUSHI	795	255	134
GAAF DHAAL	THINADHOO	3,328	552	528
GNAVIYANI	FOAMULAH	4,840	1,508	826
SEENU	HITHADHOO/FEYDHOO	7,051 2,573	2,708 541	999 263
TOTAL		30,630	10,310	4,726

Average 6.5

DATA 3

JAPANESE AIDED SCHOOLS

ATOLL	ISLAND JAPANESE AIDED	POPULATION	CHILDREN BETWEEN 2-1/2 - YEARS	NO. OF HOUSES
HAA ALIF	HUVARAFUSHI	1,616	533	227
HAA DHAAL	VAIKARADHOO	959	365	162
SHAVIYANI	LHAIMAGU	369	171	64
NOONU	KEDHIKOLHUDHOO	625	270	115
RAA	KADHOLHUDHOO	1,693	633	296
BAA	HITHADHOO	660	236	124
LHAVIYANI	HINNAVARU	2,560	996	338
KAAFU	KAASHIDHOO	940	329	161
ALIF	MAHIBADHOO	880	341	124
VAAVU	FELIDHOO	188	72	25
MEEMU	KOLHUFUSHI	623	220	115
FAAFU	FEEALEE	425	137	67
DHALL	MEEDHOO	546	214	73
THAA	GURADHOO	922	302	101
LAAMU	GAN	1,103	378	160
GAAF ALIF	KOLAMAAFUSHI	795	255	134
GAAF DHAAL	GADHDHOO	1,431	482	283
GNAVIYANI	FOAMULAH	4,840	1,508	826
SEENU	HULHUMEEDHOO	3,521	1,401	563
TOTAL		24,696	8,852	3,959

Average 2

DATA 4

GOVT. AIDED MAKTHABS

GOVT. AIDED MAKTHABS					
ATOLL	NAME OF ISLAND	NAME OF SCHOOL	POPULATION	CHILDREN BETWEEN 2½ - 15 YEARS	NO. OF HOUSES
HAA ALIF	DHIDHDHOO	MADHRASATHUL CHAAZEE MOHAMED	1,873	632	252
	KELAA	MADHRASATHUL SH. IBRAHIM	1,000	366	161
	NOLHIVARAM	MADHRASAA	894	265	209
HAA DHAAL	NEYKURENDHOO	MAKTHABUL NOOR	667	227	142
	KULHUDHUFFUSHI	MADHRASATHUL AMEER AMEEN	3,460	1,711	610
	MAKUNUDHOO	MAKTHABUL HIDHAAYAA	649	232	127
SHAVIYANI	-	-	-	-	-
	HEBADHOO	MAKTHAB	302	122	49
	FODHDHOO	MAKTHAB	186	27	37
NOONU	KEDHIKOLHUDHOO	MAKTHAB	625	270	115
	HOLHUDHOO	MEYNAA SCHOOL	1,183	411	230
	VELIDHOO	MADHRASATHUL NAHZAA	1,153	402	208
RAA	RASMAADHOO	MAKTHABUL JIHAADI	442	216	83
	TNNAMAADHOO	MAKTHABUL NOOR	-	114	61
	EYDHAFUSHI	BAHIYYAA SCHOOL	1,630	691	248
BAA	HITHADHOO	MAKTHAB	660	236	124
	THULHAADHOO	MAKTHAB	1,545	542	204
	NAIFARU	NOORAANEE MAKTHAB	2,808	837	451
LHAVIYANI	NAIFARU	MADHRASATHUL IFTHITHAAH	2,808	837	451
	NAIFARU	ROASHANEE MAKTHAB	2,808	837	451
	KURENDHOO	MAKTHABUL NAJEEBUL H'ABSHEE	885	337	146
KAAFU	-	-	-	-	-

GOVT. AIDED MAKTHABS					
ATOLL	NAME OF ISLAND	NAME OF SCHOOL	POPULATION	CHILDREN BETWEEN 2½ - 15 YEARS	NO. OF HOUSES
ALIF	DHIGURAH	MAKTHABUL IBTHIDHAAU	296	116	88
	FENFUSHI	MAKTHAB GULEHASTHAA	361	104	82
	OMADHOO	MAKTHABUL VIRDHAA	390	122	70
VAAVU	-	-	-	-	-
MEEMU	-	-	-	-	-
FAAFU	-	-	-	-	-
DHAAL	RIBUDHOO	MAKTHABUL MUBAARIK	400	133	71
	KIBIDHOO	MAKTHABUL IH'THIHAADH	571	248	101
THAA	HIRILANDHOO	MAKTHABUL ANWAAR	435	168	74
	VILIFUSHI	MAKTHABUL JIHAADH	1,103	399	147
LAAMU	MAAVASHU	MINIVAN SCHOOL	827	252	145
GAAF ALIF	-	-	-	-	-
GAAF DHAAL	THINADHOO	I'LMUL NOORIYAA	3,328	552	528
	THINADHOO	NOORAANIYYAA	3,328	552	528
GNAVIYANI	-	-	-	-	-
SEENU	HITHADHOO	MAKTHABUL U' LOOM	7,051	2,708	999
	HULHUDHOO	MAKTHABUL IRSHAADHIYYAA	2,110	869	301
	HITHADHOO	MAKTHAB RAHBATHUDHDHIRAASAA	7,051	2,708	999
	FEYDHOO	MADHRASATHUL ISLAM	2,573	1,097	487
	MEEDHOO	MADHRASATHUL HIDHAAYAA	1,411	541	263
	HULHUDHOO	NASIRIYYAA SCHOOL	2,110	869	301
	MARADHOO/FEYDHOO	MADHRASATHUL S' AAFEE	845	347	152

No.	Atoll	Name of Inland	Population	Children between 2½ - 15 years	No of literate people	No of illi- terate people	No of houses
1.	Ras Alif	Thuranku	344	162	188	156	49
2.	"	Onigama	236	85	101	135	46
3.	"	Bathifushi	172	52	78	94	33
4.	"	Kulbadhoo	198	69	100	98	55
5.	"	Buvarufushi	1616	533	1015	601	227
6.	"	Ihavandhoo	1052	428	635	413	148
7.	"	Kolan	1000	366	635	365	151
8.	"	Vachafaru	428	157	243	185	60
9.	"	Dhidhdhoo	1873	632	1000	873	252
10.	"	Filadhdhoo	465	186	235	231	82
11.	"	Kaarandhoo	397	150	159	228	64
12.	"	Thakandhoo	475	191	297	178	101
13.	"	Utheemu	597	136	271	126	53
14.	"	Kuraidhoo	343	119	95	247	66
15.	"	Baarah	775	300	244	531	135
16.	"	Berimadhdhoo	96	31	80	16	18
17.	Haa Dhaal	Harimadhdhoo	505	208	180	325	118
18.	"	Faridhoo	130	36	70	60	22
19.	"	Eodaidhoo	99	34	45	54	16
20.	"	Finey	280	79	161	119	58
21.	"	Maivandhoo	435	127	149	287	82
22.	"	Nellaidhoo	490	199	284	206	89
23.	"	Nolhivaranfuru	364	135	233	131	56
24.	"	Nolhivaranfuru	894	265	740	103	209
25.	"	Kuribee	322	105	219	105	65
26.	"	Kuburudhoo	193	68	88	105	33
27.	"	Kulhudhuffushi	3460	1711	2535	865	610
28.	"	Kumandhoo	721	335	202	519	120
29.	"	Meikurendhoo	667	227	248	419	142
30.	"	Vaibaranadhdhoo	959	355	552	121	162
31.	"	Hiriradhdhoo	316	98	121	42	42
32.	"	Malivadhdhoo	291	96	75	216	42
33.	"	Makuradhdhoo	649	232	359	290	127
34.	Shavilyani	Kadithoemu	558	246	318	240	113
35.	"	Noomaran	318	140	78	240	44
36.	"	Goldhoo	285	113	77	208	61
37.	"	Foydhoo	543	136	279	264	124
38.	"	Feevah	411	160	202	109	92

No. 2	Atoll	Name of island	Population	Children between 2½ - 15 years	No of literate people	No of illi- terate people	No of houses
39.	Shaviyani	Bilefahi	328	110	224	104	63
40.	"	Fekaidhoo	544	148	322	222	105
41.	"	Nerudhoo	206	91	186	20	43
42.	"	Makadoodhoo	903	458	611	372	181
43.	"	Kareebi	501	225	164	337	87
44.	"	Ihaimagu	369	171	195	174	64
45.	"	Firubaidhoo	397	174	198	199	71
46.	"	Komandoo	857	379	612	245	163
47.	"	Mangoodhoo	478	229	219	259	88
48.	"	Farkulhufunadhoo	257	74	127	130	52
49.	Noonu	Hobadhoo	302	122	152	150	49
50.	"	Kedhikulhuthoo	625	270	312	312	115
51.	"	Kaalhenthoo	363	151	153	210	63
52.	"	Kudafari	356	137	208	148	46
53.	"	Lardhoo	423	169	181	242	84
54.	"	Kaafaru	489	174	277	212	75
55.	"	Ischi	346	151	185	161	63
56.	"	Miladhoo	687	288	398	289	105
57.	"	Manadhoo	765	290	454	311	127
58.	"	Holhuthoo	1183	411	982	201	230
59.	"	Fedhdhoo	186	27	102	84	37
60.	"	Velidhoo	1153	402	802	351	208
61.	"	Tholhenthoo	99	35	46	53	20
62.	"	Nagoodhoo	166	64	43	123	25
63.	Raa	Alifushi	1285	478	660	480	180
64.	"	Vaadhoo	239	94	108	102	35
65.	"	Raagethoemu	621	189	303	204	87
66.	"	Agolhithoemu	-	85	-	-	41
67.	"	Ugulu	-	108	-	-	82
68.	"	Gaandoodhoo	360	113	158	150	62
69.	"	Ugoofaaru	665	256	331	237	84
70.	"	Kadhulhuthoo	1693	633	584	1104	296
71.	"	Kachurathu	591	206	231	259	100
72.	"	Rasmanadhoo	442	216	191	237	83
73.	"	Innamadhoo	-	114	-	-	51
74.	"	Maduvareo	978	307	818	71	160
75.	"	Iguraidhoo	767	292	546	200	151
76.	"	Falnu	-	67	-	-	27

No.	Atoll	Name of island	Population	Children between 2½ - 15 years	No of literate people	No of illi- terate people	No of houses
77	Raa	Nsedhoo	971	350	734	170	136
78	"	Kinolhos	287	99	125	124	48
79	Raa	Kudarikilu	293	99	112	181	54
80	"	Kamadhoo	216	92	127	89	115
81	"	Koadhoo	434	149	244	190	80
82	"	Dhonfann	242	83	118	124	44
83	"	Dharavandhoo	506	45	391	115	99
84	"	Maabhaa	242	83	165	77	44
85	"	Eydhafushi	1630	691	1178	452	248
86	"	Thulhaadhoo	1545	542	878	467	204
87	"	Hithaadhoo	660	236	467	193	124
88	"	Fulhadhoo	150	53	84	45	27
89	"	Fehundhoo	113	35	69	44	18
90	"	Gaidhoo	300	123	171	129	57
91	"	Kihadhoo	153	43	91	62	39
92	Laaviyani	Banavaru	2550	996	1545	1015	338
93	"	Nalifaru	2808	837	1927	881	451
94	"	Kureadhoo	885	337	575	310	146
95	"	Olhavelifushi	234	89	88	166	41
96	Kaafu	Kaachidhoo	940	329	663	277	161
97	"	Ganfaru	434	89	279	155	78
98	"	Dhiffushi	488	215	358	140	101
99	"	Thuladhdoo	409	98	358	51	63
100	"	Huraa	344	163	235	109	58
101	"	Bimaafushi	373	138	279	94	70
102	"	Gulhi	300	95	221	79	48
103	"	Manafushi	443	137	302	141	76
104	"	Garaadhoo	576	229	375	201	103
105	Alifu	Thoddoo	628	202	380	248	133
106	"	Baamadhoo	434	228	139	295	92
107	"	Ukullaa	317	113	136	181	52
108	"	Mathiveri	254	122	172	82	32
109	"	Bodubolhudhoo	246	89	160	86	33
110	"	Feridhoo	341	127	105	236	57
111	"	Maniboo	297	118	149	148	64

No 4	Atoll	Name of island	Population	Children between 2½ - 15 years	No of illiterate people	No of illiterate people household	No of houses
112	Alifu	Hizandhoo	246	99	112	176	53
113	"	Hanguanaseedhoo	273	90	90	183	46
114	"	Oandhoo	390	122	182	208	70
115	"	Kuturudhoo	208	82	88	120	44
116	"	Kabithadhoo	880	341	567	313	124
117	"	Handhoo	175	81	51	124	44
118	"	Dhagethi	388	122	218	170	79
119	"	Dhigurah	296	116	172	124	88
120	"	Fenifushi	361	104	239	122	82
121	"	Dhidhoo	95	20	57	38	35
122	"	Maamigili	865	290	452	413	142
123	Vaavu	Fulidhoo	188	72	101	87	25
124	"	Thindhoo	121	40	77	44	19
125	"	Felidhoo	273	94	171	102	48
126	"	Koyodhoo	344	124	170	174	57
127	"	Rakeedhoo	215	74	157	58	35
128	Keema	Raivyandhoo	111	32	82	29	21
129	"	Kadifushi	125	43	83	42	19
130	"	Voyvah	159	46	102	57	26
131	"	Kalah	673	243	310	363	101
132	"	Kali	453	143	246	207	74
133	"	Nealaafushi	278	93	134	144	48
134	"	Kolhuufushi	623	220	387	236	115
135	"	Dhiggaru	703	216	419	284	108
136	"	Maduvaree	388	157	212	176	65
137	Faafu	Faalce	425	137	305	120	67
138	"	Biledhoo	489	186	170	319	86
139	"	Kagoodhoo	298	115	180	118	77
140	"	Dharaboodhoo	157	46	101	56	33
141	"	Nilandhoo	674	317	470	204	102
142	Dhaalu	Koodhoo	545	214	218	328	73
143	"	Madidhoo	349	139	65	284	49
144	"	Kubudhoo	400	133	233	36	71
145	"	Holhudheli	402	142	227	175	65
146	"	Gomendhoo	272	147	107	165	58

No	Atoll	Name of island	Population	Children between 2½ - 15 years	No of literate people	No of illi- terate people	No of houses
147	Dhaalu	Vaane	207	70	85	122	39
148	"	Maeboodhoo	436	150	282	154	67
149	"	Kudabuvadhoo	949	779	622	328	157
150	Thila	Burunes	356	117	181	175	58
151	"	Vilufushi	1103	399	620	483	147
152	"	Madifushi	455	188	252	203	68
153	"	Dhiyamigili	367	144	177	190	66
154	"	Guraidhoo	922	302	527	385	101
155	"	Kadoodhoo	400	152	279	121	75
156	"	Vandhoo	247	81	152	95	44
157	"	Hirilandhoo	435	168	285	150	74
158	"	Gaedhiffushi	281	119	181	100	44
159	"	Thimarafushi	1422	579	874	548	148
160	"	Veyrandoo	461	172	219	242	60
161	"	Kibidhoo	571	238	375	196	101
162	"	Omadhoo	400	128	223	177	76
163	Lamu	Isdhoo	910	332	344	566	160
164	"	Dhabidhoo	412	159	214	198	66
165	"	Manbidhoo	340	134	196	144	61
166	"	Mundoo	292	106	112	180	51
167	"	Gan	1103	378	544	559	160
168	"	Kalbidhoo	255	99	113	142	43
169	"	Maaveh	827	252	546	281	145
170	"	Fenadhoo	823	237	391	432	175
171	"	Gaadhoo	212	72	92	120	56
172	"	Maamadhoo	472	175	277	195	80
173	"	Eithadhoo	457	125	213	244	92
174	"	Kunbandhoo	291	111	123	163	61
175	G.A	Kalmanafushi	795	255	619	176	134
176	"	Viligili	1390	448	1170	220	244
177	"	Maamadhoo	650	227	508	142	118
178	"	Milandhoo	380	115	200	180	68
179	"	Dhaandhoo	780	220	450	330	132
180	"	Dheevadhoo	443	132	302	141	90
181	"	Kodoy	174	38	140	34	41
182	"	Dhiyadhoo	131	34	100	31	31
183	"	Gonafushi	498	196	297	201	102
184	"	Kadumalhudhoo	343	134	195	148	60

No.	Atoll	Name of island	Population	Children between 2½ - 15 years	No of literate people	No of illi- terate people	No of houses
185	G.Da	Maiveli	763	273	565	198	164
186	"	Hoodhdhoo	493	154	295	198	98
187	"	Nadallaa	546	183	332	214	98
188	"	Gadhoo	1431	482	1389	42	283
189	"	Rathafandhoo	715	270	513	160	173
190	"	Flycari	615	237	400	109	117
191	"	Manthodaa	406	138	251	154	78
192	"	Vandhoo	680	236	509	171	138
193	"	Fares	436	159	310	126	93
194	"	Havardhinadhoo	3328	552	2553	775	528
195	Gnaviyani	Kulah	4840	1508	3517	1323	826
196	Seenu	Hithadhoo	7051	2708	4768	2283	999
197	"	Maredhoo	1690	904	908	710	284
198	"	Maradhoo Feydhoo	845	347	763	82	152
199	"	Feydhoo	2573	1097	2191	382	487
200	"	Moodhoo	1411	541	1121	290	263
201	"	Huladhoo	2110	869	1407	703	301

DATA 6

POPULATION, THE NUMBER OF SCHOOL CHILDREN
ILLITERATES, AND HOUSES ON EACH ATOLL (1978)

Atoll	Population		Children between the age of 2½ - 15		Illiterate people		Houses	
	Population of each atoll	Against the whole population	Number of persons	Against the population in atoll	Number of persons	Against the population in atoll	Number of houses	Average size of family
HAA ALIF	9,868	7.8	3,597	36.4	4,477	45.5	1,551	6.4
HAA DHAAL	10,776	8.5	4,320	40.1	4,455	41.3	1,993	5.4
SHAVIYANI	7,035	5.6	2,854	40.5	3,123	44.4	1,351	5.2
NOONU	7,152	5.7	2,691	37.6	2,857	39.9	1,247	5.7
RAA	8,127	6.4	3,233	40.0	3,338	41.1	1,422	5.7
BAA	6,264	5.0	2,277	36.4	2,169	34.6	1,084	5.8
LHAVIYANI	6,507	5.2	2,259	34.7	2,372	36.4	976	6.7
KAAFU	4,317	3.4	1,493	34.6	1,247	28.9	758	5.7
ALIF	6,694	5.3	2,466	36.8	3,225	48.2	1,893	3.5
VAAVU	1,141	0.9	404	35.4	465	40.7	184	6.2
MEEMU	3,513	2.7	1,193	34.0	1,538	43.8	577	6.1
FAAFU	2,043	1.6	801	39.2	817	40.0	365	5.6
DHAALU	3,562	2.8	1,774	49.8	1,723	48.4	579	6.2
THAA	7,410	5.9	2,787	37.6	3,065	41.4	1,062	7.0
LAAMU	6,394	5.1	2,180	34.1	3,224	50.4	1,150	5.6
G.A	5,534	4.4	1,859	33.3	1,603	28.7	1,020	5.5
G.DH	9,264	7.3	2,684	29.0	2,147	23.2	1,770	5.2
GNAVIYANI	4,840	3.8	1,508	31.2	1,323	27.3	826	5.9
SEENU	15,680	12.4	6,466	41.2	4,450	28.4	2,486	6.3
TOTAL	126,171	100 %	46,846	37.1%	47,618	37.7%	22,294	5.7

Note: As for Raa Atoll, the population of 4 islands in the atoll was uncertain, and was not included in the table.

DATA 7

ENROLMENTS AT MAJEEDIYA SCHOOL

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Kindergarten	145	129	123	134	116	109	89	63	128	192
Grade 1	73	94	77	74	97	112	120	161	62	124
Grade 2	104	85	105	72	75	97	120	133	129	90
Grade 3	103	91	63	81	67	67	90	120	129	175
Grade 4	69	106	86	62	88	90	101	91	121	138
Grade 5	60	70	101	76	49	47	70	96	97	117
Grade 6	52	59	48	87	79	55	48	71	82	87
Grade 7	30	44	59	35	60	65	48	46	65	71
Grade 8	35	24	42	46	34	52	58	46	37	65
Grade 9	27	29	27	28	33	21	40	49	41	39
Grade 10 (Arts & Science)	37	35	36	19	19	29	15	33	48	42
Commercial	--	--	--	--	--	--	14	--	--	--
Grade 11	--	--	--	--	--	--	29	19	7	--
Grade 12	--	--	--	--	--	--	--	11	--	--
TOTAL:	735	766	767	714	717	744	842	939	946	1140

DATA 8

ENROLLMENT AT AMINIYA SCHOOL - MALE

	1971	1972	1973	1974	1975	1976	1977	1978	1979
Kindergarten	133	151	95	91	86	63	55	122	190
Grade 1	92	109	101	82	85	80	108	82	118
Grade 2	81	45	104	98	80	90	89	108	87
Grade 3	66	74	65	99	104	82	90	82	113
Grade 4	68	52	74	74	88	107	78	89	88
Grade 5	62	62	54	69	63	75	99	72	87
Grade 6	50	52	64	57	71	77	76	82	97
Grade 7	26	33	52	44	50	52	73	72	54
Grade 8	25	28	28	49	54	39	36	51	60
Grade 9	14	24	29	24	25	34	37	26	43
Grade 10	10	9	19	21	22	17	32	25	29
Grade 11	-	-	-	-	-	26	9	7	-
Grade 12	-	5	10	-	-	-	-	5	-
Commercial Class	-	-	-	-	-	13	17	9	21
Home Science	11	-	-	-	-	-	-	-	-
TOTAL:	643	649	685	708	728	655	799	832	987

DATA 9

ENROLMENT AT ISKANDAR MONTESSORI SCHOOL

	1976	1977	1978	1979
Morning Session	359	433	425	627
Afternoon Session	343	418	428	615
TOTAL:	702	851	853	1242

age of admission : 2½ years
age of leaving school: 5 years

DATA 10

DETAILS OF THE RESULTS OF THE G.C.E. 'O' LEVEL (LONDON) EXAMINATION HELD IN JANUARY 1976

SUBJECT	Total No. of Boys Sat	No. of Boys Securing 'A'	No. of Boys Securing 'B'	No. of Boys Securing 'C'	No. of Boys Securing 'D'	No. of Boys Securing 'E'	Total No. passed
English	29	2	12	8	1	6	22
Mathematics	29	12	12	5	Nil	Nil	29
Technical Drawing	11	4	3	1	2	1	8
Geography	18	3	5	7	3	Nil	15
Biology	29	3	6	6	1	10	15
Chemistry	29	1	7	9	3	4	17
Physics	29	4	5	4	7	2	13
History	29	11	3	6	Nil	1	20
Economics	29	1	3	3	4	6	7
Art	7	2	2	3	Nil	Nil	7

NOTE: Ordinary Level (University of London)

Attainment in an Ordinary level subject is indicated by a Grade A,B,C,D or E of which Grade A is the highest and Grade E the lowest. Candidates awarded Grade A, B or C have reached the standard of the former subject pass at Ordinary level.

DATA 11

DETAILS OF THE RESULTS OF THE G.C.E. 'O' LEVEL (LONDON) EXAMINATION HELD IN JANUARY 1976

SUBJECT	Total No. of girls Sat	No. of girls Securing 'A'	No. of girls Securing 'B'	No. of girls Securing 'C'	No. of girls Securing 'D'	No. of girls Securing 'E'	No. of girls Securing 'U'	Total No. Passed
English	26	2	5	9	4	6	-	16
Mathematics	26	3	10	9	1	1	2	22
Technical Drawing	5	-	-	2	1	-	2	2
Geography	17	5	1	3	4	2	2	9
Biology	25	2	3	9	2	4	5	14
Chemistry	23	1	5	5	2	7	3	11
Physics	24	3	3	9	-	1	8	15
History	23	1	5	3	2	4	8	9
Economics	22	-	-	-	1	5	16	-
Art	1	-	-	1	-	-	-	1

SCHOOLS AT THE ATOLLS OF THE MALDIVES REPUBLIC AND THE NO. OF STUDENTSENROLLED (1975)

(1) <u>HAA ALIFU ATOLL</u>			<u>Boys</u>	<u>Girls</u>	<u>Total</u>
	<u>Type of School</u>				
	Makthabs (Primary schools)	- 14	227	211	438
	Schools (Ordinary)	- 2	52	50	102
(2) <u>HAA DHAAJU ATOLL</u>					
	Makthabs	- 8	329	336	665
	School	- 1	130	91	221
(3) <u>SHAVIYANI ATOLL</u>					
	Makthabs	- 1	12	8	20
	School	-	-	-	-
(4) <u>NOONU ATOLL</u>					
	Makthabs	- 3	119	82	201
	School	- 1	34	38	72
(5) <u>RAA ATOLL</u>					
	Makthabs	- 8	130	136	266
(6) <u>BAA ATOLL</u>					
	Makthabs	- 3	243	232	475
	School	- 1	107	102	209
(7) <u>LAVIYANI ATOLL</u>					
	Makthabs	- 5	144	125	269
	School	- 1	50	69	119
(8) <u>KAAFU ATOLL</u>					
	Makthabs	- 9	242	245	487
(9) <u>ALIFU ATOLL</u>					
	Makthabs	- 5	112	153	265
(10) <u>DHAALU ATOLL</u>					
	Makthabs	- 1	15	15	30
	School	- 1	69	74	143
(11) <u>THAA ATOLL</u>					
	Makthabs	- 13	638	636	1274
(12) <u>LAAMU ATOLL</u>					
	Makthabs	- 11	249	241	490
	School	- 1	60	15	75
(13) <u>GAAFU ALIFU ATOLL</u>					
	Makthabs	- 3	27	24	51
(14) <u>GAAFU DHAALU ATOLL</u>					
	Makthabs	- 7	93	93	186
	School	- 1	19	23	42

(15) <u>NAVIYANI ATOLL</u>		<u>BOYS</u>	<u>GIRLS</u>	<u>TOTAL</u>
Makthabs	- 5	104	89	193
School	- 1	28	15	42
 (16) <u>SEENU ATOLL</u>				
Makthabs	- 14	341	294	635
School	- 10	373	295	668

TOTAL: SCHOOL = 1694 students
 MAKTHABS = 5945 students.

Summary:

1. Number of students in schools in the Atolls
 - Boys - 982
 - Girls - 772
2. Number of students in Makthabs in the atolls
 - Boys - 3025
 - Girls - 2920
3. Number of students in the three Government Schools in Male'
 - 2461
4. Number of students in the eight Private Schools in Male'
 - 2138

GRANT TOTAL: 12298

Note: The above enrolments do not include the enrolments at Makthabs and schools of Vaavu, Meemu and Faafu Atolls for which figures are not available with the Education Department.

DATA 13

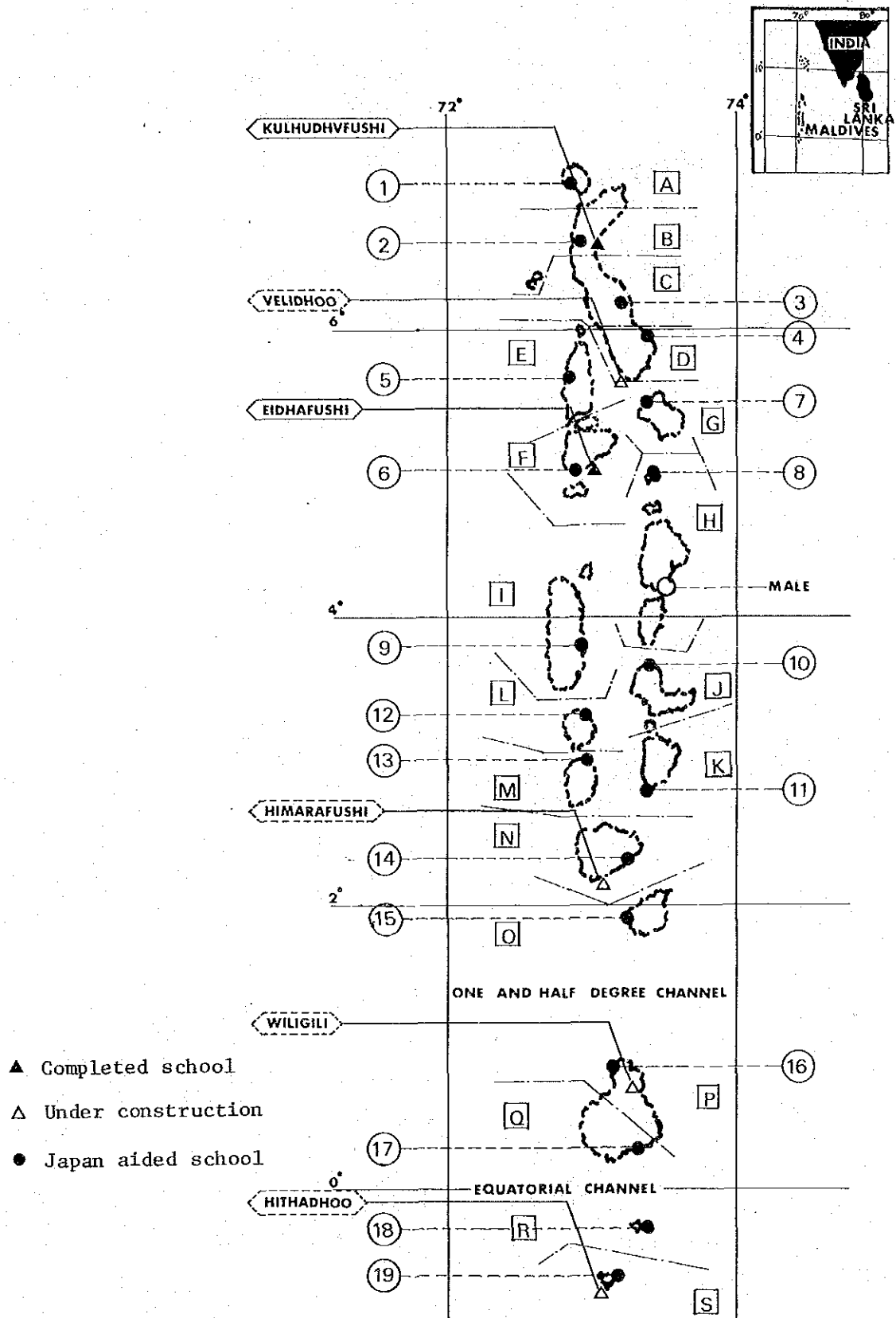
SEENU ATOLL - ENROLEMENTS 1976 MALE/FEMALE

	MALE	FEMALE	TOTAL
Pre-Primary	51	62	113
I	331	254	585
II	163	160	323
III	137	100	237
IV	44	62	106
V	20	18	38
VI	11	13	24
VII	11	12	23
VIII	8	3	11
TOTAL:	776	684	1460

Note: Students enrolled at the first three levels of education is 68 percent of the relevant age group.

DATA 14 LOCATION OF THE UNICEF AIDED SCHOOL

REPUBLIC OF MALDIVES



II-3 Outline of Climate

II-3-1 Outline of Climate

The Maldives lies in the tropics and has two monsoon seasons yearly which is typical in the Indian Ocean. Monsoon winds blow from the north east between November and April, and from the south west between May and October.

The average temperature does not vary and stays at 27° - 29°C throughout the year. The temperature rises to about 30°C, and the humidity becomes about 80% during the day.

The annual amount of rainfall is about 2,000 mm and much of it falls during May and October (rainy season).

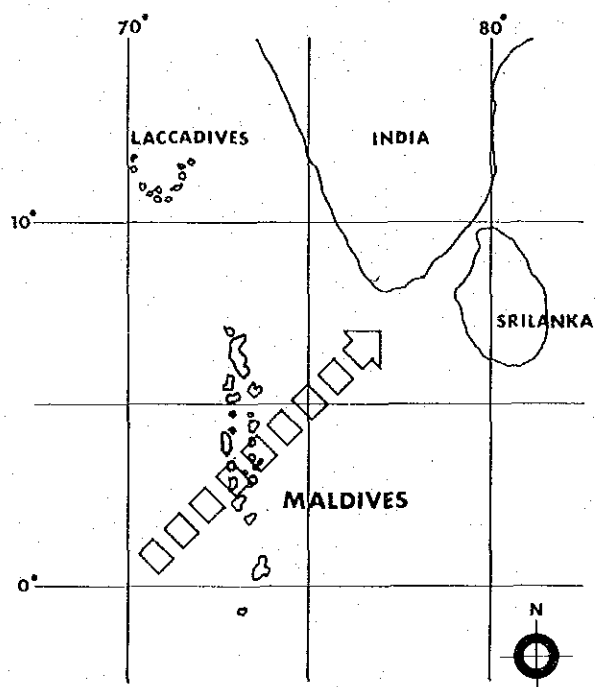
The month with the most amount of rainfall is normally October which usually gets about 300 mm. of rain, the record rainfall per day for the past 12 years being 176 mm.

The pattern of rainfall during October is different from that of the squalls which occurs between May and September. The rain continues for about a week which is typical of the area.

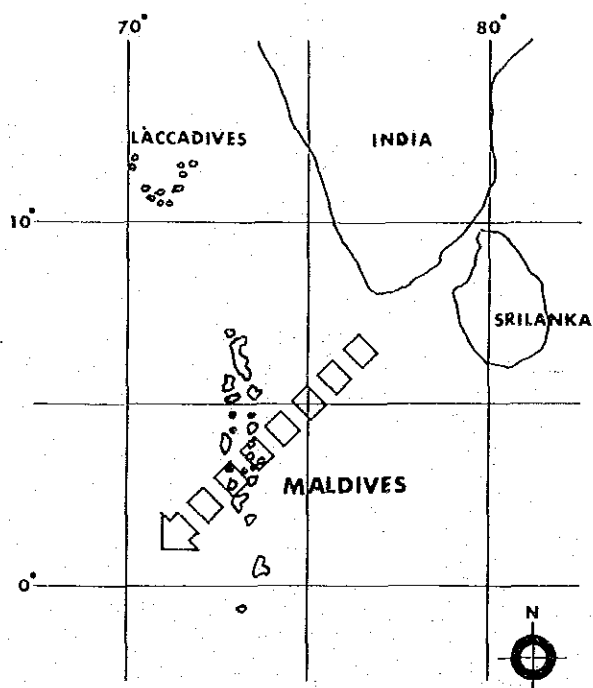
The wind blows from almost one direction throughout the year. Strong wind blows from the northeast or the southwest and the exceptionally strong October winds blows with a velocity of about 8 m/sec from the southwest.

II-3-2 DATA-1

Wind Direction of the Two Types of Monsoons



South-West Monsoon (May-Oct)



North-East Monsoon (Nov-Apr)

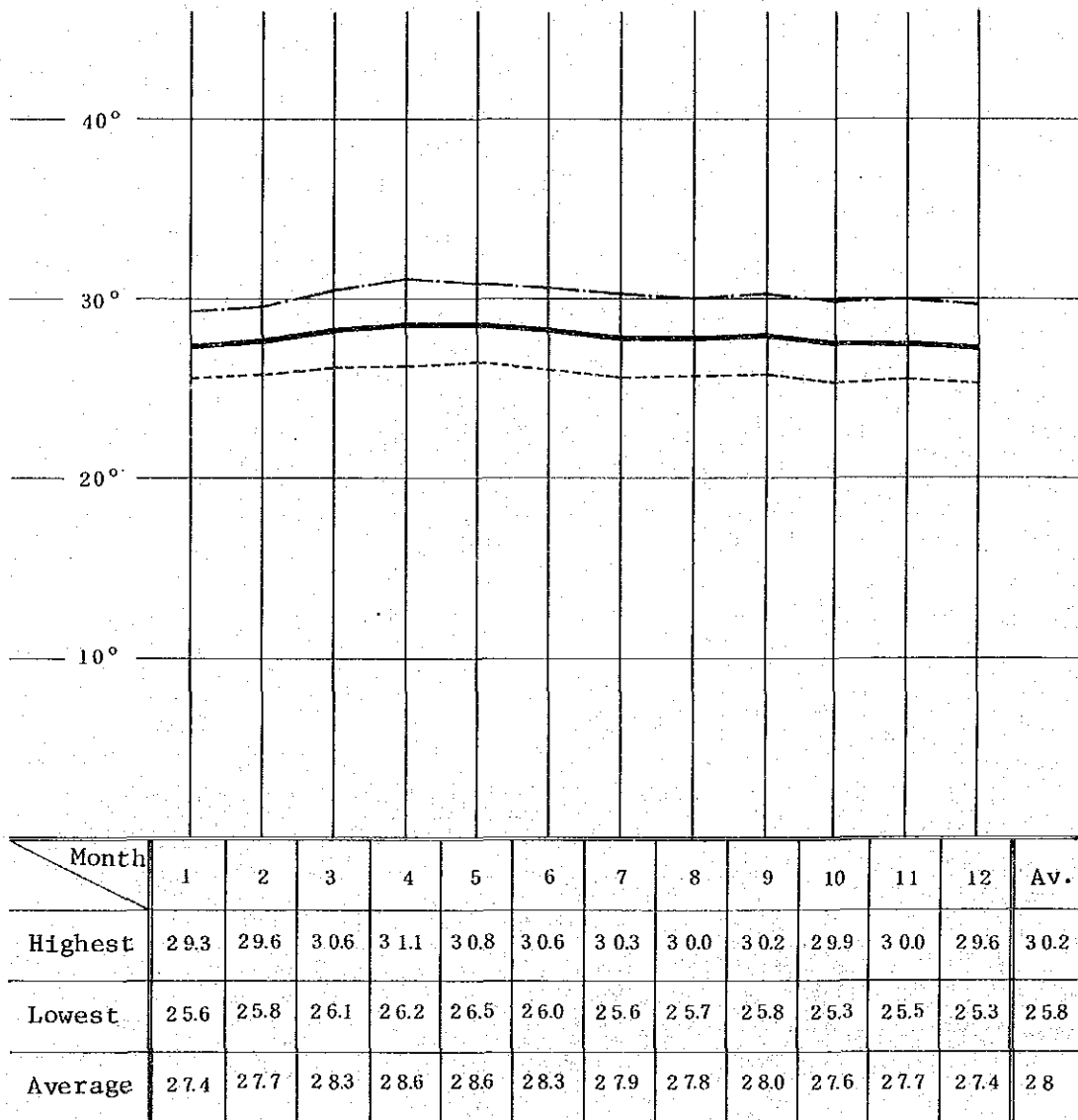
DATA-2

Temperature

(1967 ~ 1978. average temperature for 12 years)

Note: highest recorded temperature-34.1°C (1973.4.28)

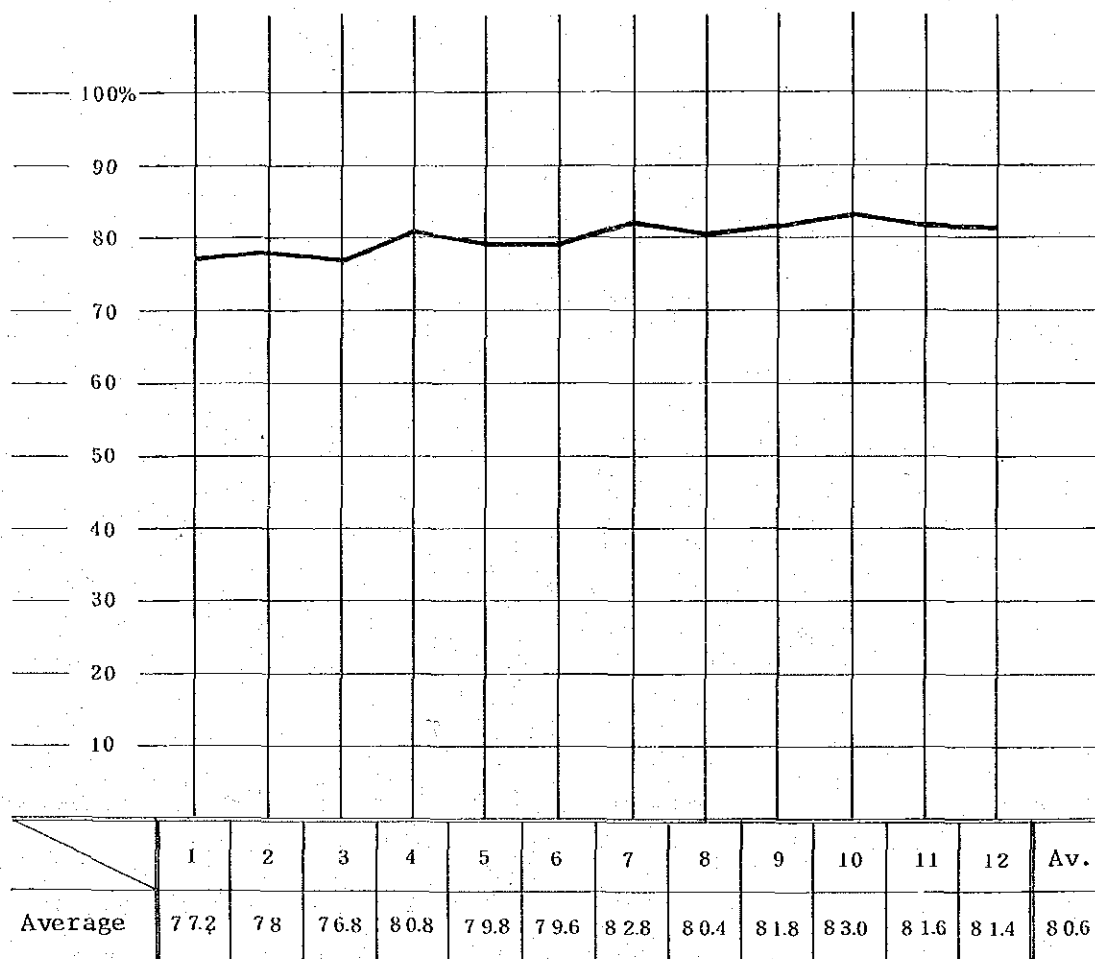
lowest recorded temperature -17.2°C (1978.11.3)



DATA-3

Humidity

(1974 ~ 1978. Average humidity for 5 years)



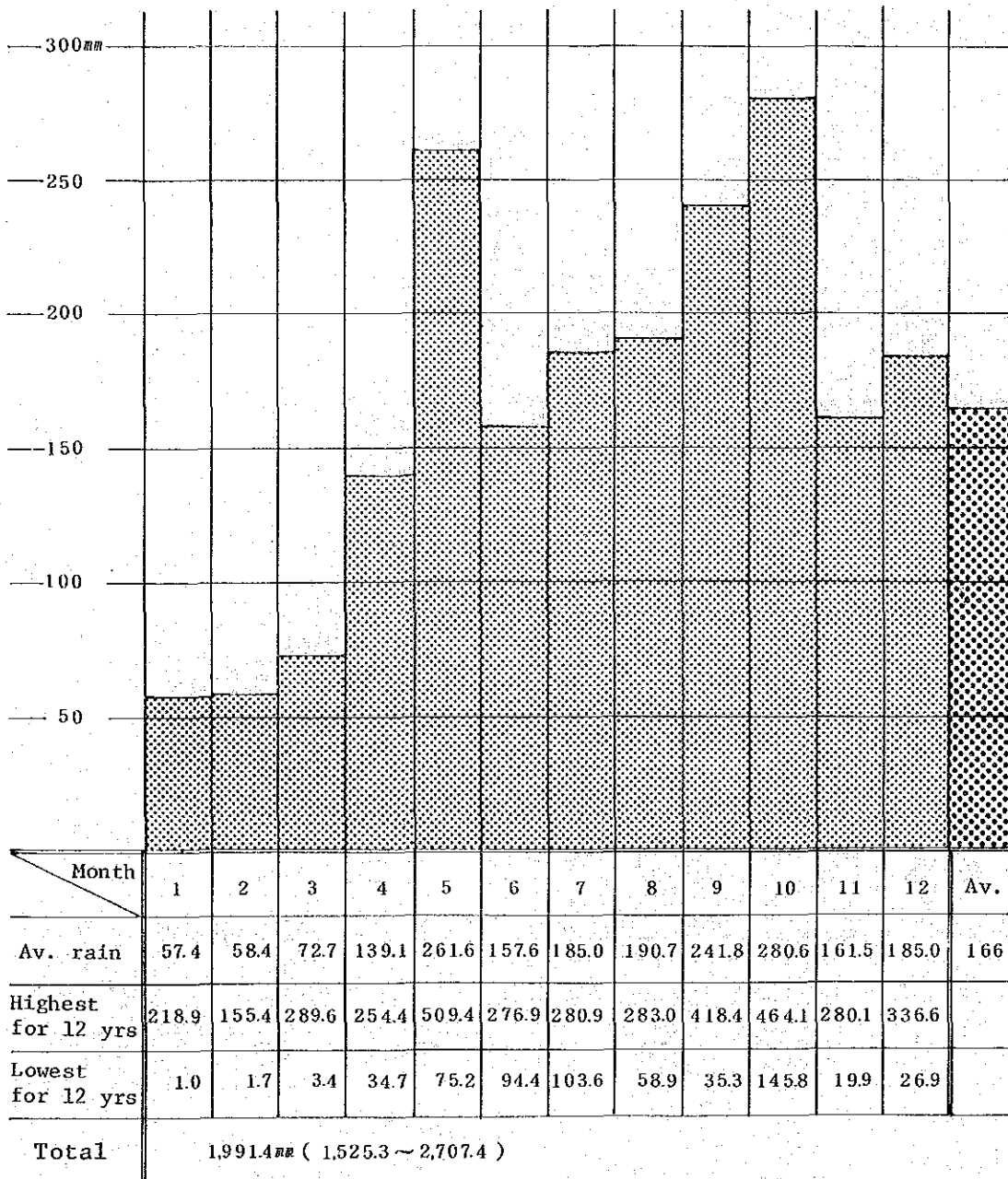
1974			79	87	68	75	95	80	87	83	78	82	81
75	84	82	75	87	85	85	79	85	82	85	82	79	83
76	73	73	77	80	82	75	79	78	78	85	86	83	79
77	76	79	77	74	82	80	83	78	80	81	82	82	80
78	75	78	81	76	82	83	83	81	82	81	80	81	80

DATA-4

Amount of Rainfall

(1967 ~ 1978. Average amount of rainfall for 12 years)

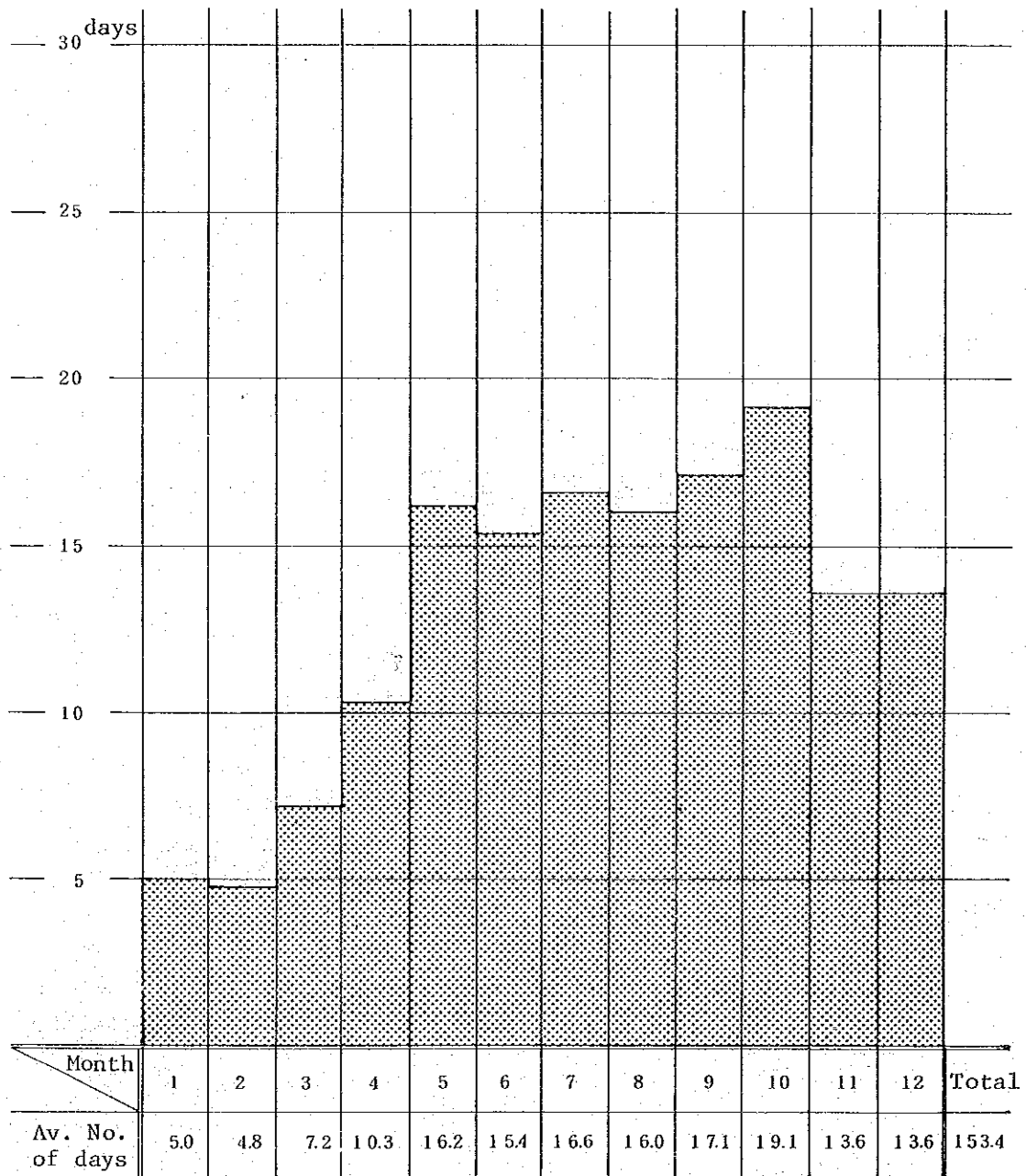
Note: highest recorded amount of rainfall during
24 hours: 175.9 mm (1977.12.23)



DATA-5

Number of Rainy Days

(1967 ~ 1978. Average number of rainydays for 12 years)

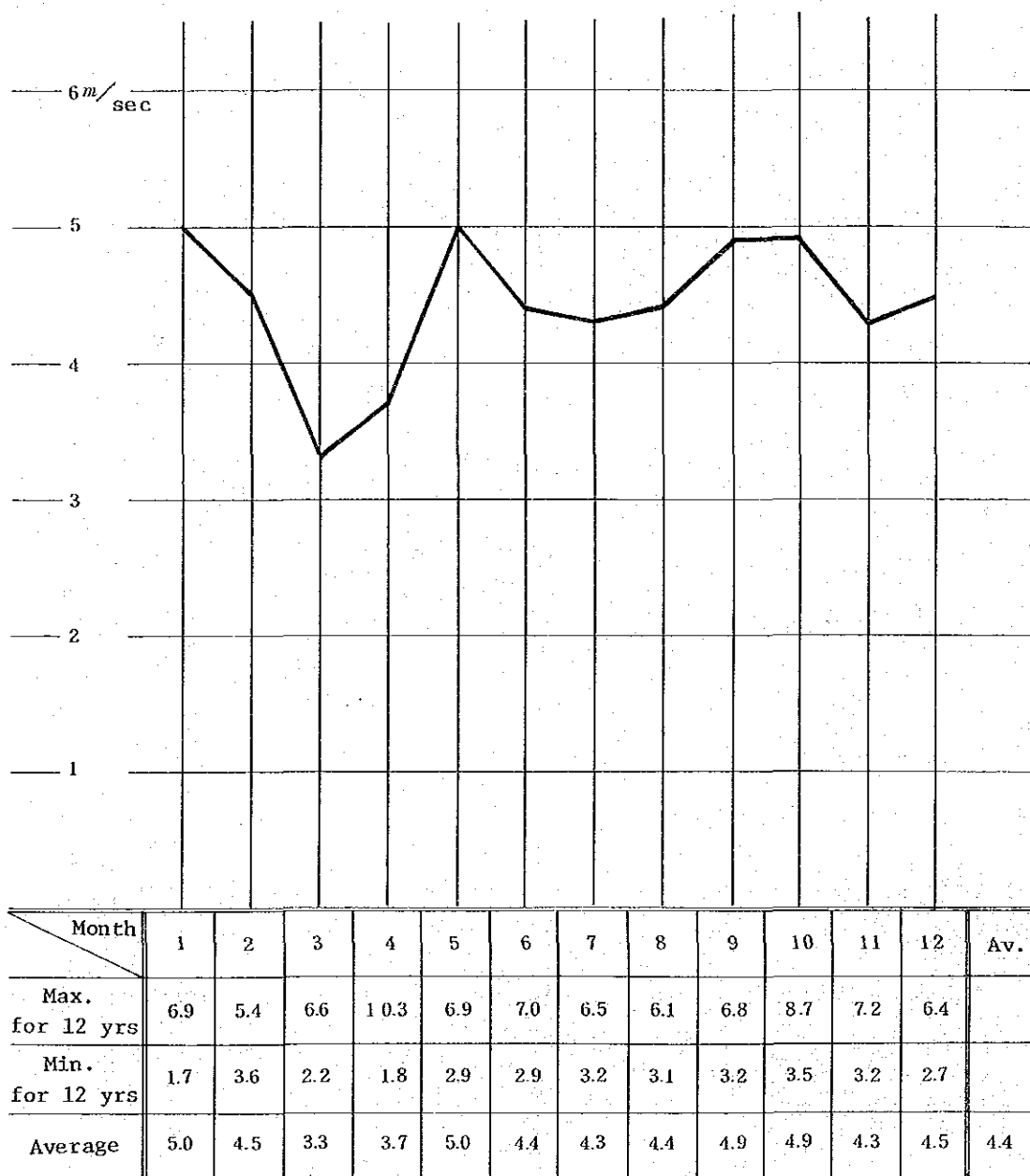


DATA-6

Wind Velocity

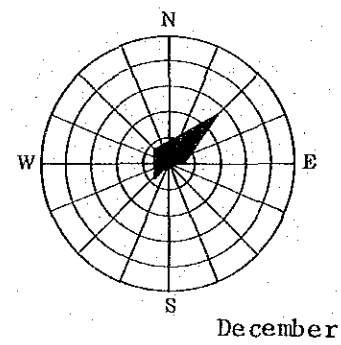
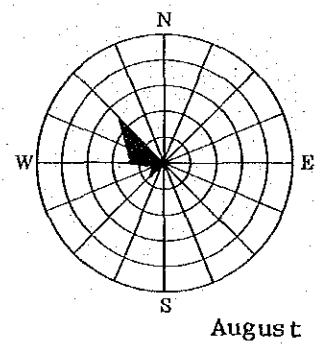
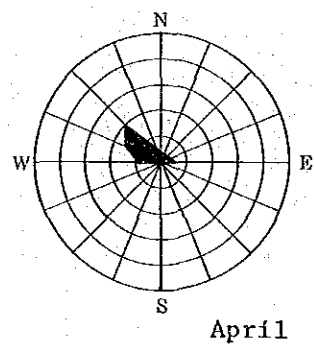
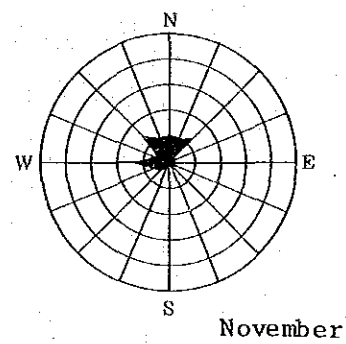
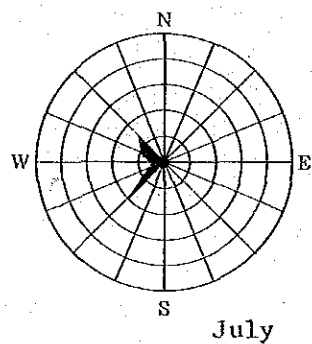
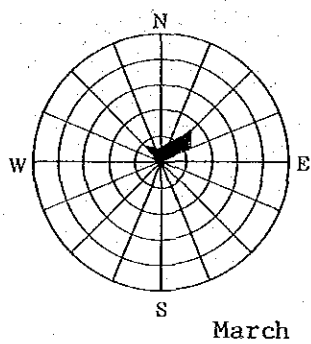
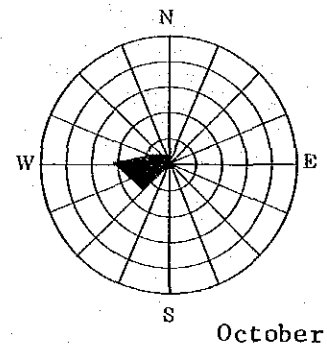
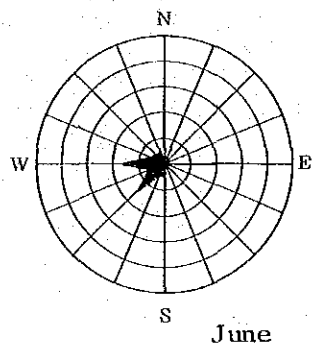
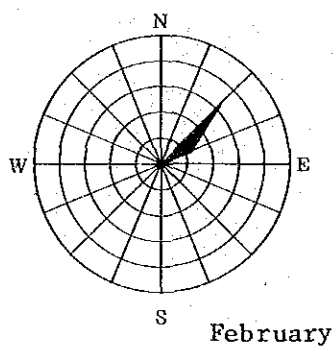
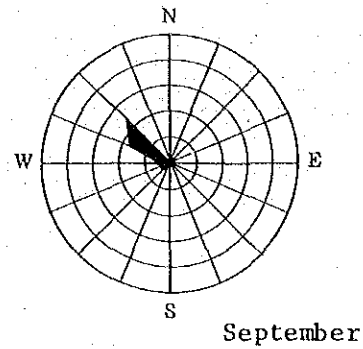
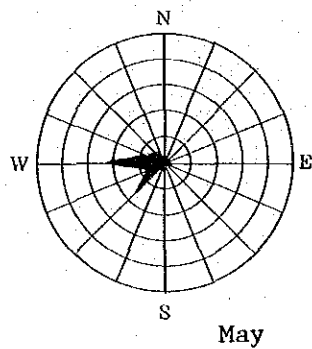
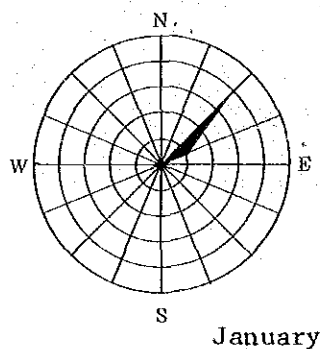
(1967 ~ 1978. Average velocity for 12 years)

Note: highest recorded velocity-31.9 M/S (1978.11.3)



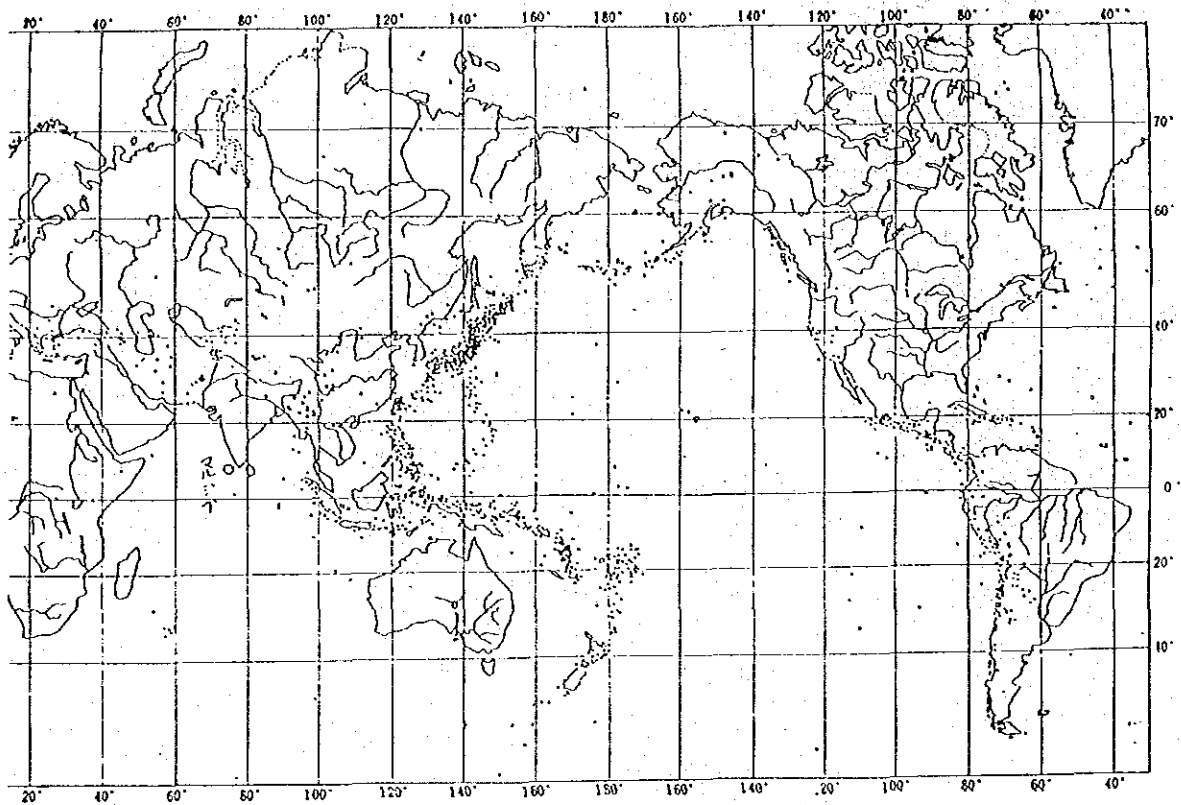
DATA-7

Wind Direction (1967 yrs~1978 yrs average for 12 yrs)



II-3-3 Earthquakes

The Maldives have never been visited by earthquakes.
Furthermore, there have been no records of earthquakes.



Seismic map (1900-1949)

II-4 Domestic transportation

II-4-1 Summary

As mentioned in II-1-1, The Republic of Maldives is made up of about 2,000 small islands scattered in atoll-form along an area of 110,067 km² (about 82 km north to south and about 130 km east to west.)

Accordingly, we must consider great distances even for domestic transportation. The sea is both splendid and frightening at the same time for traveling in the Maldives from one island to another takes from sunrise to sunset.

Upon conducting an inspection tour of the UNICEF aided schools (both under construction and completed) it took 11 hours from Male to Velidhoo in the Island in Noonu atoll, which is about 150 km from Male, and took 6 hours, in spite of the expected 4.5 hours, from Velidhoo to Eydhafushi in the Baa atoll. The ship used was the 3 cabin ocean-going cruiser owned by the government called the Silver Beam. 6 crews of this ship were very skillful, and surprisingly they did not use maritime charts or a compass; 3 crews just stood on the bow watching for islands and strong currents throughout the journey.

This fact exemplified the difficulty and the climatic insecurity of inter-island sailing in the Maldives which is conducted visually during the day without the use of charts or compasses. Apparently, the people of the Maldives sail and navigate totally by experience and by judging the climate, but in spite of this, no weather for-

cast services are available.

Also no regular sailing services or transportation system of any kind exists so, the people sail by an island "dhoni" when it becomes necessary. A "dhoni" is a wooden fishing boat chiefly used on the islands. Recently, a dhoni with an engine is used on some of the islands. An engine dhoni has a loading capacity of less than 2 tons and its size is about 33 to 38 ft. (Ref. II-4-2 Data II).

MALE	HUVARAFUSHI	THURAAKUNU	DHIDHDHOO	NOLHIVARANFARU	KULHUDHUFFUSHI	MAKUNUDHOO	FARUKOLHUFUNADHOO	MAROSHI	MANADHOO	VELIDHOO	KADHOLHUTHOO	UGOOFARU	EYDHAFUSHI	GOIDHOO	NAIFARU	OLHUVELIFUSHI	KAASHIDHOO	GAAFARU	GURADHOO	THODDOO	MAHIBADHOO	MAAMIGILI	FOTTHEYO	FELIDHOO	MULAH	MULI	MAGOODHOO	MEEDHOO	KUDAHUVADHOO	BURUNI	VELMANDHOO	ISDHOO	HITHADHOO (L)	VILIGILI (G.A)	KOLAMAAFUSHI	HAVARUTHINADHOO	GADHDHOO	FOAH MULAH	GAN		
HUVARAFUSHI	278																																								
THURAAKUNU	290	11																																							
DHIDHDHOO	267	23	27																																						
NOLHIVARANFARU	248	35	42	21																																					
KULHUDHUFFUSHI	243	39	47	29	8																																				
MAKUNUDHOO	232	50	55	61	50	34																																			
FARUKOLHUFUNADHOO	198	85	90	74	51	47	61																																		
MAROSHI	203	77	87	71	50	40	40	16																																	
MANADHOO	156	127	137	111	92	87	90	53																																	
VELIDHOO	150	130	140	117	100	92	85	50	55	16																															
KADHOLHUTHOO	156	134	143	126	106	101	77	71	60	56	40																														
UGOOFARU	151	129	138	119	100	95	80	61	53	31	16	27																													
EYDHAFUSHI	103	182	192	172	153	145	129	109	105	72	58	50	55																												
GOIDHOO	87	203	214	195	175	167	150	119	129	93	80	31	77	23																											
NAIFARU	124	156	166	143	126	117	201	74	80	35	48	53	34	43	63																										
OLHUVELIFUSHI	111	166	195	169	169	146	150	100	114	58	29	97	69	72	85	43																									
KAASHIDHOO	79	204	206	188	180	166	171	119	126	79	74	87	95	42	47	50	43																								
GAAFARU	39	227	233	212	195	187	175	145	151	105	97	92	95	56	55	71	53	26																							
GURADHOO	27	299	320	295	272	267	253	225	229	87	177	172	175	125	106	149	137	105	80																						
THODDOO	58	248	243	240	220	214	196	175	175	137	126	117	122	69	45	105	113	89	58	71																					
MAHIBADHOO	79	309	322	303	290	277	253	240	235	196	187	180	183	132	116	163	164	109	103	50	63																				
MAAMIGILI	92	338	348	330	311	303	282	270	266	225	217	206	224	159	117	190	195	145	134	66	92	31																			
FOTTHEYO	72	354	364	336	319	314	303	269	275	232	220	229	261	175	158	195	179	150	126	51	121	85	89																		
FELIDHOO	68	346	352	333	314	309	285	266	269	225	216	219	216	159	148	192	175	148	121	43	108	63	72	21																	
MULAH	119	396	402	381	365	359	344	315	319	277	269	269	261	216	190	243	214	201	172	93	151	100	90	53	53																
MULI	121	394	404	383	367	360	346	317	320	278	270	270	270	217	192	245	216	203	174	95	153	101	92	55	55	16															
MAGOODHOO	114	375	386	369	348	341	322	301	301	261	253	246	249	196	174	233	220	185	164	82	145	68	40	80	64	58	58														
MEEDHOO	108	377	389	370	351	357	325	303	465	262	257	246	172	198	175	230	224	187	163	90	132	71	43	79	61	53	55	5													
KUDAHUVADHOO	154	418	428	409	389	383	365	348	206	303	295	286	301	238	216	270	259	229	206	130	171	109	82	111	95	68	69	43	43												
BURUNI	159	430	439	420	401	394	375	352	357	314	304	299	301	248	227	280	270	237	217	135	183	124	95	106	97	56	56	55	53	23											
VEYMANDHOO	195	472	475	455	436	430	412	389	391	365	340	335	336	285	262	317	304	272	246	167	219	156	129	137	129	85	84	92	90	50	47										
ISDHOO	198	475	478	463	445	408	423	399	401	356	349	348	346	291	270	323	307	278	253	174	230	172	153	134	134	82	79	110	108	84	63	47									
HITHADHOO (L)	233	502	513	494	475	468	449	430	430	391	378	372	328	322	301	359	346	311	265	220	256	195	264	177	166	126	124	132	127	89	77	40	68								
VILIGILI (GA)	330	603	613	594	575	568	552	526	526	486	478	471	476	431	406	454	439	409	385	307	359	296	270	266	266	214	214	230	230	188	82	140	139	108							
KOLAMAAFUSHI	323	595	597	489	566	560	542	520	521	478	472	465	468	415	393	447	433	402	378	299	349	288	262	248	259	209	204	222	219	180	167	132	130	95							
HAVARUTHINADHOO	357	623	636	616	579	589	573	552	550	509	502	492	497	444	423	478	467	433	407	328	377	315	288	293	290	241	235	251	248	208	200	163	166	122							
GADHDHOO	375	645	658	637	620	613	594	571	571	529	523	517	520	470	456	497	484	452	428	349	401	341	314	309	307	245	254	274	272	232	220	183	179	150							
FOAH MULAH	426	703	716	695	676	668	649	647	629	587	580	576	578	525	505	555	541	510	484	406	462	397	369	365	365	314	312	330	327	241	278	241	233	204							
GAN (S)	472	726	753	734	713	706	689	668	626	618	610	616	562	541	626	578	547	525	446	546	433	407	404	404	404	356	354	369	367	327	315	278	274	243							
HITHADHOO (S)	465	734	761	732	706	698	676	663	660	615	608	603	608	554	533	586	570	541	517	436	538	425	397	396	396	346	344	360	357	319	306	270	266	237							

NOTE: (1) ALL DISTANCES ARE IN KILOMETERS

(2) ALL DISTANCES ARE TAKEN ON A STRAIGHT LINE BETWEEN POINS IN THIS TABLE

NOTE: (1) ALL DISTANCES ARE IN KILOMETERS
(2) ALL DISTANCES ARE TAKEN ON A STRAIGHT LINE BETWEEN POINS IN THIS TABLE

DISTANCE BETWEEN EACH ISLAND IN THE MALDIVES

DATA 2

RAA E
NORTH MAALOMADULU ATOLL
ADM. ISLAND: UGODHARU

VELIDHOO
Velidhoo Island (UNICEF School
under construction)

Oct. 30
VELIDHOO-EIDHAFUSHI
Took 6 hours in
spite of the estimated
4.5 hours. The sea was
extremely calm
but took
1.5 hours more than
usual, probably due
to a mistake in
sailing

F. BAA
SOUTH MAALOMADULU ATOLL
& EIDHAFUSHI ATOLL
ADM. ISLAND: EIDHAFUSHI

EIDHAFUSHI
EIDHAFUSHI Completed
UNICEF

(Oct. 29 1979)
MALE-VELIDHOO
took 10 hours and a half.
Fine weather but with some
swells and wind

Oct. 31
EIDHAFUSHI-MALE
6 hours

The current is so strong
that the ship & its wake
angles off making a dog
leg shape.

It took 3 hours and
a half to sail
through MALE ATOLL

1. ALIF
ARI ATOLL & RASDU ATOLL
ADM. ISLAND: MAALOMADULU

NORTH MALE ATOLL

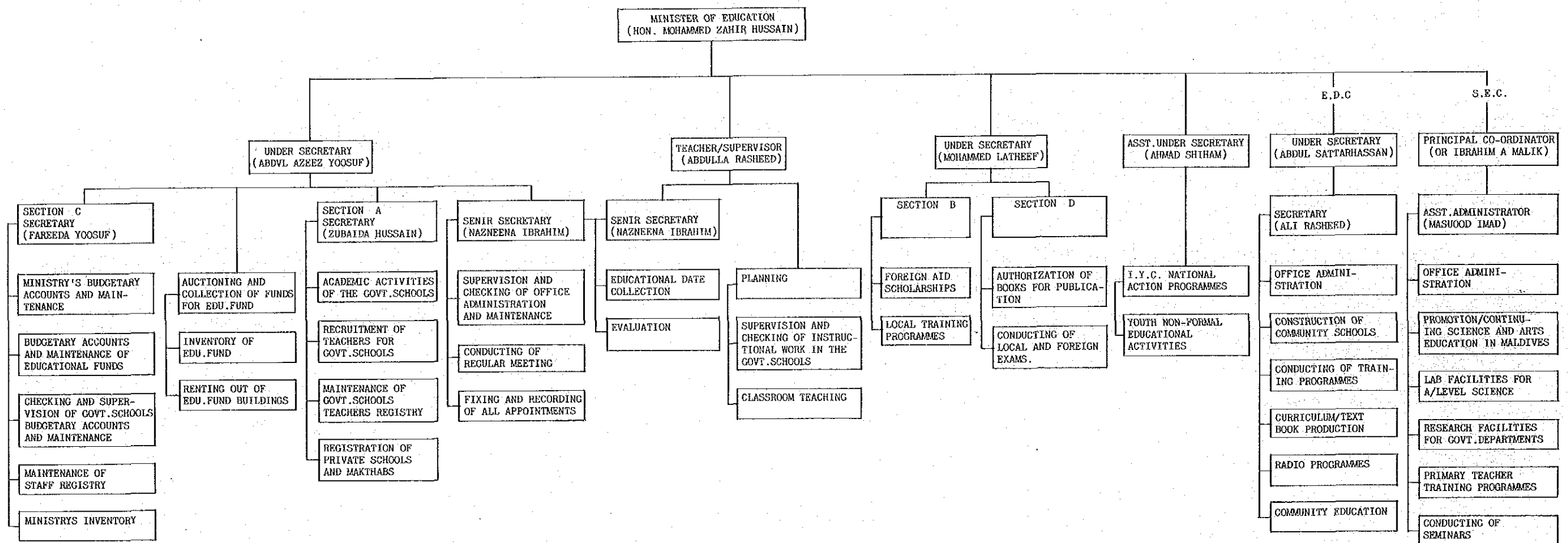
MALE

INSPECTION OF THE ACTUAL CONDITION OF CONSTRUCTION

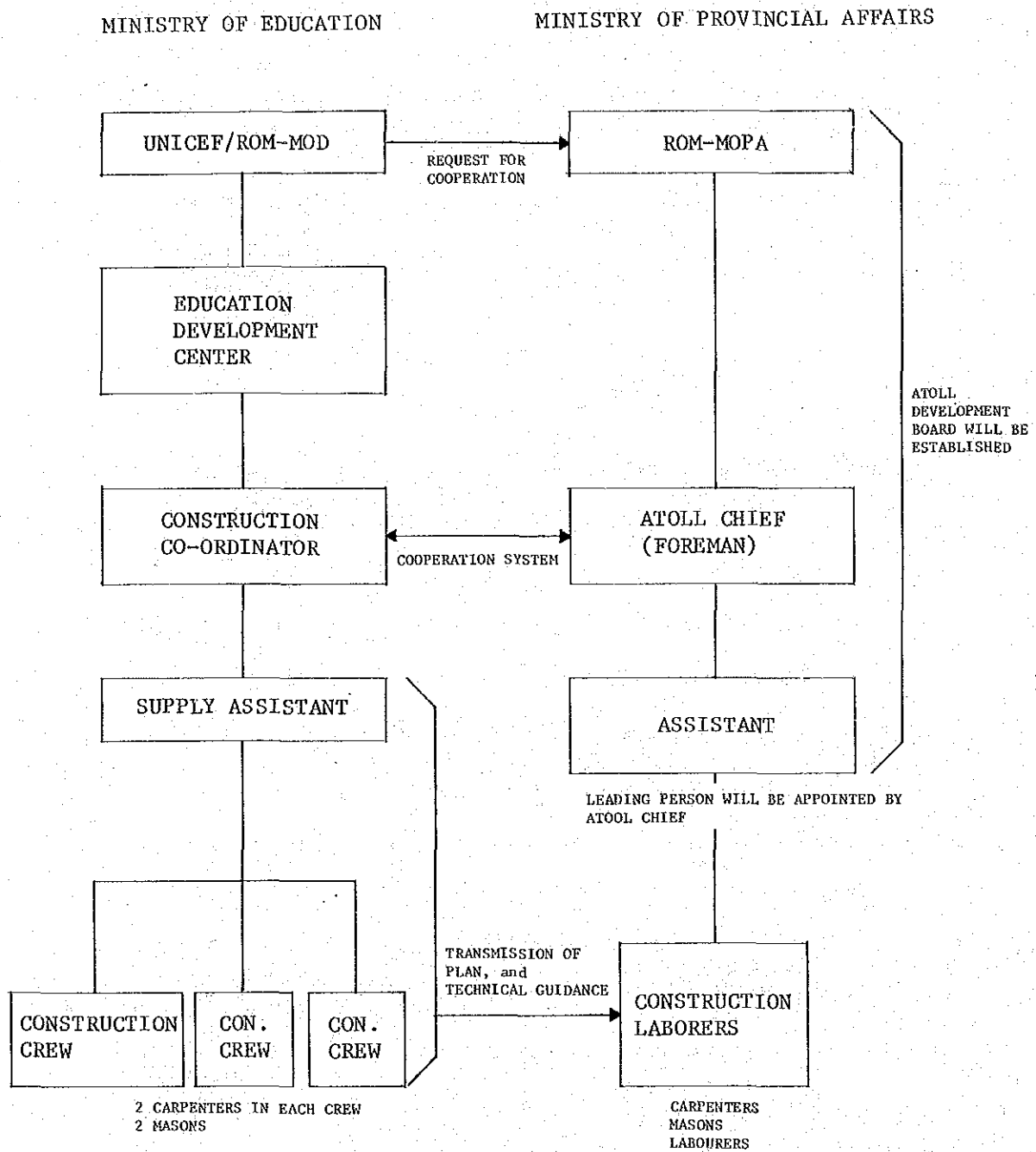
II-5 Organization concerned

II-5-1 Organization of the Ministry of Education of the Maldives.

STRUCTURE OF MINISTRY OF EDUCATION



II-5-2 Organization chart of community school construction



II—6 Actual condition of construction

There is a great difference in construction as well as in other factors between Male, its capital, and the other islands.

Electricity is supplied on Male, so its people can watch colour television for several hours and go to cinemas.

In this respect, there is a great gap between the other local islands and the capital.

Nine out of ten buildings on Male are of masonry structure made up coral stones. However, some three-story buildings of reinforced concrete structure and spacious steel-frame theatres can be found and the finished work is very nice and is very accurate as well. Cranes and power shovels are available enabling the construction of 3-story buildings and other buildings of middle height and according to the 2 Maldivian architects, there is no problem to acquire the technicians to operate them.

Outside of Male, however, nothing more than hoes (imported), hammers (for crushing coral stones), saws (with rough tooth), etc. are used, and it seems that they don't even have primitive tools such as carts and straw baskets due to the fact that the fishermen need to carry nothing in their hands but fish.

The following is the report of inspection concerning the construction work of UNICEF-aided schools outside of Male:

II-6-1 Temporary construction work

Palm logs of about 20 cm ϕ and 3 m long acquired from palms which grows on these islands are used for the scaffolds which will be put in at an interval of 3-4 m.

It is a primitive technique but it works also as a temporary vertical sheathing. (Picture 1. 2)

Temporary houses of about 6-12 m² made out of palm leaves are used for a temporary office and stockyard. In the future, we must consider the need for a cement stockyard.

II-6-2 Well

Firstly, a well must be dug.

The well will supply the water necessary for construction. After the completion of the construction it will be utilized for miscellaneous purposes.

II-6-3 Masonry work

Coral stones cut into rectangles will be used, and will be laid instead of bricks using cement or lime mortar. Residences and buildings on these islands are mostly of masonry construction using coral stones. Therefore, the masons are fairly skillful.

II-6-4 Carpentry

The wood used will be acquired from the coconut palm and the construction of the roof truss will take up 80% of the carpentry.

Conventionally, there has been almost no need for carpentry since most of the houses have no windows or doors so the local carpenters are somewhat inexperienced. They use, saws with rough teeth and large shipbuilding planes for their work, so we can't expect them

to be very accurate.

Moreover, on an island with about 1000 people, there are less than 5-6 carpenters. There are local shipbuilders but they will not get into the construction work because of their pride.

II-6-5 Interior Finishing

The standard floor finishing is the cement mortar trowel finish and the wall finishings will be the lime mortar (plaster) trowel finish. In nine out of ten cases, there are no ceilings but when there is one, a non-finished ceiling, most relevant to the climate, is used (High temperature and humidity calls for a high ceiling for comfort.)

The floor in an ordinary residence is made out of white coral sand which is very clean and good for moderating the humidity.

II-6-6 Ground Work

Because the islands chosen as construction sites are flat coral islands which are about 2 meters above sea level, only light ground work such as excavation and rooting of palm trees will be necessary. This ground work will be done totally by hand using a plow.

II-6-7 Construction Labor

The main structure will be of coral stone masonry in which the coral stones will be piled up and plastered by lime mortar (plaster). Lime mortar hardens very slowly and it takes as much as 3 days to harden even on a fine day. If it rains, therefore, the construction will be delayed considerably which has usually been the case for the Maldives for there are many squalls in the area.

One mason, with two laborers, has the ability to complete a structure of about 25 cm. in width, 30 - 40 cm. in height and 30 - 40 cm. in length per day, assuming that they work 8 hours a day.

The islanders seem to be especially eager to construct a school. We have heard that the sand for the construction of the UNICEF aided Community School on Velidhoo island was carried from the seaside to the site by the school children.



Picture No. 1 Temporary Housing and Scaffolding



Picture No. 2 Temporary Work



Picture No. 3 Stone Masonry and Mason



Picture No. 4 Stone Masonry



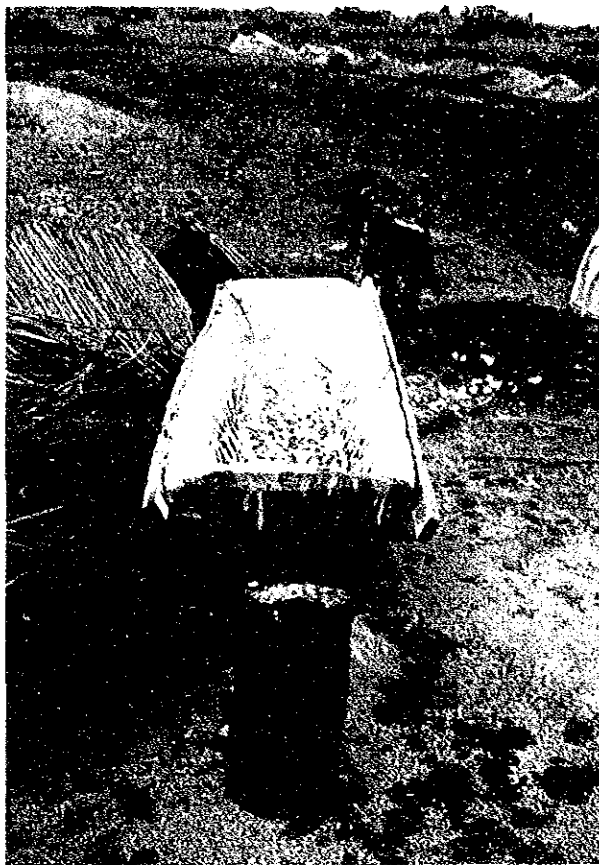
Picture No. 5 Branch Coral (akiri)
(the powder made by burning akiri isllime)



Picture No. 6 Coral Stone



Picture No. 7 Coral Stone Block



Picture No. 8 Mixing Vessel for Lime Mortar



Picture No. 9 Hoe and Vessel for Measuring Lime Mortar

II-6-8 DATA 1

QUANTITIES REQUIRED 9" THICK WALL (228 mm)/M²

< stone thickness = 7" >

Materials	Per sq.ft		Per M ²	
Wall				
Stone	0.0082	Doni	0.883	Doni
	0.0005125	Golhi	0.055	Golhi
Lime	0.15	Dabiya	1.615	Dabiya
Sand	0.25	Dabiya	2.69	Dabiya
Cement 1/18	0.62	Dabiya	0.2153	Dabiya
Cement 1/16	0.025	Dabiya	0.270	Dabiya
Cement 1/12	0.035	Dabiya	0.377	Dabiya
Plastering				
Lime	0.123	Dabiya	1.324	Dabiya
Sand	0.204	Dabiya	2.196	Dabiya

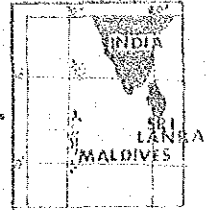
1 Golhi = 2 ft x 25 ft x 75 ft (106.2 M³)

1 Golhi = 16 Doni

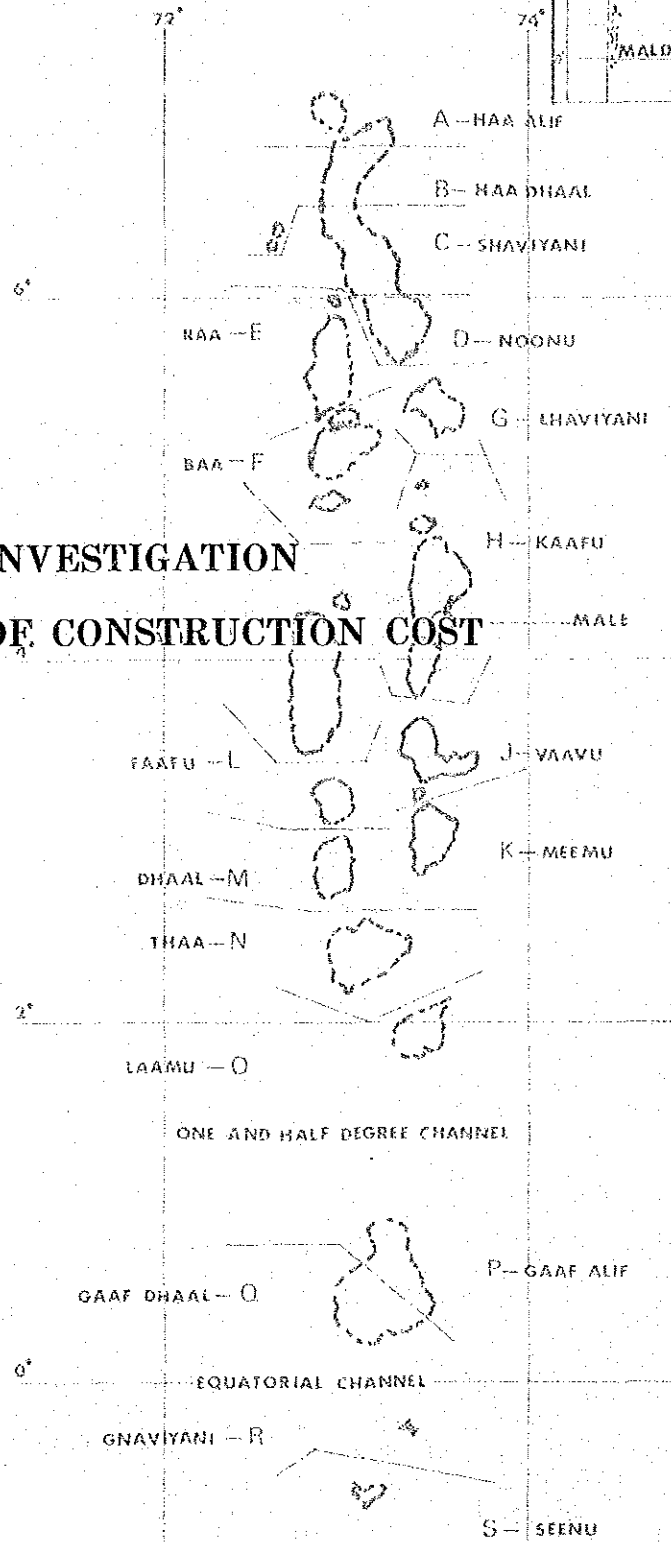
1 Dabiya = 0.66 cuft (0.02 M³)

1 Kandi = 18 Dabiya

REPUBLIC OF MALDIVES



III INVESTIGATION OF CONSTRUCTION COST



III-1 Cost of building materials

III-1-1 Cost of building Materials from Singapore (from UNICEF's July, 1979 data)

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Cement	50 kg bag	2.50
Timber-for Roof Trusses		
5" x 2" x 20'	ea	11.70
5" x 2" x 21' (Top cord in 1 piece rafters)	ea	12.40
4" x 2" x 16'	ea	7.20
4" x 2" x 10'	ea	4.50
4" x 2" x 8'	ea	3.70
4" x 2" x 5'	ea	2.30
4" x 2" x 4'	ea	2.00
Girders for Roofs		
4" x 4" x 9'	ea	8.20
4" x 4" x 12'	ea	11.00
Purlins		
4" x 2" x 14' (Bracing 32 pieces for Regular Purlins)	ea	6.40
4" x 2" x 11' (Regular Purlins)	ea	5.50
4" x 2" x 11'	ea	6.00
4" x 2" x 5'	ea	2.50
Valance Board		
9" x 1½" x 11' (Regular 154ft)	ea	8.50
9" x 1½" x 14' (Irregular 280 ft)	ea	10.75
9" x 1½" x 9' (45 ft)	ea	7.00
9" x 1½" x 18' (Regular 144 ft) Barge Board for all the building	ea	12.50
9" x 1½" x 23' (Regular 276 ft) Barge Board for all the building	ea	13.50

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Door, Window & Room Divider		
4" x 3" x 6'6" (Window)	ea	4.70
4" x 3" x 7' (Door)	ea	5.00
4" x 3" x 4' (Door)	ea	2.80
4" x 1" x 10' (Door)	ea	2.25
4" x 1" x 2' (Window)	ea	0.50
3" x 1½" x 8' (Room Divider)	ea	2.30
3" x 1½" x 7' (Room Divider)	ea	1.90
2½" x 2½" x 8' (Room Divider)	ea	3.00
2" x 1" x 8' (Room Divider)	ea	0.50
1" x 8" x 7' (Door)	ea	3.30
1" x 4" x 4' (Window)	ea	1.00
5/16" x 4' x 4' (4 Ply Plywood Sheets Marine Type)	ea	5.20
4" x 3" x 7' (Door)	ea	5.00
4" x 3" x 3' (Door)	ea	2.00
1" x 10" x 7' (Panels)	ea	4.20
1" x 3" x 2'6" (Panels)	ea	0.50
Class Room Furniture		
7" x 1" x 10' (Desk & Chairs)	ea	3.80
6" x 1" x 10' (- do -)	ea	2.80
6" x 1" x 8' (- do -)	ea	2.25
5" x 1½" x 10' (- do -)	ea	4.00
5" x 1" x 10' (- do -)	ea	2.30
5" x 1" x 8' (- do -)	ea	2.00
4" x 1½" x 8' (- do -)	ea	2.20
3" x 1½" x 8' (- do -)	ea	1.70
3" x 1" x 7' (- do -)	ea	1.00
2½" x 1" x 10' (- do -)	ea	1.40
2½" x 1" x 9' (- do -)	ea	1.25
2" x 2" x 9' (- do -)	ea	1.70
2" x 1½" x 10' (- do -)	ea	2.00
2" x 1" x 8' (- do -)	ea	0.80
1" x 1½" x 8' (- do -)	ea	1.00
3" x 2" x 9' (- do -)	ea	1.50

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Swing Doors		
3" x 4" x 4'	ea	3.15
1" x 4" x 3'6"	ea	1.00
1" x 4" x 3'	ea	0.75
$\frac{1}{2}$ " x 8" x 3'	ea	1.25
Bolts & Nuts		
5/8" Diameter 9" long (GI Bolts in Tup truss)	ea	0.50
1/2" Diameter 7" long (GI Bolts in Tup bolts truss)	ea	0.30
1/2" Diameter 5" long (GI 6 per Truss, 1 per rafter 2 per each cantilever)	ea	0.25
10 mm DIA x 15cm Screw Crampe (Galvanized)	no	0.35
5/8" DIA x 30cm Galvanized Steel	no	0.85
Paints etc.		
Wood Priming Paint	gal	9.70
Oil Paint-under coat (cream or white) wood type	gal	9.60
Oil Paint-finishing high gloss (cream or white) wood type	gal	11.25
Chalk Board Paint (green)	gal	21.70
Turpentine (paint thinner)	gal	3.50
Linseed Oil	gal	8.00
Stopping (Putty)		
Zinc Chromate Paint (white metal paint type)	kg	3.75
Black Bituminous Paint for inside water tanks	gal	12.50
Miscellaneous		
Monkey Spanner 35mm	no	3.75
3mm Gauge 12" x 16" Clear Glass Sheets	no	1.40
24 Gauge 2" x 7' Corrugated galvanized Roofing Sheets	sheet	2.75
24 Gauge 2" x 8' Corrugated galvanized Roofing Sheets	sheet	3.25
3" x 12 Zinc Coated Roofing Nails	no	0.03

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Screw/Nails for Doors & Windows		
1½" (40mm) x 9 Gauge Galvanized Iron Screws	Gross	2.00
3" (75mm) x 10 Gauge Nails	kg	1.25
1½" (38mm) x 10 Gauge Nails	kg	1.25
7/8" (20mm) Nails for fixing Glass Sheets	kg	1.50
2" (50mm) x 10 Gauge Wire Nails	kg	1.50
1 3/4" x 9 Gauge Iron Screws	Gross	0.70
2½" x 9 Gauge Iron Screws	Gross	2.00
1" x 6 Gauge Brass Screws	Gross	7.50
5/8" x 4 Gauge Brass Screws	Gross	1.50
4" (100mm) x 10 Gauge Iron Wire Nails (for Trusses)	kg	1.15
Hinges & Barrel Bolts, etc.		
4" (10cm) Brass Broad Butt Hinges with screws to match (1" x 8' Gau. Bress Screws 288) for Doors	nos	4.20
3" (7.5cm) Brass Butt Hinges with 576 Nos 3/4" x 7 Gauge Brass Screws to match	nos	2.80
4" (10cm) Brass Butt Hinges with 176 Nos 1" x 8 Gauge Brass Screws to match	nos	1.40
4" (10cm) Brass Barrel Bolts with Screws to match	nos	1.50
6" (15cm) Brass Batrel Bolts with Screws to match	nos	1.50
12" (30cm) Brass Casement Stays with Screws to match	nos	2.90
3" (7.5cm) Brass Cocks Pur Sash Fastners with Screws to match	nos	2.90
6" (15cm) Rim Lock and Brass Door Fastners with Screws to match	no	4.00
1½" Brass Padlock	no	1.50
3" Brass Hasps and Starles for room dividers with screws to match	no	0.50
3" Diameter Rubber Wheels for Room Divider	no	1.25

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Accessories for 1" Dia Pipes		
Valve Sockets	no	0.25
Faucet Tees	no	0.65
1" x $\frac{1}{2}$ " Reducing Tee	no	0.45
$\frac{1}{2}$ " Dia PVC Pipe for Water Line Taps	ft	1.20
$\frac{1}{2}$ " 90 Elbow	no	0.15
1" Dia Brass Gate Valves	no	4.00
$\frac{1}{2}$ " Dia Brass Bib Tap for Pipes	no	2.50
Hand Separated Double Acting Horizontal Pump (Lucky) with Joineries for Well Pipe Dia 3" & Lift Pipe Dia 3"	no	75.00
3" Dia PVC Pipes for Lifting Water (complete) with Couplings for Each Length of Pipe	m	4.40
Accessories - 90 Elbows	no	6.70
3" x 12' PVC Pipe (3mm) for Ventilating with Cowl	no	18.00
4" Dia PVC Pipe (3mm) with Couplings for each Pipe Length	ft	2.00
Accessories - 4" Elbow 90	no	9.50
4" Tees 90	no	14.00
4" End Caps	no	1.50
PVC Glue	kg	3.25
4" Dia PVC Pipes (3mm) with Couplings for each Length	ft	2.00
4" Elbows 90	no	9.50
4" End Caps 90	no	1.70
4" Tees 90	no	14.00
Indian Style Latrine Seat with Minimum Water Seal for Hand Flush with 4" Traps	no	6.00
$\frac{1}{2}$ " Dia Steel Bars (for septic Tank)	ft	0.25
$\frac{1}{4}$ " Dia Steel Bars (for inspection holes)	ft	0.10
Colourless Wood Preservatives for Furnitures, 4 Litre Cans	can	2.35

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Miscellaneous		
1" Round Lead Washere	no	0.01
24 Gauge Plain Galvanized Iron Sheets 3' x 6'	sheet	6.85
2" Ordinary Paint Brushes	ea	2.00
1" Ordinary Paint Brushes	ea	2.00
6" (15cm) Dia PVC Half Round Gutters	ft	1.10
Accessories:- JOINTS	no	1.70
Stop Ends PVC	no	2.15
4" Dia Outlets PVC	no	11.25
4" Dia Elbows 90° PVC (2mm)	no	4.15
Galvanized Steel Gutter Brackets for 6" (15cm) Dia Gutters. PVC Brackets if Available (Please note fixing detail)	no	0.85
1" x 8 Gauge/Brass Screws for Gutter Brackets	no	0.20
4" (10cm) Dia PVC Rain Water Down Pipes (2mm)	ft	1.20
Down Pipe Bracket 4" (10cm) Dia	ea	1.40
Solvent Cement	kg	10.00
Standard Patterns 400 Gallon Galvanized Steel Water Tank with Access Cover/Lid Holder for 10cm Dia Rain Water Pipe and fitted with 1" Outlet, Overflow Outlet, Bottom Cleaning Outlet.	no	307.15
1/2" Brass Bibtaps with Union Connection for Fitting to Tank	no	2.30
No Leak Gum (4 Lbs. Tins) for Teaks and Roofing Screws	tin	3.75
1" Dia PVC Pipes for Water Line (Complets with couplings for each length of pipe)	ft	2.50
Accessories for 1" Dia Pipes		
Couplings	no	0.40
End Cups	no	0.25
90° Elbows	no	0.35

<u>DESCRIPTION</u>	<u>UNIT</u>	<u>US DOLLAR</u>
Accessories for 1" Dia Pipes		
Brown Wood Preservative Oil for Beams (4 Litre Cans)	no	2.35
Hinges for Swing Doors	no	1.75
$\frac{1}{2}$ " Dia Hose, PVC Flexible for Water-ing School Garden	ft	0.25

III-1-2 Price of materials and payment

	Description	Number Unit	At Oct. 1979
			US\$. RS
Building Materials	Coral stone	cu. ft	Rs 0.50
	Stand	KANDI	Rs 8-10
	Lime (CaO)	KANDI	Rs 60
	Timber (100% imported from singapore)	TON	US\$ 372
	Louver window	M	Rs 45
Transportation	Charter of ship (20 ton)	MONTH	US\$ 1,000
	Payment of the crew of ship (20 ton) excluding cost of fuel	MONTH	US\$ 1,000
	Charter of ship (10-12 ton) including crews	2 WEEKS	Rs 7,500
	Buying cost of ship (battery boat of about 40 feet) including engine installment cost and reinforcement cost	STAND	US\$ 8,300
	Charter of ship (DHONI) in- cluding 4 crews	MONTH	Rs 3,500
	Taxi fare (one way)	STAND	Rs 10
	Taxi fare (hired for an hour)	STAND	Rs 50
	Buying cost of bicycle	STAND	US\$ 80
Cost of Living	Rent House (with two rooms) Note: Cannot be immediately found in Male.	MONTH	US\$ 160 US\$ 200
	Payment for servant	MONTH	US\$ 50
	Lowest cost of living of a native family of 4 on Male	MONTH	Rs 450
	Lowest cost of living of a native family of 4 on local Islands	DAY	Rs 8

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