

655-0008
PD-AAG-800-B1

UNCLASSIFIED

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DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D.C. 20523

PROJECT PAPER

CAPE VERDE - PRIMARY AND NON FORMAL EDUCATION

Authorized: June 20, 1978

Amended: July 20, 1978

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

JUL 13 1978

FROM : AFR/DR, John W. Koehring ^{JW Koehring}

SUBJECT: Cape Verde - Primary and Non-Formal Education - 655-0008

PROBLEM:

Your authorization is required to amend the subject grant-financed project to allow summer training to commence prior to Government of Cape Verde's meeting of required Conditions Precedent for full disbursement under the Grant.

DISCUSSION:

The Cape Verde Primary and Non-Formal Education project (655-0008) was authorized on June 20, 1978. Subsequently, we received two cables from the CDO Bissau (BISSAU 0734 and BISSAU 0760, attached) requesting changes be made in the Conditions Precedent to this Grant to allow primarily the initiation of the summer training program during FY 1978. In view of the limited time available, the CDO Bissau feels it would be impossible to meet the requirements of the Conditions Precedent and also begin the summer training program in FY 1978. As a solution, GC/AFR has suggested we carve out of the Conditions Precedent for full disbursement under this Grant those monies designated for training in FY 1978 (\$56,000) while leaving in effect the Conditions Precedent as described in the PAF II of June 20, 1978 as it relates to the remainder of this Grant (\$2,944,000). AFR/DR and AFR/SFWA concur in this approach.

RECOMMENDATION:

That you sign the attached PAF II Amendment and thereby authorize the revision in the language of the Conditions Precedent for this Grant.

ATTACHMENTS:

- 1. PAF II Amendment
- 2. BISSAU 0734
- 3. BISSAU 0760

CLEARANCES:

AFR/DR/CAWARAP:GThompson (draft)
AFR/DR :JKelly JK
AFR/SFWA :OLustig OL
CDO/Bissau :JMahr (draft)

DRAFT:AFR/DR/CAWARAP:JWills:mjb:7/18/78:29066

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS

PART II AMENDMENT

COUNTRY : Cape Verde
PROJECT : Primary and Non-Formal Education
PROJECT NO.: 655-0008

Pursuant to Part I, Chapter 1, Section 121 of the Foreign Assistance Act of 1961, as amended, I hereby authorize an amendment to the Project Authorization and Request for Allotment of Funds - Part II for the captioned project executed on June 20, 1978 by deleting paragraph b and substituting the following:

"b. Conditions Precedent

1. Prior to the first disbursement of funds under the Grant, or to the issuance of commitment documents with respect thereto, for any purpose other than to finance the cost of goods and services for the training period of 1978, the Cooperating Country shall furnish to A.I.D. the following in form and substance satisfactory to A.I.D.:
 - A. A plan for assigning adequate living and working space in Mindelo to house all participants in the training component; and
 - B. A plan for assigning one full-time administrator and two part-time administrator/planners from the Ministry of Education and Culture.
2. Prior to the first disbursement of funds under the Grant for commodity procurement and for construction operations, or to the issuance of commitment documents with respect thereto, the Cooperating Country shall furnish to A.I.D. the following in form and substance satisfactory to A.I.D.:

- A. A plan for assigning other specific personnel, equipment office space and other resources necessary for the Project;
- B. A plan for the procurement of project commodities;
- C. A plan for the maintenance of all schools and related facilities constructed or improved under the Project; and
- D. Evidence of a system for accounting for all financial activities under the Project."

Except as expressly amended herein, the Project Authorization and Request for Allotment of Funds - Part II for the captioned project, dated June 20, 1978, remains the same.



W. Haven North
Acting Assistant Administrator
for Africa

7/20/78

Date

CLEARANCE:

AFR/DR/CAWARAP:GThompson (draft) _____
AFR/DR :JWillis (draft) _____
AFR/SFWA :OLustig _____
CDO/Bissau :JMahr (draft) _____

DRAFT:GC/AFR:STisa:mjb:7/18/78

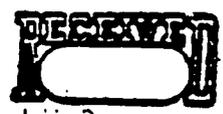
Department of State

PAGE 01: BISSAU 00734 201529Z
ACTION AID-31

INFO OCT-01 AF-10 /042 W

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TO SECSTATE WASHDC PRIORITY 1253
INFO AMEMBASSY ABIDJAN
AMEMBASSY DAKAR



JUN 2

AFR

UNCLAS BISSAU 0734

AIDAC

E. O. 11652: N/A
SUBJEC: PRIMARY AND NON-FORMAL EDUCATION PROJECT GRANT AGREEMENT

1. IN VIEW OF LIMITED TIME AVAILABLE TO BEGIN 1978 SUMMER TRAINING PROGRAM COMPONENT OF PROJECT, MISSION REQUESTS AUTHORIZATION TO MODIFY PROJECTS GRANT AGREEMENT. AS PRESENTLY STATED, PLANS FOR PROCUREMENT, MAINTENANCE, AND ACCOUNTING SYSTEM, ETC., WILL PREVENT GOCV FROM STARTING SUMMER TRAINING PROGRAM.

2. MODIFICATION WOULD BE MADE TO CONDITIONS PRECEDENT TO FIRST DISBURSEMENT ARTICLE 4, SECTION 4.1 (C), (D), (E) AND (F). RECOMMEND EACH CONDITION READ (C) BEFORE THE END OF THE FIRST SIX MONTHS OF THE PROJECT A PLAN FOR ASSIGNING SPECIFIC PERSONNEL, EQUIPMENT, OFFICE SPACE AND OTHER RESOURCES NECESSARY FOR PROJECT IMPLEMENTATION, ETC. CONDITIONS (D), (E), AND (F), WOULD FOLLOW SAME EXAMPLE, EACH BEGINNING QUOTE BEFORE THE END OF THE FIRST SIX MONTHS OF THE PROJECT A PLAN FOR ETC. END QUOTE.

3. OTHERWISE MISSION AND GOCV WILL BE UNABLE TO BOTH MEET REQUIREMENTS OF CONDITIONS PRECEDENT TO PROJECT GRANT AGREEMENT AND ALSO BEGIN SUMMER TRAINING PROGRAM DURING FY 1978.

4. AID/ SHOLD CONSIDER TRAINING COMPONENT, ONCE A SENSITIVE SUBJECT DURING DESIGN PHASE, A GOCV PRIORITY.

5. ALSO ADVISE WHENN MISSION CAN ANTICIPATE RECEIVING FINAL COPY OF PROJECT GRANT AGREEMENT IN PORTUGUESE AND/OR FRENCH. MARKS

NOTE BY OCT: TELEGRAM DELAYED IN TRANSMISSION.

Processed 10-20-78

#1 BISSAU 08760 210919Z

8277

BISSAU 08760 210919Z

ACTION AID-31

INFO OCT-01 SSO-00 AF-10 /042 W

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FM AMEMBASSY BISSAU
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INFO AMEMBASSY DAKAR
AMEMBASSY BRAIA

UNCLAS BISSAU 0760

AIDAC

ABIDJAN FO REDSO

DEPT FOR AFR/DR, AFR/SFWA, G/AFR

E.O. 11652: N/A

TAGS: N/A

SUBJECT: PRIMARY AND NON-FORMAL EDUCATION PROJECT
CAPE VERDE NO. 655-0008 GRANT AGREEMENT

REF: BISSAU 0734

1. REVIEW OF SUBJECT DRAFT AGREEMENT FORWARDED BY SOLEM SHOWS ARTICLE 3, SECTION 3.1 OBLIGATION OF DOLS 3.0 MILLION. AUTHORIZATOR FOR O TY DOLS 790,000. PLEASE ADVISE/CONFIRM AMOUNT TO BE OBLIGATED IN ANY TNT.

2. UPON RECEIPT CONFIRME AMOUNT, CDO WILL CHANGE ANNEX 2, SUMMARY BUDGET AS REQUIRED.

3. REFTEL WAS ADDRESSED TO NECESSITY CHANGING CONDITIONS PRECEDENT FOR FIRST DISBURSEMENT IF PROJECT TRAINING PROGRAM TO START ON SCHEDULE LATER SUMMER. FURTHER REVIEW BY CDO SUGGESTS FOLLOWING:

A) ARTICLE 4: CONDITIONS PRECEDENT TO DISBURSEMENT. SECTION 4.1 FIRST DISBURSEMENT (NO CHANGE). SECTION 4.1 (A) NO CHANGE; (B) NO CHANGE. SECTION 4.1 (C) BECOMES QUOTE 4C) ADEQUATE LIVING AND WORKING SPACE IN MINDELO TO HOUSE ALL PARTICIPANTS IN THE TRAINING COMPONENT UNQUOTE. SECTION 4.1 (D) BECOMES QUOTE (D) ONE FULL-TIME ADMINISTRATOR FROM M.E.C. AND TWO PART-TIME ADMINISTRATORS/PLANNERS FROM M.E.C. AS SIGNED TO PROJECT UNQUOTE.

E) SECTION 4.1 ADDITIONAL DISBURSEMENT INTRODUCTORY PARAGRAPH LEFT UNLETTERED. 4.2 (A) BECOMES QUOTE (A) A PLAN FOR ASSIGNING OTHER SPECIFIC PERSONNEL, EQUIPMENT, OFFICE SPACE AND RESOURCES NECESSARY FOR PROJECT IMPLEMENTATION, INCLUDING THE FOLLOWING:

- (1) ACCESS TO THE USE OF FIVE AND TEN TON DUMP TRUCKS, CONCRETE MIXERS, VIBRATORS, WATER TANKERS, AND JEEPS/LAND ROVERS INCLUDING ALL PREVENTIVE MAINTENANCE;
 - (2) APPROXIMATELY SEVENTY-SEVEN (77) HECTARES OF LAND FOR CONSTRUCTION ACTIVITIES;
 - (3) ONE ENGINEER AT 25 PERCENT TIME, TWO ENGINEERS FULL-TIME, ONE ARCHITECT AT 20 PERCENT TIME AND ONE ARCHITECT FULL-TIME; AND
 - (4) LOCAL BUILDING MATERIALS (SAND, STONE AND WATER, INCLUDING TRANSPORTATION TO SITES) UNQUOTE.
- 4.2 (B) BECOMES QUOTE (B) PLANS AND SPECIFICATIONS, BID DOCUMENTS, COST ESTIMATES, AND A PLAN WITH

TIME SCHEDULES FOR CARRYING OUT COMMODITY PROCUREMENT UNDER THE PROJECT. UNQUOTE.

4.2 (C) BECOMES QUOTE (C) AN EXECUTED CONTRACT FOR COMMODITY PROCUREMENT SERVICES UNDER THE PROJECT. UNQUOTE.

4.2 (D) BECOMES QUOTE (D) AN ACCOUNTING SYSTEM FOR FINANCING ALL PROJECT ACTIVITIES UNQUOTE.

4.2 (E) BECOMES (E) A PLAN FOR MAINTENANCE OF ALL SCHOOLS AND RELATED FACILITIES TO BE SUPPLIED UNDER THE PROJECT; AND UNQUOTE AND 4.2 (B) IN CURRENT DRAFT BECOMES 4.2 (F).

RECEIVED

JUN 28

Original 6/27

C) SECTION 4.4 TERMINAL DATES FOR CONDITIONS PRECEDENT DELETE REFERENCE TO (E) AND (F) IN SECTION 4.4 (A). ADD NEW SECTION 4.4 (B) QUOTE (B) IF ALL THE CONDITIONS SPECIFIED IN SECTIONS 4.1 (A), (B), (C), (D), (E), AND (F) HAVE NOT BEEN MET WITHIN SIX MONTHS FROM THE DATE OF THIS AGREEMENT, OR SUCH LATER DATE AS A.I.D. MAY AGREE TO IN WRITING, A.I.D., AT ITS OPTION, MAY TERMINATE THIS AGREEMENT BY WRITTEN NOTICE TO THE GRANTEE UNQUOTE.

4. REQUIRE PRIORITY RESPONSE TO ABOVE CHANGES IN GRANT AGREEMENT AND ADVISEMENT OF IF/WHEN WILL RECEIVE PORTUGUESE TRANSLATION. AMBASSADOR AND CDO PLANNING CAPE VERDE TRIP O/A JULY 5 AND WOULD LIKE TO SIGN AGREEMENT DURING THAT VISIT. MARKS

*ACT
AFR*

*1/1/78
2-3-6-8*

*SCHEID C
SCHEID C/LI
SCHEID C/P
C/S
CTR C7
F/A
ENGR*

check out please

Revision Request #2

ACTION TO: AFR/DR
DATE DUE: _____
STANDARD AF DEPT
CRM/IMO (CORSO # 2) EXT 22000
JUN 28 1978
710191011211010141016

MAY 30 1978

ACTION MEMORANDUM FOR THE ASSISTANT ADMINISTRATOR FOR AFRICA

FROM : AFR/DR, Jim Kelly *JK*

SUBJECT: Cape Verde - Primary and Non-Formal Education, 655-0008

PROBLEM: Your authorization is required for a grant financed project in an amount not to exceed \$3,000,000 of Sahel Development Program funds for the Cape Verde Primary and Non-Formal Education Project (655-0008).

DISCUSSION:

A. Description of the Project:

The principal purposes of the project are (1) to improve primary and vocational education facilities on the islands of Sao Tiago, Fogo and Brava, Cape Verde, and (2) to upgrade the professional skills of teachers and administrators responsible for Cape Verde's elementary education program. Specific activities to be carried out under the project include construction of 60 rural primary schools providing classrooms for more than 7,000 students, 15 housing units for teachers required to work in the most remote rural areas and 2 vocational education workshops as well as design and implementation of training programs to upgrade the professional capabilities of 200 educators and education administrators.

The new classrooms will replace mostly rented facilities (generally within private homes) which are seriously inadequate for both teachers and students and, in some cases, also pose health hazards. The 2 industrial arts shops to be constructed will be the first of such school facilities in Cape Verde and will enable the Government to move toward its goal of providing for non-formal, vocational learning experiences. The teacher housing is expected to help in attracting qualified teachers to outlying areas where their talents are most needed, and the technical assistance planned will serve to enhance the skills of under-prepared teachers and school administrators while assisting in raising the general level of education by providing improved methods of teaching basic topics such as sanitation, nutrition and health.

Direct beneficiaries of the project will include approximately 7,000 students per year, as well as 200 education professionals who will receive special training, more adequate facilities and improved instructional methods.

B. Financial Summary:

A.I.D. grant funding for the project is \$3,000,000. The funding required for the first year of the project is \$700,000, with the balance to be provided in the succeeding 2 fiscal years. The table below summarizes funding by inputs:

1. A.I.D.	(\$000)			<u>Total</u>
	<u>FY 1978</u>	<u>FY 1979</u>	<u>FY 1980</u>	
Personnel	159	89	63	311
Commodities	318	62	516	896
Local Cost and Trng.	100	383	560	1,043
Contingency	<u>123</u>	<u>166</u>	<u>461</u>	<u>750</u>
(Sub-Total)	700	700	1,600	3,000
2. G.O.C.V.				
Personnel	23	23	24	70
Commodities	28	29	25	82
Other	<u>284</u>	<u>284</u>	<u>283</u>	<u>851</u>
Total	1,035	1,036	1,932	4,003

C. Project Analysis:

The project was subjected to social, financial and economic analyses and was found to be sound in each area. The technical analysis indicates that the construction and training are feasible within the anticipated term of three years. The environmental action recommendation is to approve a negative determination. You may indicate such approval by signing the appropriate line on the IEE Facesheet (Annex E of the PP attached).

D. Special Conditions and Waivers:

The conditions precedent to disbursement for this project include the following items:

(1) GOCV will provide evidence satisfactory to A.I.D., of the assignment of specific personnel and the availability of equipment and office space necessary for project implementation as indicated on page 42 of the PP.

(2) GOCV will submit a plan, satisfactory to A.I.D., for procurement of all project commodities.

(3) GOCV will submit a plan, satisfactory to A.I.D., for maintenance of all schools and related facilities to be supplied under the project.

(4) GOCV will establish a system, satisfactory to A.I.D., for accounting for all financial activities under the project.

No waivers of A.I.D. regulations appear to be required in implementation of this project.

E. Committee Action and Congressional Apprisement:

At the Project Committee Meeting on April 12, 1978, the Project Paper was reviewed and recommended for approval without an ECPR. A Congressional Notification advising that this project is being switched from the FY-79 program to FY-78 was sent to the Congress on June 6 and the 15-day waiting period for Congressional objection expired June 20 without response.

DATE 20 JUN 1978

[Handwritten Signature]

Goler T. Butcher
Assistant Administrator
Bureau for Africa

DRAFTED: AFR/DR/CAWARAP:RSD *[Handwritten Initials]* lem:mb/bfc:5/12/78

CLEARANCES:

AFR/DR/CAWARAP:	GThompson	(draft)	<i>[Handwritten Initials]</i>
AFR/DR/SDP	:DDibble	(draft)	<i>[Handwritten Initials]</i>
AFR/SFWA/PA	:OLustig	(draft)	<i>[Handwritten Initials]</i>
AFR/DP	:CWard	(draft)	<i>[Handwritten Initials]</i>
GC/AFR	:STisa	(draft)	<i>[Handwritten Initials]</i>

AGENCY FOR INTERNATIONAL DEVELOPMENT
**PROJECT AUTHORIZATION AND REQUEST
 FOR ALLOTMENT OF FUNDS PART I**

1. TRANSACTION CODE

A ADD
 C CHANGE
 D DELETE

PAF

2. DOCUMENT CODE
 5

3. COUNTRY ENTITY
 Cape Verde

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 digits)

655-0008

6. BUREAU/OFFICE

A. SYMBOL

AFR

B. CODE

06

7. PROJECT TITLE (Maximum 40 characters)

Cape Verde-Primary and Non-Formal Educa

8. PROJECT APPROVAL DECISION

ACTION TAKEN

A APPROVED
 D DISAPPROVED
 DE DEAUTHORIZED

9. EST. PERIOD OF IMPLEMENTATION

YRS. 04 QTRS -

10. APPROVED BUDGET AID APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY 78		H. 2ND FY 79		K. 3RD FY 80	
		C GRANT	D LOAN	F GRANT	G LOAN	I GRANT	J. LOAN	L GRANT	M. LOAN
(1) SH	600	636		700		700		1,600	
(2)									
(3)									
(4)									
TOTALS									

A. APPROPRIATION	N. 4TH FY 81		O. 5TH FY		LIFE OF PROJECT		11. PROJECT FUNDING AUTHORIZED (ENTER APPROPRIATE CODE(S)) 1 - LIFE OF PROJECT 2 - INCREMENTAL LIFE OF PROJECT	A. GRANT	B. LOAN
	D GRANT	P LOAN	R GRANT	S LOAN	T GRANT	U. LOAN			
(1) SH	-				3,000		2		
(2)									
(3)									
(4)									
TOTALS									
								C. PROJECT FUNDING AUTHORIZED THRU FY <input type="checkbox"/> 80 <input type="checkbox"/>	

12. INITIAL PROJECT FUNDING ALLOTMENT REQUESTED (\$000)

A. APPROPRIATION	B. ALLOTMENT REQUEST NO.	
	C GRANT	D LOAN
(1) SH	3,000	
(2)		
(3)		
(4)		
TOTALS		

13. FUNDS RESERVED FOR ALLOTMENT

TYPED NAME (Chief, S&R/FM/FSD)

SIGNATURE

DATE

14. SOURCE/ORIGIN OF GOODS AND SERVICES

000 941 LOCAL OTHER

15. FOR AMENDMENTS, NATURE OF CHANGE PROPOSED

FOR PPC/PIAS USE ONLY	16. AUTHORIZING OFFICE SYMBOL	17. ACTION DATE			18. ACTION REFERENCE (Optional)	ACTION REFERENCE DATE		
		MM	DD	YY		MM	DD	YY

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS - PART II

COUNTRY : Cape Verde
PROJECT : Primary and Non-Formal Education
PROJECT NUMBER: 655-0008

Pursuant to Part I, Chapter 1, Section 121 of the Foreign Assistance Act of 1961, as amended, I hereby authorize a Grant to the Republic of Cape Verde (the "Cooperating Country") of not to exceed Seven Hundred Thousand United States Dollars (\$700,000) to assist in financing certain foreign exchange and local costs of goods and services required for the project described below.

The project consists of the providing technical assistance, training and commodities required for construction or improvement of approximately 60 small rural elementary schools, 2 workshops and 15 teacher housing units and for carrying out a special training program for approximately 200 school teachers and administrative personnel in poor communities, in terms of facilities presently available, on the islands of Sao Tiago, Fogo and Brava hereinafter referred to as the Project").

I approve the total level of A.I.D. appropriated funding planned for the Project of not to exceed Three Million United States Dollars (\$3,000,000), Grant, during the period FY 1978 through FY 1980, including the amount authorized above and additional increments of grant funding during such period subject to the availability of funds and in accordance with A.I.D. allotment procedures.

I hereby authorize the initiation of negotiations and execution of the Project Grant Agreement by the officer to whom such authority has been delegated in accordance with A.I.D. regulations and Delegations of Authority subject to the following essential terms and conditions, together with such other terms and conditions as A.I.D. may deem appropriate:

a. Source and Origin of Goods and Services.

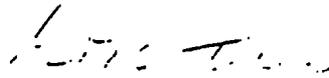
Except for ocean shipping, goods and services financed by A.I.D. shall have their source and origin in the Cooperating Country and in countries included in Code 941 of the A.I.D. Geographic Code Book, except as A.I.D. may otherwise agree in writing. Ocean shipping financed under the Grant shall be procured in any eligible source country except the Cooperating Country.

b. Conditions Precedent.

Prior to the first disbursement of funds under the Grant, or to the issuance of commitment documents with respect thereto, the Cooperating Country shall furnish to A.I.D. the following in form and substance satisfactory to A.I.D.:

- (1) Evidence of the assignment of specific personnel and the availability of equipment and office space necessary for effective implementation of the Project.
- (2) A plan for the procurement of all project commodities.
- (3) A plan for maintenance of all schools and related facilities constructed or improved under the project.
- (4) Evidence of a system for accounting for all financial activities under the project.

Date 20 JUN 1978


Assistant Administrator
for Africa

Clearances:
AFR/DR/CAWARAP:GThompson GT 5/15/78
AFR/DP:CWard FC 5/14/78
AFR/SFWA/PA:CLustig 4 5/16/78
GC/AFR:STisa SM

PROJECT ANALYSIS TEAM

Agency for International Development (AID)

Craig P. Buxton	International Development Intern USAED/Bissau and Cape Verde
Richard R. Solem	Project Officer Africa/Development Resources
Donald Barbee	Education Planner
Juan Casasco	Community Development Advisor
Georgette Gonsalves	Non Formal Education Specialist
William Shimasaki	Engineer

Government of Cape Verde (GOCV)

Joao Querino Spencer Lopes	Secretary General Ministry of Education
Esther Siquira	Ministry of Education
Maria Luisa Ribeiro	Ministry of Education
Aguinaldo Gominho	Ministry of Education
Pedro Gregorio	Ministry of Public Works
Julio Lobo	State Construction Enterprise (EMEC)
Alcestra Tolentino	Ministry of Health

TABLE OF CONTENTS

	<u>Page</u>
Project Analysis Team	i.
Map of the Cape Verde Islands	ii
I. SUMMARY AND RECOMMENDATIONS	
A. Project Paper Face Sheet	1.
B. Recommendations	1.
C. Description of the Project	2.
D. Summary of Findings	4.
E. Project Issues	4.
II. BACKGROUND AND DETAILED DESCRIPTION	
A. Background	5.
1. Overview of Cape Verde	5.
2. Construction of School Facilities	7.
3. Education	9.
4. Differences	22.
B. Detailed Description	24.
1. Outputs	24.
2. Inputs	29.
III. PROJECT ANALYSIS	32.
A. Technical Analysis	32.
1. Construction	32.
2. Education	36.
B. Financial Analysis	38.
1. Overview of Education Expenditures	38.
2. Financial Plan	42.
C. Social Analysis	49.
1. Setting	49.
2. Beneficiaries	50.
D. Economic Analysis	54.

TABLE OF CONTENTS Continued

	<u>Page</u>
IV. IMPLEMENTATION PLAN	55.
A. Administrative Arrangements	55.
1. Recipients Arrangements	55.
2. AID's Arrangements	56.
B. Implementation Plan	56.
1. Schedule	56.
2. Logistical Support	61.
3. Unresolved Issues	61.
4. Local Involvement	61.
5. Staffing	62.
C. Evaluation Plan	64.
1. Construction	64.
2. Education	65.
D. Conditions Precedent to Disbursement	66.

ANNEXES

A. Logical Framework	
B. 611(a) Certification	
C. 611(e) Certification	
D. Letter Requesting Assistance	
E. Environmental Impact Identification and Evaluation	
F. Statutory Checklists	
G. Project Performance Network Chart and Bar Chart	
H. Technical Details	
1. Organization of the M.O.P.	
2. Attendance by School Level	
3. Elementary School Attendance	
4. School Building Use And Teacher Assignments	
5. Training Levels of Elementary School Teachers	
6. School Construction Summary	
7. Ownership Status of Classrooms	
8. M.E.C. Proposed School Design	

TABLE OF CONTENTS Continued

Page

9.	Design For No-Flush Toilets	
10.	Design For Teacher Housing	
11.	Design For Workshops	
12.	Educational Specifications	
13.	Construction Budget Details	
14.	General Construction Criteria	

MAPS

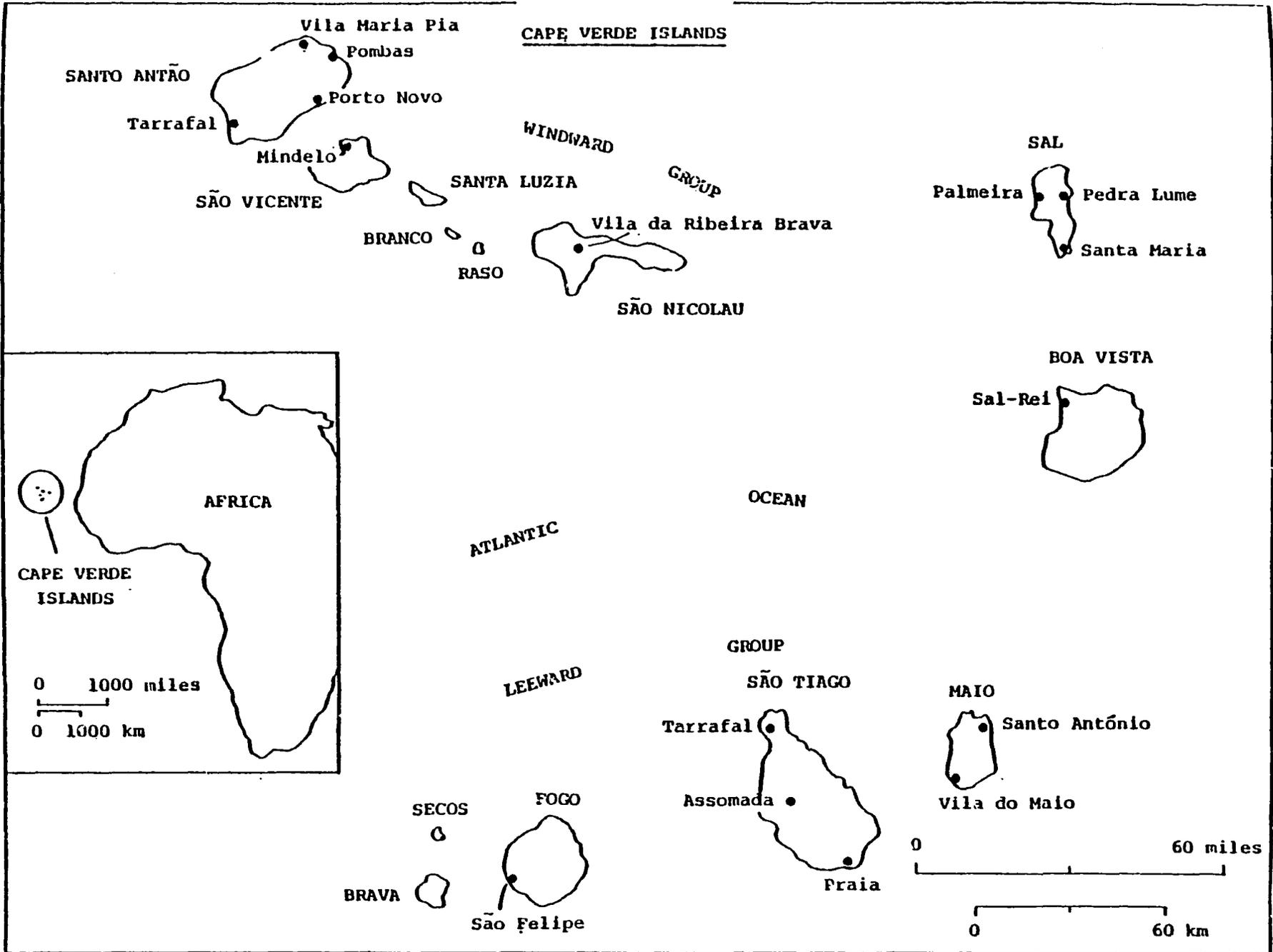
1.	Cape Verde	i.
2.	Island of Brava	26.
3.	Island of Fogo	27.
4.	Island of Sao Tiago	28.

CHARTS

IIA.	Organization of M.E.C.	11.
IIB.	Grade Level Organization of Schools	13.
IIC.	Academic Success/Failure Rates	14.
IID.	Proposed Structure of Adult Education	15.
IIE.	Percent of Study Time per Subject (Grades 1-4)	17.
IIF.	Percent of Study Time per Subject (Grades 5-6)	18.

TABLES

3A	Resume of National Budget	38.
3B	Resume of Extraordinary Expenditures	39.
3C	Distribution of Pupils and Budget in Selected Countries	40.
3D	Ministry of Education and Culture	41.
3E	Summary of Cost Estimate and Financial Plan	42.
3F	Estimated Unit Cost for School Furniture	47.



AGENCY FOR INTERNATIONAL DEVELOPMENT

PROJECT PAPER FACESHEET

1. TRANSACTION CODE

A

A ADD
C CHANGE
D DELETE

PP

2. DOCUMENT CODE

3

3. COUNTRY/ENTITY

CAPE VERDE

4. DOCUMENT REVISION NUMBER

5. PROJECT NUMBER (7 digits)

655-0008

6. BUREAU/OFFICE

A. SYMBOL

AFR

B. CODE

06

7. PROJECT TITLE (Maximum 40 characters)

Primary and Non-Formal Education

8. ESTIMATED FY OF PROJECT COMPLETION

FY 8 1

9. ESTIMATED DATE OF OBLIGATION

A. INITIAL FY 7 8

B. QUARTER 4

C. FINAL FY 8 0

(Enter 1, 2, 3, or 4)

10. ESTIMATED COSTS (\$000 OR EQUIVALENT \$) -

A. FUNDING SOURCE	FIRST FY			LIFE OF PROJECT		
	B. FX	C. L/C	D. TOTAL	E. FX	F. L/C	G. TOTAL
AID APPROPRIATED TOTAL						
(GRANT)	(600)	(100)	(700)	(1,957)	(1,043)	(3,000)
(LOAN)	()	()	()	()	()	()
OTHER U.S.	1.					
	2.					
HOST COUNTRY		335	335		1,003	1,003
OTHER DONOR(S)						
TOTALS	600	435	1,035	1,957	2,046	4,003

11. PROPOSED BUDGET APPROPRIATED FUNDS (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	PRIMARY TECH. CODE		E. 1ST FY <u>78</u>		H. 2ND FY <u>79</u>		K. 3RD FY <u>80</u>	
		C. GRANT	D. LOAN	F. GRANT	G. LOAN	I. GRANT	J. LOAN	L. GRANT	M. LOAN
(1) SH	600	636		700		700		1,600	
(2)									
(3)									
(4)									
TOTALS									

A. APPROPRIATION	N. 4TH FY		O. 5TH FY		LIFE OF PROJECT		12. IN-DEPTH EVALUATION SCHEDULE				
	D. GRANT	P. LOAN	R. GRANT	S. LOAN	T. GRANT	U. LOAN					
(1)					3,000		<table border="1"> <tr> <td>MM</td> <td>YY</td> </tr> <tr> <td>19</td> <td>7 9</td> </tr> </table>	MM	YY	19	7 9
MM	YY										
19	7 9										
(2)											
(3)											
(4)											
TOTALS					3,000						

13. DATA CHANGE INDICATOR. WERE CHANGES MADE IN THE PID FACESHEET DATA, BLOCKS 12, 13, 14, OR 15 OR IN PRP FACESHEET DATA, BLOCK 12? IF YES, ATTACH CHANGED PID FACESHEET.

1 = NO
2 = YES

14. ORIGINATING OFFICE CLEARANCE

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TITLE

David Shear, AFR/SFWA

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PART I. SUMMARY AND RECOMMENDATIONS

A. FACE SHEET

See the preceding Face Sheet for a summary of fiscal data and project purpose.

B. RECOMMENDATIONS

The Mission recommends authorization of grant financing to achieve the following summarized program which will be carried out by the Government of Cape Verde (G.O.C.V.).

1. Goal

To provide the elementary school age population of Cape Verde with an effective and relevant education program.

2. Purpose

- (a) Provide needed school facilities and assist in the initiation of a construction program.
- (b) Upgrade the professional skills of teachers and school administrators.

3. Outputs

- (a) Construct and furnish:
 - 30 one-room elementary schools
 - 20 two-room elementary schools
 - 10 three-room elementary schools
 - 2 workshops
 - 15 teacher housing units
- (b) Provide in-country training for:
 - 100 teachers in the methods of teaching nutrition, sanitation, handicrafts, and music education;
 - 10 industrial arts specialists in teaching methods;
 - 75 teachers in methodology of teaching basic curriculum;
 - 15 school administrators in educational management.

4. Inputs

2.

a. A.I.D.	<u>FY 1978</u>	<u>FY 1979</u> ((\$000))	<u>FY 1980</u>	<u>Total</u>
Personnel	159	89	63	311
Commodities	318	62	516	896
Local cost and training	100	383	560	1,043
Contingency	<u>123</u>	<u>166</u>	<u>461</u>	<u>750</u>
(Sub-total)	700	700	1,600	3,000
b. G.O.C.V.				
Personnel	23	23	24	70
Commodities	23	29	25	82
Other	<u>284</u>	<u>284</u>	<u>283</u>	<u>851</u>
TOTAL	1035	1036	1932	4003

The grantee will be the Government of Cape Verde (G.O.C.V.). Representing the G.O.C.V. and administering the grant program will be the Ministry of Education and Culture (M.E.C.). The M.E.C. will be assisted by the Ministry of Public Works (M.O.P.) in administering construction activities under the project.

C. DESCRIPTION OF THE PROJECT

This project will provide a grant of \$3,000,000 to the GOCV to improve school facilities and the professional skills of teachers and administrators responsible for elementary education in Cape Verde. Project activities fall into two general phases; (1) school construction phase will provide classrooms for more than 7,000 students and housing for fifteen teachers' families in remote rural areas; (2) technical assistance will up-grade the level of training of 200 educators and provide engineering assistance for initial construction stages. To this end the project proposes that A.I.D. finance: (1) building materials, labor and equipment; (2) engineering

services; (3) educational training and materials; and (4) trainee participation expenses. The GOCV will also provide: (1) building materials, (2) construction management services; and (3) general logistical support, including personnel.

The construction phase will be implemented by a division of the Ministry of Public Works (M.O.P.). A U.S. engineer will assist in planning and coordinating the early stages of construction.

The education technical assistance phase will be coordinated with the Ministry of Education (M.E.C.). This will provide in-country training for teachers and administrators. Training for teachers in the first year will focus on those teachers with only the most minimal level of training (monitors). In the second year training for teachers will be concerned with critical subject areas and upgrading the supervisory skills of field administrators.

One hundred new classrooms will be used largely to replace highly unsatisfactory rented facilities which pose not only severe limitations on learning but also serious health hazards in many cases. Two industrial arts shops to be constructed will be the first of such school facilities and will enable the M.E.C. to move toward its goal of providing non-formal, vocational learning experiences which are essentially non-existent. Teacher housing for critical areas, usually remote locations, will do most to attract qualified teachers to outlying areas and help to stem the general "rush" to urban centers.

Teacher in-service training will take place during the Summers of 1978 and 1979. It will enhance the skills of under-prepared teachers while assisting in raising the general level of education by providing improved methods of teaching basic topics such as sanitation, and nutrition and health.

In-service training of middle-management administrators has the potential for indirectly reaching a major portion of the teachers in the country. By focusing on the improvement of classroom supervision techniques, field administrators can themselves be teacher trainers as they work with instructors in the schools. School administrators will partake in the planning of the two training periods as well as receiving instruction.

The project components, then, should improve educational facilities, up-grade professional staff and, thereby, improve educational services and indirectly enhance the quality of Cape Verde's human resources.

D. SUMMARY OF FINDINGS

The technical analysis indicates that the construction of 102 instructional units and 15 teachers' houses plus the training of 200 teachers and administrators is feasible within the anticipated term of three years. The financial analysis shows the GOCV is willing and able to implement the project. The social analysis indicates that 7,000-10,000 students and 200 educators will benefit directly from more adequate facilities and instructional methods. Indirectly residents of sixty communities will be affected by improved education facilities and services. The economic analysis suggests the project will provide a viable return for the GOCV.

E. PROJECT ISSUES

Issues were encountered in both the construction and education training phases. In Part 2, Project Background and Detailed Description, the necessity for reducing the total number of units to be constructed is reviewed. The capability of the GOCV to provide necessary engineering services was a matter of concern. GOCV officials indicated that the engineers and architects now training or working abroad would be returning to Cape Verde in time to provide the technical assistance required. The additional services of a U.S. consulting engineering firm during the first three months of construction will serve to further strengthen this facet of the project program. Further support will be provided by the Mission and, if needed, REDSO/WA.

In the education phase, there appeared to be some initial reluctance to involve education specialists in instructional development. It was learned that the GOCV has followed a policy of preparing its own curriculum materials. Therefore, when technical assistance alternatives were proposed that focused on methodology, rather than curriculum content, concurrence was achieved.

Also in Part 2, the bases for modifying proposed informal education and community development aspects are explained.

It is the judgement of the team that the above issues were satisfactorily resolved.

PART II. BACKGROUND AND DETAILED DESCRIPTION

A. BACKGROUND

1. Overview of Cape Verde

The archipelago of Cape Verde consists of ten islands and five islets located in the North Atlantic about 455 kilometers west of Dakar, Senegal, West Africa. Of volcanic origin, the land is mountainous and rocky. Between 15° and 17° North Latitude, it lies in the semi-arid belt which extends west from the drought-prone Sahel region of West Africa. Total land area is 4,033 square kilometers.

Average temperatures are warm (76°F) and there are constant northeast winds. Annual rainfall (July to August) is little, averaging in a normal year 680 mm. However, like many of the West African Sahelian countries, the islands suffer from long, periodic droughts. Moreover, when it rains, problems of torrential downpours along with over-pasturage by animals, and a lack of soil conservation methods contribute to serious erosion of productive topsoil.

Population estimates for 1977 approximate 302,086 with an annual increase of 2 - 3%. Density, therefore, is about 77 per square kilometer. In addition, the population is very young with 48% less than 15 years old.

For administrative purposes, the islands are divided into northern (Barlavento) and southern (Sotavento) regions. The capital city of Praia is located on the largest of the southern group, Sao Tiago. The main port city of Mindelo is located on the island of St. Vicente in the northern group.

Cape Verde is a bilingual country. The official language, Portuguese, is used in government and educational institutions, but the indigenous Cape Verdean language, a creole, is used by almost the entire population.

Originally the islands, discovered by the Portuguese in 1460, were uninhabited. Portuguese farmers and laborers along with slaves brought from West Africa constituted the original population on the islands. Today, approximately 70% of the population is "mestico" (mixed black and caucasian), 28% is black, and 2% is caucasian.

Between 75% and 85% of the population live in rural areas. Most of the population subsist on the cultivation of sugar cane, bananas, coffee, beans, and manioc. Another more promising food source is the fishing industry comprised largely by small scale artisan fishermen.

Because of the severe droughts throughout the history of the islands (records show that from 1747 to 1974 some 210,000 deaths have been attributed to famine) emigration to other countries has been a constant. The United States, Portugal, mainland Africa, Brazil and other European countries receive steady streams of Cape Verdeans. This exodus has drained the country of more skilled and professional labor while at the same time contributing to maintenance of life on the islands through monetary remittances sent from abroad.

After 500 years of colonial rule under the Portuguese, the islands were given their independence in July 1975 following a thirteen-year armed struggle on the African mainland. The ruling body, PAIGC (Party for the Independence of Guinea and Cape Verde), determines all domestic and foreign policy which currently follows a policy of non-alignment.

With the independence of the islands, there has been a return to Cape Verde of some emigrants for political and other reasons. Fortunately many are professional and skilled workers who have been incorporated immediately into the growing economic infrastructure.

The long colonial rule was characterized by a total absence of a productive infrastructure, either social or economic. In Cape Verde, there is no basic industry or light goods manufacturing. Sal Island does have small salt mining operations, but general economic activities function around farming and fishing, neither of which is developed sufficiently to support the population of Cape Verde. Per capita income is about US \$120. Currently, unemployment varies between 35%-50%.

Almost totally dependent on imports of fuel, food and other miscellaneous necessities, the new republic looks primarily to Portugal, the United States, and various West African countries for trade and assistance. This dependence has contributed to severe balance of payments problems since Cape Verde has virtually nothing to export. A number of donor nations have enabled the economy, as well as the people, to survive.

Currently, there are several projects in the areas of desalination, ground water exploration, soil conservation, wind and solar energy, and improved crop production to bolster the economy of Cape Verde. The United States, Sweden, Holland, Canada and West Germany are conducting these major efforts along with various United Nations organizations.

Until 1975, the system of education was based on the classical European model. Illiteracy has been and continues to be high (between 60 and 70%). Current plans to eradicate the problems have been initiated on Sao Tiago Island. Presently, there are 67,000 school children enrolled in 630 elementary schools and 15 secondary schools. University education must be pursued overseas.

Consistent with the high illiteracy rate and a drought ridden history is the problem of malnutrition. Vitamin and protein deficiencies are prevalent. Gastroenteritis, tuberculosis, respiratory infections, leprosy and other serious illnesses are found. The infant mortality rate is 103.9 per thousand of the population. Praia and Mindelo have hospitals, but lack of equipment and staffing contribute to poor service to the population. There is one doctor for every 20,000 persons.

The development of its human resources appears to be a major avenue for the future of Cape Verde. In 1975, the C.V. government announced a national school construction program which will initiate efforts toward this end.

2. Construction of School Facilities

a. Type of Construction

Buildings are generally constructed of load-bearing basaltic stone walls about forty centimeters thick with or without mortar. Wood trusses and purlins are often used as framework for corrugated asbestos cement roofing. The roofs are used as collectors of rain water which is then channeled into a cistern. Many private houses in rural areas are made of dry rubble construction with a thatched roof applied over a wooden framework.

All building materials are imported except for sand, gravel, stone and water. However, a small start has been made in making concrete blocks both solid and hollow. Reinforced concrete utility poles are also being made individually by hand. Plans are under way to

produce small pre-stressed beams to be used in the construction industry. It has also been reported that a small factory to manufacture concrete roof tiles will be in operation by mid-1978.

b. Design of Buildings

The design of practically all buildings is done by the architectural branch of the Ministry of Public Works (Annex H-1). They are seriously handicapped by the lack of qualified architects which greatly delays implementation of many projects. Fortunately, the Ministry of Public Works technical staff will be augmented by five architects and six engineers who will be returning from studies and work abroad. Engineer Graca, Chief Engineer of M.O.P. (Ministry of Public Works), stated that with the additional technicians who are slated to arrive by July 1, 1978, they will be able to handle the work of this project.

c. Building Codes and Specifications

All construction is being done under the Colonial Building Codes "REGULAMENTO GERAL dos EDIFICACOES URBANAS," but inspection and supervision seem to be minimal. The M.O.P. is presently in the process of revising the building codes to reflect the indigenous environment.

d. Construction of Public Works

All construction assigned to M.O.P. is done by a division known as E.M.E.C. (Empressa Estatal Para Construcoes). Here again there is a serious shortage of trained personnel in the supervisory and management sector. E.M.E.C. will have one architect, two engineers and nine in the category of "mestre das obras" who will be returning to the Cape Verde Islands from overseas jobs. For this reason, E.M.E.C. expects to adequately handle the work.

e. Water

The shortage of water is a major problem throughout the Islands, especially during the last few years of drought

Almost all of the pre-independence schools built by the Portuguese have a cistern to store rain water collection from the roof.

This water is then pumped by a simple hand pump to an overhead holding tank for the wash basins and flush toilets. Various water projects are underway throughout the islands in an effort to ameliorate drought conditions. Activities range from drilling wells to using windmill-powered pumps, especially on the Island of San Tiago where the underground aquifer and the wind conditions are favorable. Another plan now being processed for implementation is the construction of "galleries" (horizontal tunnels into the hillsides). The islands of Fogo and Santiago appear to have favorable conditions for this type of development. Fogo Island is served by several different water delivery systems, including transportation by truck.

f. Sanitary Systems

A few cities have municipal sewage disposal systems that discharge untreated wastes into the sea. Most communities, however, have no municipal sewage system and septic tanks are used only to a limited degree.

In pre-independence schools, a system of flush toilets, a septic tank and "soaking pit" have been used. In the rented facilities, which comprise about one-half of present classrooms, there are no sanitary facilities whatsoever.

g. Roads

The road system in the Cape Verde Islands is very adequate. The roads are made of hand-placed basalt cobblestones over an adequate base. Since unemployment in the last years of drought has been very high, the government has sought to ameliorate this situation by employing large numbers of workers in making roads and in the soil erosion protection projects.

3. Education

a. General Objectives for Education

Independence and formation of the new Cape Verdean government in 1975 brought with it some basic changes in educational policy. After a period of only three years, there is considerable evidence that initial aspects of the new policies are being initiated in several areas.

Fundamental to the new philosophy of reform is the abolition of those colonial government concepts and practices believed to be inimical to the interest of the Cape Verdean people. One aspect pertains to the desire to eliminate the pre-existing education program believed to serve the elite at the expense of the general population. Along with this is the desire to place greater emphasis on applied education through the development of closer ties between schooling and work. These and other principles of the new education program are summarized as follows:

- (1) The G.O.V.C. will be the primary agency responsible for providing education in the country.
- (2) Education shall be available to all citizens.
- (3) Educational planning will be integrated with the social and economic development of the country.
- (4) There shall be a linking of study and work.
- (5) The education program of the school will be related to the community it serves.
- (6) Provision will be made for adequate preparation in basic education as well as an educational program which provides needed technical and professional training.

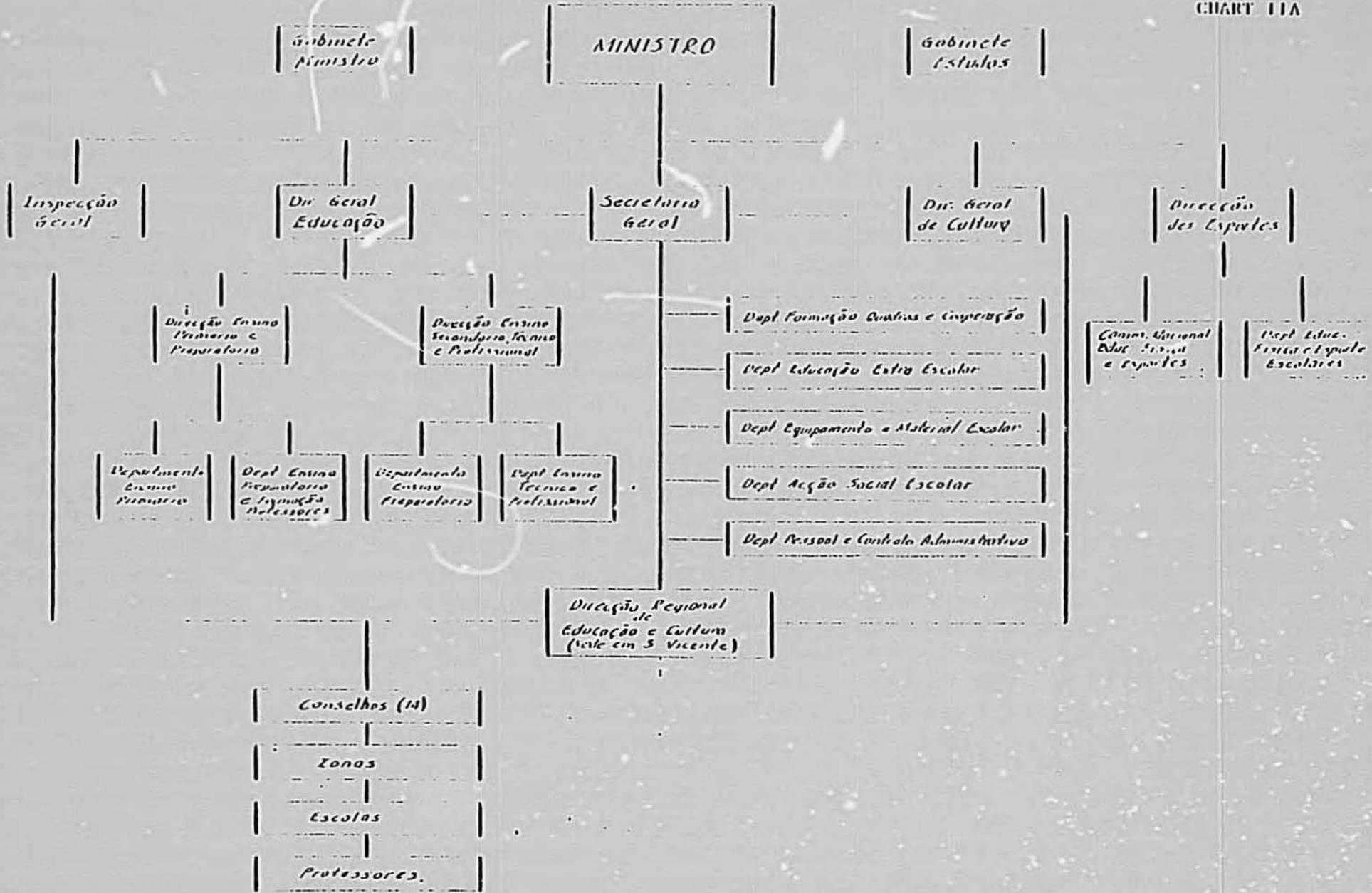
The general principles outlined above were reflected in a specific plan for development projected for the six-year period, 1977-78 through 1982-83. The plan anticipates a schedule of development for: (1) grades one through four; (2) the "Preparation Cycle" (grades five and six); (3) secondary education; and (4) technical and professional education (including teacher training).

b. Organization of the Education System

Formal education in G.O.C.V. is conducted by the Ministry of Education and Culture (M.E.C.) which effectively controls curriculum and instruction in virtually all schools. ^{1/}

^{1/} Less than one percent of the students are enrolled in private or parochial institutions.

CHART 11A



ORGANIGRAMA

The education system is centrally organized and assisted by regional subdivisions (Chart IIA).

The head of M.E.C., the Ministry, oversees all major policy decisions of the Ministry. The Secretary General serves as the chief administrative officer and is responsible for overall program operation and planning, including coordination of foreign assistance.

Curriculum planning and instructional activities for the largest segment of education are directed by the Division of Primary and Preparatory Education which is considered the single most important agency for education development. Within this division is a department for preparatory education (grades five and six) which represents one of the new thrusts to extend educational opportunity to more students and to more closely tie non-formal (applied) education with formal education.

Regional division of education is effected through fourteen "concelhos" which approximate the U.S. county school district. Concelhos are sub-divided into zones with one administrator, often a classroom teacher in charge. Each school has, in turn, a head teacher responsible for administrative duties that may be required.

With the formation of the new republic, schools were reorganized on a 4-2-3-2 grouping of grades (Chart IIB). Except for a few schools, the pre-primary program was suspended in 1975 with the intention of reopening the program at a future date when conditions guarantee an adequate program of instruction.

More than 87.7 percent of all students are enrolled in grades one to four and 7.7 percent in grades five and six. The remaining students are found in secondary schools, technical schools, and in teacher training.

The school year begins the first of October and continues until late June. During this time, M.E.C. schedules about one week for teacher orientation and preparation, one and a half weeks for examinations and approximately four weeks for holidays and semester breaks. During the school year and summer, some training sessions are provided to teachers and administrators.

Grade - Level Organization of Schools

Age	Grade Level	Type of School	
18+		University *	Advanced Technical Training *
18	12		
17	11	Secondary Pre- Univ	Teacher Training
16	10		
15	9	Basic Secondary	Vocational Training
14	8		
13	7	Cycle of Preparation	
12	6		
11	5	Primary	
10	4		
9	3		
8	2		
7	1	Pre - School	
6			
5			
4			
3			
2			
1			

*OTHER COUNTRIES

c. Students

Elementary school enrollment will soon approach 70,000 students for the entire country. Based on enrollment data for 1975-76, enrollment in the first six grades represented 95.4 percent of the total enrollment in all education programs (Annex H-2). Limited school census data suggest that the percent of children ages five to twelve steadily increased for several years (Annex H-3). The estimated increase in elementary school enrollment of thirteen percent between 1975-76 and 1977-78 is attributable to an increased emphasis on school attendance. M.E.C. Personnel stated that elementary schools are now available to virtually all elementary school aged children.

Student academic progress data show high rates of failure in each of the first four grades (Chart II-C). On the average, more than 50 percent of the students fail end-of-year exams in the primary grades. As a result many students were found to be repeating at all elementary grades and at the same time many students have dropped out of school. While grades one through four were intended for ages seven through ten, students are permitted to continue attending through age twelve and occasionally until fourteen. Those who do not pass grade four by age fourteen have little opportunity for further schooling.

Chart II-C
End-Of-School Examinations/1975-76
Rates of Success/Failure for Primary Grades

<u>Grade</u>	<u>Number Enrolled</u>	<u>Number Passing</u>	<u>Percent Passing</u>
1	27,667	10,790	39
2	13,181	7,171	54
3	9,780	5,645	58
<u>4</u>	<u>6,575</u>	<u>3,231</u>	<u>49</u>
Total	57,202	26,837	47 (Average)

"Statistical Data", p. 16

Data were not available to assess the percent of school age children actually enrolled in school at each grade level.

Students are asked to buy their own books, paper and pens. The language spoken by the students is Creole although the language of instruction is Portuguese.

A random sampling of student attendance as reported by classroom teachers was made by the A.I.D. project team in January-February 1978. On the islands of Sao Tiago, Fogo and Brava the percent of daily attendance was approximately ninety percent.

Costs of books and materials is fairly reasonable given the local economy. An agency of the government (D.A.S.E.) is responsible for providing educational materials for students that cannot afford them.

Team visits to schools suggested that distribution of educational materials to students was not as effective as would be desired. Although powdered milk is available in most schools, many students are malnourished and an adequate school lunch program does not exist in all the schools.

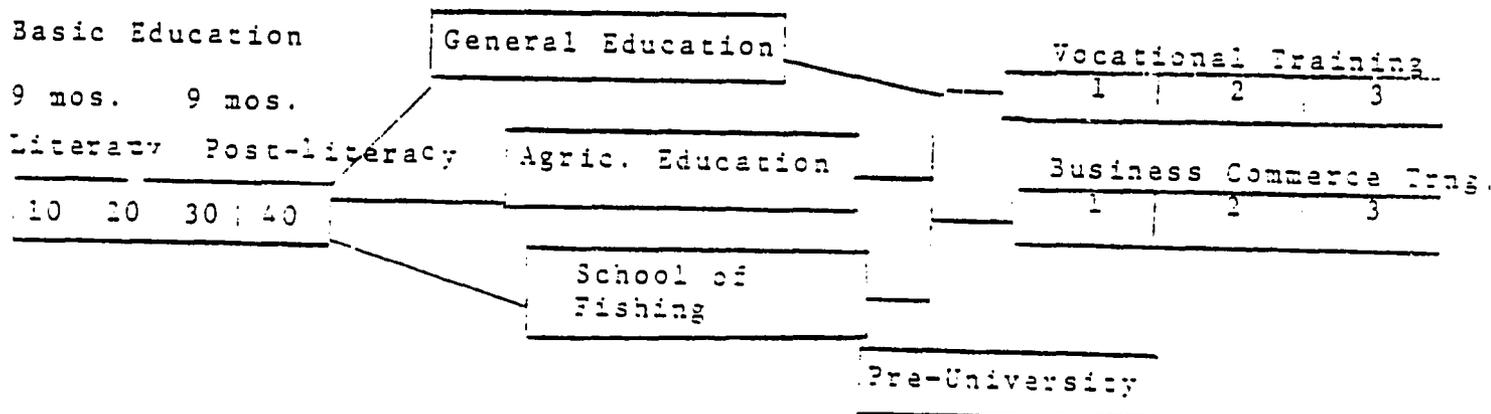
d. Post-elementary Education

Secondary school education has a very limited clientele with only three to four percent of all school enrollments (Annex II-D). The curriculum has followed the classical format common to Portugal and other European countries. Some modest changes were instituted with independence but relatively little attention has been given to this level thus far.

Planning for adult education was reflected in educational documents prepared in 1977. Chart II-D schematically summarizes the structural arrangements proposed.

Chart II-D

Proposed Structure of Adult Education



The adult education structure envisions a program of educational training that would have several options including access to the university. It also provides for abbreviating the time required to complete basic education.

Adult education programs underway in early 1978 were of two types. One consisted of a few classes taught gratuitously by elementary school teachers. There were no costs incurred by the GOCV except for testing.

A second type was connected with a construction project in Praia, Sao Tiago. As part of a pilot literacy project, workers on the job were taught to read and those who displayed a particular ability to learn were asked to help others in their own community. There was no information immediately available as to the specific nature or overall success of the program.

Technical education and teacher education represent only a fraction (1.5%) of the total education effort. However, a new teacher training facility is planned for construction in 1980 by an outside donor.

The design for adult education program appeared logical but as of February 1978, relatively little progress was evident. Because of the general dearth of reading materials available, M.E.C. officials expressed concern that once those who are illiterate learn to read, they would have little opportunity to use the skill, thus training efforts at this time would be for naught. The minimal attention given to adult education undoubtedly reflects the lesser priority assigned to this area.

However, M.E.C. officials are very much aware of the need for trained technicians and have consequently designed the new Cycle of Preparation as a basic step toward developing human resources in this area.

e. Elementary Education

The program of the elementary school is especially significant as it affects by far the largest portion of students in the education system. The basic curriculum for all students in grades one through four is summarized in Chart II-E.

Chart II-E

SUBJECTS	PERCENT OF STUDY TIME ALLOCATED/WEEK
Portuguese	26%
Mathematics	26%
Social Studies	15%
Arts & Crafts	11%
Music	9%
Orientation to work	4%
Physical Education	9%
	100%

Instructional materials are in short supply and M.E.C. has sought to develop new textbooks as quickly as possible. Although some pre-independence texts are still used in schools, M.E.C. has developed seven basic school books which are designed to reflect a Cape Verdean perspective. This includes examples of contemporary life, Cape Verdean history and social and political orientation.

The instructional program for the fifth and sixth grades (Cycle of Preparation) is outlined in Chart II-F.

Chart II-F

SUBJECTS	PERCENT OF STUDY TIME ALLOCATED/WEEK
Portuguese	15%
French	11%
Mathematics	15%
Social Studies	7%
Natural Science	7%
Visual Education	11%
Arts and Crafts	7%
Orientation to work	15%
Music	4%
Physical Education	7%
	<u>100%</u>

Tasting procedures coincide with the long-established Portuguese system of end-of-year exams at each grade level. Students failing such tests, are required to repeat the entire year.

Visits to thirty-five schools indicated that, with only two or three exceptions, instruction was very traditional and leaves room for considerable improvement. The lecture style predominated in every grade one through six. Some modest changes were observed in one sixth grade class and a very good instructional program was noted in one specially-funded public kindergarten.

Not only were basic teaching materials in very short supply, but no additional reference books were viewed in any elementary school classroom. In addition, there appeared to be virtually no school or even community libraries. This raised a basic question, "what do students read once they learn to read?"

It is fair to conclude that much is yet needed in the way of adequate materials of instruction. A need of equal or greater magnitude is a well-trained teaching corps.

f. School facilities

The G.O.C.V. provided classroom space for 61,000 students in 650 classrooms in 1975-76. a/ Of these facilities, 320 or forty-nine percent were in rented facilities.

Since independence, the G.O.C.V. has constructed fifty-one new classrooms for grades one through four and thirty-six classrooms for the Cycle of Preparation (grades five and six).

It is estimated there soon will be 70,000 students enrolled in grades one through six. Assuming a maximum of thirty-five students per classroom and two instructional groups (sessions) per day, there is a need for 1,000 classrooms. Given those classrooms currently owned by the government (330), this will mean an overall need in the near future for an additional 670 classrooms beyond those currently owned by the G.O.C.V.

Most of the rented elementary school classrooms are small, poorly ventilated, ill-lighted, one-room houses. These teaching spaces generally have little or no storage and often are without any operating toilet facilities. b/ State-owned elementary schools are likely to be of more substantial construction but often are poorly equipped and in need of repair.

It is very evident that there is a critical need to replace rented facilities and to build additional classrooms as well. Rented facilities, as minimal as they are, cost the G.O.C.V. approximately \$14,600 per year for the Islands of San Tiago, Fogo and Brava. Savings could be redirected to other educational needs including the improvement of state-owned facilities which have received the most meager attention.

a/ "Statistical Data" p.12

b/ Of thirty-five schools visited by the project team, the large majority had no useable toilet facilities. With one or two exceptions, rented classrooms were without any toilets. No outdoor privy-type toilets were found at any school site.

Records show the present classroom utilization for all of the fourteen concelhos is very heavy (Annex II-F). Assuming an enrollment of thirty-five students per classroom, this represents an average of more than two and one-half sessions in each classroom per day.

Also critical to the improvement of the educational program is adequate teacher housing. Given the general lack of adequate housing and low levels of teacher pay, state-owned residences available for teacher use could do much to attract and retain capable and qualified instructors. This will be especially true for the rural areas and regions where there are severe housing shortages.

g. Teachers

In 1975-76, one thousand three hundred and fifty teachers were employed throughout the country to teach 61,000 students (Annex II-F). This represented a 1:43 ratio of teachers to students for grades one through six.

There are three general levels of teacher preparation in Cape Verde. One level is for primary school teachers (grades K-4). A second level authorizes teaching their intermediate grades (grades five and six) as well as for the primary school; and the third level qualified teachers for the secondary school.

Within the first six grades, there are three sub-classifications of teachers. The classification involving the most extensive training is called "Curso do Magisterio Primario." Training for this level is roughly equivalent to the U.S. high school diploma and includes two years of course work specifically designed for teacher preparation.

A second classification at the elementary level is called "Posto Escolar". This provides for at least eight years of schooling and also involves some teacher training in the last four years. The third and least qualified classification is known as "Monitor". Only the first four years of elementary school plus forty additional days of teacher training are required. Monitors are most frequently found in rural schools.

The proportion of teachers with the Magisterio Primario preparation dropped in recent years, but this has been offset with a corresponding drop in the percentage of Monitors while the proportion of Posto Escolar teachers increased (Annex II-G).

Beyond the first four years of primary school is a second level called the "Cycle of Preparation". Teaching at this level requires completion of grades one through six, three years of secondary school plus two years of professional training in education. Teachers with these eleven years of schooling are qualified to teach in grades one through six.

The most advanced level of teacher training requires a university degree at the baccalaureate level in a subject taught in the secondary school. Certification at this level authorizes teaching in the secondary school.

The normal daily teacher assignment for grades one through six is one instructional period of four and one-half hours. Each classroom ordinarily is scheduled for two groups of students per day, six days a week. One session is held in the morning (7:30 A.M. 12:00 P.M.) and the second in the afternoon (1:00 - 5:30 P.M.).

In locales where there is insufficient classroom space, three and occasionally four sessions are arranged each day. Triple sessions and quadruple sessions are scheduled in three-hour modules, reducing thereby, conventional instructional time by 33-1/3 percent.

Pay for teachers is allocated according to the level of preparation as follows:

Monitor	\$100/mo.
Posto Escolar	\$109/mo.
Magisterio Primario	\$161/mo.
Cycle of Preparation	\$261/mo.
Secondary	\$261/mo.

Instructors teaching two sessions each day receive an additional one-third in salary. a/ Only a few teachers are able to live in government-owned housing. While there are few state-owned residences available to teachers, most teachers try to avoid "board expenses" by living with families within the community where they teach. Usually such living arrangements, however, are minimal at best.

a/ About one-third of the elementary school teachers are paid on a twelve-month basis while the remainder only receive the salaries indicated for nine-months. M.E.C. ultimately hopes to place all teachers on a twelve-month period.

Consultation with M.E.C. personnel revealed that a substantial effort has been made to reduce the number of minimally-prepared teachers (monitors) through a program of in-service training. Latest figures show that there are currently about one hundred monitors in a training program designed to raise their level of qualification. At the end of this year there will be approximately one-hundred fifty monitors still needing additional training.

If teachers at all qualification levels are included, the supply of teachers is sufficient to fill the instructional positions in the elementary schools. At the present time, seventy new teachers are being trained, thirty to qualify for the Magisterio Primario and forty for the Posto Escolar. Plans call for opening a new teacher training facility in 1980 with a capacity to handle six hundred students.

Except for secondary school teachers, the academic and professional training of teachers and middle-management school administrators is minimal in terms of the degree of professional expertise needed. Especially critical to future educational development is a corps of well-trained school administrators who would be available to do in-service training in local schools and classrooms. This would appear to be one of the more efficient and economical means for upgrading instruction in the elementary grades.

4. Differences

a. Construction

The original borrower/grantee application for assistance estimated the construction of approximately 150 primary schools involving 350 classrooms. This program was based on estimated costs at the time of independence (1975). A new list of requirements was made by the G.O.C.V. and estimated at current costs. The new list of requirements added four larger regional schools of twelve classrooms (each including workshops for manual arts) and increased the request for living quarters from the original sixteen to 108. While the original school design was for a basic "core" of classrooms and a kitchen/canteen/ storage area, the new designs called for a school complete with a multi-purpose area, a patio area, cisterns and a stone wall around the school grounds as a protection against goats. In addition to the added refinements and additional facilities requested, considerable inflation had added to the costs so that the cost of the new program as proposed had escalated to

eight times that originally estimated. The request was discussed with the G.O.C.V. as to the best program to utilize the limited funds available. It was mutually agreed that only the basic "core" facilities should be built including the classrooms and the kitchen/canteen/storeroom areas. This resulted in agreements on the following program.

30	One-classroom schools
20	Two-classroom schools
10	Three-classroom schools
15	Teachers' living quarters
2	Workshops

77 Buildings

The estimated total cost of the 77 buildings is U.S. \$2,000,000 to be constructed over a period of three years.

The above program includes the doors and windows and all school furniture to be made by the G.O.C.V. but paid for in local currency from project funds. All materials for construction will be furnished from project grant funds except for the sand, gravel coarse aggregate and water which will be furnished by the G.O.C.V. All labor costs will also be paid from project grant funds. All personnel costs of technical and supervisor personnel on direct G.O.C.V. salary will be paid by M.O.P.

b. Education

For the education equipment some program differences exist between the application for assistance and this project. The differences are largely a matter of degree and reflect a change in G.O.C.V. priorities.

The initial application suggested a community development/non-formal education component. While no separate component is identified in this project, elements of such a component are in fact found in various facets of the project as noted below:

- (1) The design of school facilities anticipates community use of the schools intended to serve adult members of the community as well as children;
- (2) Outdoor recreation areas are to be used by the community during non-school periods;

(3) Especially relevant is the teacher training program which includes instruction in methods of teaching, sanitation and nutrition;

(4) Until the government can provide basic health and other community development services, M.E.C. encourages teachers to help with local development wherever possible. ^{1/}

(5) The construction of vocational training facilities (workshops) and the training of industrial arts specialists are examples of efforts to assist in non-formal or vocational type education. Upon completion of the fourth year of the formal system of education, the student has the option of continuing in the formal system or entering the newly developed industrial arts shops where they learn vocational skills. Those students who opt for the technical training component still may reenter the formal system after two years.

In summary, community development/non-formal education elements do exist in the project but due to a modification in educational priorities of the G.O.C.V., a separate component was not designed.. Rather emphasis was given primarily to elementary education at the request of the Ministry of Education.

B. DETAILED DESCRIPTION

The overall goal of the project will be to improve the quality of human resources through an effective program of elementary education. More specifically the project purposes are to provide needed school facilities and assistance to up-grade the professional skills of teachers and supervisory personnel responsible for elementary and non-formal types of education in Cape Verde. The project outputs are expected to reduce the number of rented facilities used as classrooms nearly twenty percent. At the same time the project will provide training for 200 teachers and a significant number of school administrators.

1. Outputs

a. Construction

The project will provide 100 classrooms with kitchen, canteen, and storage facilities, as well as a cistern and sanitary units.

^{1/} Of the limited adult education activities that do exist in communities, most of these are conducted gratis by local school teachers.

These will replace rented classrooms which are dark, crowded and without any sanitary facilities (MAPS 2,3,4). Fifteen two-bedroom living quarters will be constructed with kitchen, bathroom and living room for teachers in rural areas where it is difficult to obtain adequate living quarters. The project, also, will provide two industrial arts shops for the preparation cycle to reinforce the GOCV's emphasis on manual arts and vocational education (See Annex (H-11)).

In addition, technical assistance will be given to the planning and organization of work crews to efficiently prosecute construction activities.

b. Education

By the end of the project the following personnel will have received training to up-grade their professional capabilities:

- (1) 100 minimally-trained teachers (monitors)
- (2) 10 industrial arts specialists
- (3) 15 school administrators
- (4) 75 elementary school teachers

During the first training period August-October 1978, the training of monitors will help the G.O.C.V. reduce the number of teachers with minimal qualifications. The industrial arts specialists are skilled technicians but without teaching experience; the project, therefore, will provide them with basic training in instructional methodology. Professionally trained industrial arts teachers are in short supply and they will be at least minimally prepared to serve as teachers in the vocational phase of the fifth and sixth grade program (Cycle of Preparation). Key school administrators will participate in the planning and first week of the actual training period, September 1978.

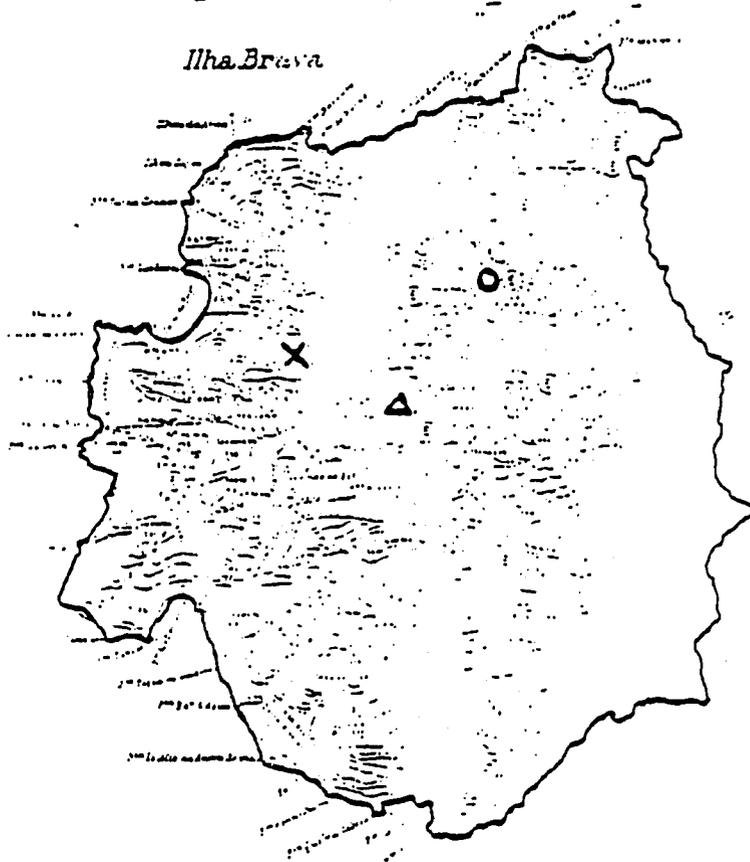
During the second training period, 1979, fifteen middle-management administrators will be trained in supervisory techniques and seventy-five teachers will be trained in instructing basic subject areas (natural science, math., etc.).

All facets of the training program are conducted in-country and are directed toward fulfilling needs in the high priority areas of elementary education. Moreover, the training will enhance the teacher's ability to respond to more immediate community needs such as health education and skilled craftsmen. At the same time, the school construction phase of the program will complement the training component by providing better equipped elementary school classrooms and needed housing for rural teachers.

CARTA
 DA
 ILHA BRAVA

ILHAS BICONS OU DO ROMEIO

MAP 2



- △ → 1 classroom
- → 2 classroom
- → 3 classroom
- X → T. housing

2. Inputs

a. Construction

Construction inputs shall consist of the following:

A.I.D.

- (1) All construction materials except: Sand, gravel, crushed stone, for foundations and walls, water for mixing for concrete, mortar, plaster and other building uses.
- (2) All labor costs except: regular salaried employees of the G.O.C.V. such as the engineer, architect or others in supervisory positions. Funds for this payment shall be deposited to an account set up with the G.O.C.V. specifically for this project.
- (3) Glass or unbreakable plastic for all windows.
- (4) The services of a top-level engineer who has Portuguese language capability and experience in labor intensive construction methods in developing countries.
- (5) Payment for all required housing for the engineer technician. (The G.O.C.V. will make arrangements for and assure such housing in a timely manner).
- (6) Payments in local currency for all millwork fabricated by the G.O.C.V. for schools, teacher housing and shops.
- (7) Payment for the fabrication of all school furniture including desks, chairs, closets, shelves, and frames for blackboards and bulletin boards. The materials for furniture making, primarily wood, come from Guinea Bissau and, to a lesser degree, Portugal.

G.O.C.V.

- (1) All sand, gravel, crushed rock, stones for building walls and foundations and water needed for construction.

- (2) All trucks, personnel transportation, equipment such as concrete mixers, concrete vibrators, water pumps, tractors, bulldozers, cranes and all other equipment to be used for construction.
- (3) All sites for schools, living quarters for teachers and workshops including surveying topographic studies for design and registration of documents as required.
- (4) Salaried supervisory personnel regularly on the government payroll including engineers and architects.
- (5) Make arrangements for housing of the engineer furnished under Technical Assistance (payment for housing will be made by the engineer).
- (6) Make arrangements for any in-country travel required (payment for travel will be made by the A.I.D.)
- (7) Make arrangements to set up a separate account to which funds can be deposited exclusively for this project. Withdrawals will be made against vouchers and payroll sheets. Payments for labor shall be made twice monthly, not later than 10 days after the end of the payroll period.
- (8) The fabrication of all millwork (doors and windows). (The glass for the windows shall be furnished by A.I.D. Payment in escudos for the millwork, including labor and materials, shall be made by A.I.D.).
- (9) The fabrication of all school furniture including tables, chairs, desks, closets, and shelves, as required. (Payment for labor and materials for the fabrication shall be made by A.I.D.).

b. Education

The following inputs are required to produce the outputs outlined for educational technical assistance.

(1) Human Resources

185 teachers will be trained in-country in educational methodology and 15 school administrators in education administration as follows:

	Training Period	Length of Training Period
100 teacher-monitors	September, 1978	5 weeks
10 industrial arts specialists	September, 1978	5 weeks
75 elementary school teachers	September, 1979	5 weeks
15 school administrators	September, 1978/79	5 weeks

Examples of training outputs which are expected to reflect progress toward the program goal are noted below:

1978

Among the topics included in the training program for the monitors are methods for teaching subjects related to sanitation and nutrition. These topics seek to respond to serious health needs of the people in a large number of Cape Verdean communities. School administrators will also be involved in a brief orientation session in 1978.

The monitor-training phase will also focus on developing basic handicraft skills. Short of skilled craftsmen, additional training of ten industrial arts specialists will enable these craftsmen to more effectively apply their skills to instructing students in the fifth and sixth grades.

1979

Fifteen school administrators (delegates and/or school directors) will be trained in education administration for one month in September, 1979. 75 Primary school teachers will receive training in instructing basic subjects such as math and natural science as well as health and nutrition.

U.S. Technical assistance (Education Specialists)

Five U.S. education Specialists and a team coordinator will provide instruction during the month of September, 1978 plus evaluation and follow-up in the field.

Four U.S. education specialists and a team coordinator will provide instruction in September, 1979.

G.O.C.V. In-country Coordinator

The G.O.C.V. will provide a counterpart from the Ministry of Education to assist in the planning, coordination, evaluation and logistical support essential to conducting of all training sessions, including preparation and follow-up phases.

(2) Institutional Support

- (a) A.I.D. will provide funds for team contract services, expenses of U.S. technical assistants (education specialists), and instructional materials.
- (b) A.I.D. will also provide funds for per diem expense (300 escudos/day or about \$9.10/day) of participants and their travel to and from the training site.
- (c) G.O.C.V. will provide logistic support (arrangements for housing, transportation, etc.), facilities and equipment for all training sessions.

PART III. PROJECT ANALYSIS

A. Technical Analysis

1. Construction

a. Priorities

The principal school construction objectives of the G.O.V.C. are listed in order of priority:

- (1) Replace rented classrooms by the construction of new government-owned classrooms.
- (2) Construct new classrooms in locations where the growth in population has resulted in serious over-crowding of present classrooms.
- (3) Construct living quarters (moradias) for teachers in remote areas where there is great difficulty in recruiting teachers because of the lack of living accommodations.
- (4) Construct industrial arts workshops for the Cycle of Preparation.
- (5) Construct classrooms for Cycle of Preparation schools (5th and 6th grade).

b. Evaluation of G.O.C.V. Plans and Costs

The plans and the cost estimates for the one classroom and the multi-classroom schools developed by the G.O.C.V. have been carefully studied and are deemed to be adequate and reasonable except for the following:

- (1) Only the basic "core" facilities consisting of the classrooms and the kitchen/canteen/storage room complex and the cisterns will be constructed at this time. The patio, the multi-purpose facilities and the outside perimeter walls will be planned for the future and will not be constructed at this time (Annex H-8).
- (2) Only the teacher's sanitary facilities including a toilet and wash basin will be included in the construction.
- (3) Wash basins for the students will be included but no flush-type toilets or showers will be installed at this time. However, the plans will be made so that these facilities can be added at a later date if and when a dependable water supply becomes available (Annex H-9).

The cost and production figures appear to be reasonable, but due to the short historical background of the present government

(Cape Verde attained independence in 1975) it is recommended that the project provide the services for three months of one Portuguese-speaking engineer with a strong background in labor-intensive construction methods in developing countries to assist the GOCV in the initial stages of construction.

c. Methods of Construction

Most construction is done using broken basaltic stones with or without mortared joints. There are many skilled stone masons who are able to build structurally sound and aesthetically pleasing walls. Corrugated asbestos roofing on wooden purlins and wooden truss system is the most commonly used construction and will be utilized for the schools to be built under this program.

d. Personnel Availability and Capability

Although at present there is a shortage of supervisory personnel, eight to ten architects and engineers will be returning to Cape Verde by the end of June, 1978. In addition, the G.O.C.V. has requested the return of various foremen and superintendent of construction (Mestres de Obras) who have gone to other countries to seek employment.

A large program is now underway for soil and land conservation where many walls, dikes and dams are being built with basaltic stones. The Ministry of Obras Publicas and its construction branch the "Empressa Estatal para Construccoes (E.M.E.C.) have sufficient equipment and other logistical support for the execution of this project.

The G.O.C.V. has indicated that the Cape Verdians would much rather work to earn money to purchase food than to accept food assistance or dole. This coupled with the high rate of unemployment indicate that with good supervision and scheduling, the construction work can proceed very smoothly especially since the labor costs will be paid from grant funds.

e. Water Availability and Sanitary Facilities

Due to the scarcity of water during the last few years, most of the cisterns are now dry. Except for the few locations where there are municipal water systems, all school flush toilet facilities have been closed. However, the G.O.C.V. states that during a normal year, with careful use, the cisterns usually provide water during most of the school term.

f. Conclusion and Recommendations

In view of the above analysis the following program is recommended.

- (1) All outside walls to be made of hand-placed mortared, basaltic stone (40 centimeters wide).
- (2) A roof system of corrugated asbestos roofing sheets with wooden truss framework and horizontal purlins.
- (3) Each school to have a 10,000 to 15,000 gallon cistern plastered both inside and outside with a lime cement mortar for water tightness.
- (4) Installation of a flush toilet and wash basin for the use of the teachers.
- (5) Installation of one wash basin for each 15 students. Each wash basin will be equipped with a delayed action, self-closing faucet in order to limit the use of water.
- (6) An outdoor, privy system of sanitary facilities be furnished for each school on the basis of one toilet facility for each ten males and one toilet facility for each ten female students in the school at any one time. The siting shall be done so that the privies are downhill and downwind of the classrooms.
- (7) School plans to be made so that if and when water becomes available for the school, the construction of flush-type sanitary facilities for the students will not be precluded.
- (8) All doors and windows including frames will be built by and at the E.M.E.C. wood shops in Mindelo. Payment for the millwork will be made from project funds.
- (9) Because of the short lead-time allowed for the procurement of the construction materials and supplies from the United States, it is recommended that the PIO/C be initiated immediately and firm orders placed immediately upon the signing of the ProAg. As shown

in the Bar Graph and the Project Performance Network (Annex G), timing is the critical factor for the successful prosecution of the project. However, in order to be able to start the implementation of the project as planned, the GOCV has suggested and agreed to furnish cement, reinforcement steel, the lumber for the roof truss system and the corrugated asbestos roofing on a reimbursable basis to be returned as soon as the U.S.-purchased supplies and materials arrive.

Some of the teacher housing units shall be constructed in accordance with the Plans formulated by the GOCV architects and others in accordance with the plans formulated by the Consultants (Annex H-10).

The two manual training workshops (oficinas) will be constructed as developed by the Consultants as shown in Annex H-11.

- (10) Procure the services of one Portuguese speaking engineer with a strong background in labor-intensive construction methods in developing countries.

2. Education

Priorities for school construction and staff development focus on the same basic facet of education, namely elementary education. It is not surprising, however, that the locus of need for the two components is not identical. As noted above, construction activities will center on the three islands of Sao Tiago, Fogo and Brava. Staff training priorities, however, will involve teachers and administrators from other islands as well. In fact, all of the concelhos will be represented by a teacher(s) and administrator during the training periods.

The G.O.C.V. has properly directed its attention to first up-grading the levels of training for those teachers least qualified. The monitor-training session to be held in-country is planned for September, 1978, and is a necessary and proper activity that will involve monitors from most of the islands.

Teachers receiving training will be able to use their new skills both in and out of the formal classroom. Most instructors, especially those in remote areas are responsible for non-formal learning as well as formal education. They might teach classes in nutrition or rural crafts to members of the community outside the normal school system. This training program will enhance their ability to convey new skills to their community's active population.

Similarly, there is strong justification to move forward with the training of industrial arts teachers for at least two fundamental reasons: (a) training in vocational education has been almost totally absent in the past and likely accounts in part for high drop out rates and a program which was generally elitist in character and; (b) there are virtually no adequately prepared industrial arts teachers at the present time. The first year of technical training, then, is directed toward two of the more critical needs in elementary and non-formal education, i.e., better trained instructors and instruction in more economically relevant skills.

In the second year, the project proposes working with the next most pressing areas of need, i.e, methods of teaching natural science, math and physical education. Both components are logical extensions of the concern for sanitation and nutrition treated in the first year. Teachers will be given instruction in how to better instruct courses taught in the formal system and to apply this instruction to the context of the community served by the school.

The second year also plans an in-country training phase which has the potential for substantial amplifying results. That is, with the training of middle management school administrators, the training experience of the administrators can ultimately be shared with a large portion of the teachers throughout the country. This is based on the assumption that at least one administrator from each of the fourteen counties (counselhos) will participate in the training session, giving each part of the country a newly-trained teacher-trainer.

It must be recognized that the proposed program of training is in no way an educational panacea. It does focus on the more critical areas; it is designed to fit into the G.O.C.V. program for dealing with educational priorities and should be a viable model for future use; to insure such a possibility, key M.E.C. officials,

school administrators and instructors will participate in some capacity in the design, implementation and evaluation of the two training periods (1978 and 1979). Moreover, the coordinator will attempt to maximize the appropriateness and acceptance by the GOCV of all aspects of the training programs.

B. Financial Analysis

1. Overview of Education Expenditures

Cape Verde's fiscal year coincides with the regular calendar year plus a three month period during which most liquidation of expenditures takes place.

TABLE 3 A
Resume of the National Budget

<u>Ministry or Use</u>	<u>1977</u>	<u>(%)</u>	<u>1978</u>	<u>(%)</u>
National Assembly	\$ 103,070.	(.2)	\$ 112,573.	(.2)
Executive Office	872,282.	(2.)	947,373.	(1.6)
Prime Ministry	1,403,552.	(3.3)	3,369,999.	(5.8)
Foreign Affairs	1,225,037.	(2.8)	1,594,241.	(2.7)
Defense	2,648,111.	(6.1)	3,009,654.	(5.1)
Min. of Economy	5,540,205.	(12.8)	11,374,210.	(19.4)
Min. of Education & Culture	3,359,624.	(7.8)	4,008,328.	(6.8)
Min. of Transportation and Communications	8,086,639.	(18.7)	3,439,501.	(5.9)
Min. of Rural Development	6,927,874.	(16.1)	15,100,594.	(25.8)
Min. of Health	2,267,094.	(5.3)	3,189,764.	(5.4)
Min. of Public Works	10,234,707.	(23.7)	11,835,329.	(20.3)
Min. of Justice	502,325.	(1.2)	566,216.	(1.)
TOTAL	\$43,170,520.	(100.)	\$58,547,782.	(100.)

About seven percent of the total National Budget is allocated to the Ministry of Education and Culture (most developing countries allocate between 4 to 6 percent of public expenditures to education).

The National Budget is subdivided into ordinary and extraordinary expenditures. Extraordinary expenditures, as presented in Table 3B below, are in large part, foreign assistance grants and loans

and earnings from food sales (the latter is soon to be channeled into a National Development Fund); they represent mostly outlays for development purposes.

TABLE 3 B
Resume of Extraordinary Expenditures

<u>Resume or Use</u>	<u>FY 1977</u>	<u>(%)</u>	<u>FY 1978</u>	<u>(%)</u>
National Assembly	-		-	
Executive Office	-		-	
Prime Ministry	-		\$ 1,753,939.	(4.5)
Foreign Affairs	-		-	
Defense	-		-	
Min. of Economy	\$ 2,606,061.	(13.3)	8,007,879.	(20.7)
Min. of Education & Culture	75,152.	(.5)	213,030.	(.6)
Min. of Transportation and Communications	2,666,667.	(13.6)	2,813,636.	(7.2)
Min. of Rural Development	4,242,424.	(21.7)	13,627,273.	(35.4)
Min. of Health	378,788.	(1.9)	1,133,636.	(2.9)
Min. of Public Works	9,587,878.	(49.)	11,085,152.	(28.7)
Min. of Justice	-		-	
TOTAL .	<u>\$19,556,970.</u>	<u>(100.)</u>	<u>\$38,634,545.</u>	<u>(100.)</u>

Extraordinary expenditures are invested in a number of non-formal programs to develop specific skills. Many of these programs originate outside the administration of M.E.C. and are financed instead by other ministries interested in providing unique learning opportunities or alternatives to and extensions of formal education. For example, the Ministry of Rural Development (M.R.D.) is using extraordinary expenditures to finance students to study agriculture and hydrology as part of projects being implemented by M.R.D. While formal education remains a principle activity under M.E.C., non-formal programs are nevertheless coordinated with the appropriate division of M.E.C. With the new Six Year Education Plan, formal education is to be better adapted to technical and professional needs of the country.

Consequently, M.E.C. has given priority to the expansion and development of elementary education to insure that (1) basic education be made available to all Cape Verdeans and (2) education is adapted to community level realities.

Unlike many LDC's, Cape Verde obligates a greater percentage of their budget to elementary education.

From the Table 3C below, close to 83 percent or a little over \$3 million is allocated by M.E.C. to elementary education (grades 1-6). For the same year about \$2 million or about 62 percent of the total M.E.C. Budget is expended in primary education (grades 1-4).

TABLE 3C

Distribution of Pupils and Budget in
Selected Countries - 1975

<u>Less</u> <u>Developed</u>	<u>Pupils</u>			<u>Budget</u>		
	<u>Elementary</u>	<u>Secondary</u>	<u>Higher</u>	<u>Elementary</u>	<u>Secondary</u>	<u>Higher</u>
Botswana	95.1	4.9	N/A	65.9	24.0	10.1
C.A.R.	95.5	4.5	N/A	60.1	11.8	19.2
Ecuador	81.4	16.0	2.6	50.8	37.1	12.1
Ghana	94.2	5.5	.3	44.1	30.9	25.1
Peru	78.0	18.2	3.7	41.0	40.8	18.2
Cape Verde	95.4	4.6	N/A	83.0	13.0	4.0
 <u>More</u> <u>Developed</u>						
France	60.2	34.6	5.2	32.1	45.2	22.7
Portugal	69.9	27.1	3.0	48.1	40.3	11.6
U.S.A.	55.7	31.6	12.7	69.8	-	30.2
Yugoslavia	75.9	18.0	6.1	55.9	28.6	15.4

TABLE 3 D
Ministry of Education and Culture

<u>Source</u>	<u>FY 1977</u>	<u>FY 1978</u>
The Ministry's Office	\$ 87,109.	\$ 63,921.
Secretary - General	-	31,788.
Dept. for Staff/Cooperation Training	-	34,327.
Dept. of Non-Formal Education	-	15,279.
Dept. of Equipment and School Materials	-	17,400.
Dept. of Social Work for Schools	-	13,218.
Dept. of Personnel and Administration Control	-	181,473.
Office of Studies and Teacher Training	10,800.	-
Gen. Office for Physical Education and Sports	6,243.	14,484.
National Office of Culture	19,315.	34,400.
National Office of Education	201,412.	40,794.
Division of High Schools	350,944.	338,259.
Division of Junior High Schools	619,352.	603,321.
Industrial/Commercial School, Mindelo	141,309.	128,207.
Primary Teachers College	95,673.	114,249.
Office of Technical & Professional Secondary Edu.	-	5,485.
Dept. of Teacher Training/Preparation	-	7,322.
Office of Studies	-	15,806.
Dept. of Regional Education/Culture	-	30,158.
Primary Education	1,722,012.	2,002,594.
Other Expenses	30,303.	22,982.
General Inspection	-	79,830.
Sub-total	\$3,284,472.	\$3,795,298.
Extraordinary Expenses	75,152.	213,030.
TOTAL	U.S. \$3,359,624.	U.S. \$4,008,328.

A number of changes have been made to the M.E.C. Budget for 1978 in comparison with its budget for 1977. All expenditures related to personnel and administration support (not including salaries) which were in 1977 included under item the National Office of Education, at \$201,412, instead in 1978 are allocated to the new department of Personnel and Administration Control. Also funds once allotted under the Office of Studies and Teacher Training and the National Office of Education during 1977 are now allocated to the Department of Teacher Training/Preparation and to the Department of Staff and Cooperation Training.

Using total school enrollment outline in Annex II-D, adjusted to 1977 population and enrollment estimates and calculating with figures from M.E.C.'s annual budget presented in Table 3C above, per pupil expenditure in 1977 was about \$48 $\left(\frac{3,359,624}{70,000}\right)$.

Per pupil expenditure for elementary education alone would approximate \$42 or $\left(\frac{2,788,488}{67,000}\right)$, which in turn represents a 3:1

ratio between expenditures per pupil and per estimated capita income (estimated at \$120).

2. Financial Plan

The financial plan for project costs is summarized in Table 3E.

TABLE 3 E

Summary of Cost Estimate and Financial Plan
(U.S. \$000)

Source	A.I.D.		Host Country		
	FX	LC	FX	LC	TOTAL
1. Technical Assistance	\$ 311.	-	-	\$ 70.	\$ 381.
2. Training	-	\$ 98.	-	-	98.
3. Equipment	896.	255.	-	82.	1,233.
4. Local Materials and labor ^{a/}	-	690.	-	851.	1,541.
Contingency	750.	-	-	-	750.
TOTAL	\$1,957.	\$1,043.	-	\$1,003.	4,003.

^{a/} Includes the costs for transporting materials to construction sites.

GOCV contribution will include the following items: (a) adequate living and working space in Mindelo to house all participants in the training component; (b) access to the use of five and ten ton dump trucks, concrete mixers, vibrators, water tankers and jeeps/land-rovers including all necessary preventative maintenance; (c) approximately 77 hectares of land for construction activities; (d) one engineer at 25% time, two engineers full time, one architect at 20% time and one architect full time; (e) one full time administrator from M.E.C. and four part-time administrator/planners from M.E.C.; (f) local building materials - sand, stone and water, including transportation to sites - and (g) support of M.E.C., E.M.E.C. and M.O.P. personnel, heavy and light duty equipment and office supplies.

The Project Development Team, in collaboration with the GOCV, was able to approximate and assign capital value to the GOCE inputs which are mostly considered "in kind", i.e. already in place.

a. GOCV Contribution

Construction

Land		554,400
Sand, stone and water	17% x \$1,746,187	296,852
Rental of 5-10T dump trucks	\$35/day x 800	28,000
Rental of 8 concrete mixers	\$10/day x 800	8,000
Rental of 12 vibrators	\$ 8/day x 800	6,400
Rental of 2 water tankers	\$35/day x 800	28,000
Rental of 3 jeeps	\$15/day x 800	12,000
Salary of one engineer 25% @	\$300 x 36	2,700
Salary of 2 engineers 100% @	\$250 x 36	18,000
Salary of 1 architect 20% @	\$300 x 36	2,160
Salary of 1 architect 100% @	\$250 x 36	9,000
		<u>U.S. \$965,512</u>

Education

Educational facilities for training programs	\$ 35,000
Personnel salaries during preparation and implementation of training	3,000
TOTAL	<u>\$1,003,512</u>

Maintenance

District administrators are responsible for controlling the upkeep of school facilities and maintaining adequate supplies of instructional materials. In reality, most of the maintenance and cleaning work is done by the teacher, pupils and the community. More serious repairs are the responsibility of the Minister of Public Works who responds to requests from the local school administrator (delegado) who, in turn, coordinates requests coming from teachers to the local representative for M.O.P.

According to M.O.P. officials, maintenance costs are accounted for by M.O.P. and disbursed by the Minister of Finance upon receipt from M.O.P. for work completed. Although no appropriate figures could be given to attest to GOCV capability to maintain the new facilities to be constructed under these projects, the Secretary of State and International Cooperation and M.O.P. officials were confident that recurrent maintenance costs for the new and expanded facilities are fiscally feasible.

The type of construction being used for this project should result in minimum maintenance problems. Since, in most locations there is no electricity available, there will be no electrical problems. There should be a minimum of plumbing maintenance due to the very little amount of plumbing used. Maintenance is expected to be limited to an occasional repainting required. In some of the schools it was noticed that some window panes had been broken for some time. For this reason, "Lexan" an unbreakable and hard to scratch plastic material is being provided for the glazing material. The initial investment is a little more but the extra cost is considered to be feasible.

Since the climate is very moderate and temperatures never drop down to the freezing point, there should not be any cold weather problems.

The overhead windows for light and ventilation being planned for the schools will be well adapted to the local environment.

One extra diaphragm type hand pump will be provided together with a small stock of repair parts for every ten schools being constructed.

Although the rains are very infrequent, when it does rain it comes down in the typical desert type torrents. It has been emphasized that very adequate drainage provisions be provided to prevent flooding of the school premises. All ground around the school building must slope away from the buildings.

It has been recommended to the GOCV that a full time maintenance person be employed at each school for the routine maintenance and cleaning. The government has given assurance that adequate maintenance provisions will be made in the budgeting.

Land

Escola com 1 sala de aula _____	600m ²
(One room school)	
Escola com 2 sala de aula _____	800m ²
(Two room school)	
Escola com 3 sala de aula _____	1200m ²
(Three room school)	
1 Moradia _____	130m ²

(Global value of land by classroom size)

Escolas com 1 sala _____ 600 m² x 20 = 18,000 m²

Escolas com 2 salas _____ 800 x 20 = 16,000 m²

Escolas com 3 salas _____ 1200 x 10 = 12,000 m²

Total _____ 46,000 m²

Moradias _____ 130 m² x 15 = 1950 m²

Total geral _____ 47,950 m²

(Average price per square meter)

Preco total _____ 14,385 000\$00

* 32.9 CV Escudos = \$1 US. _____ = \$437,234.00

In summary, GOCV contribution amounts to approximately \$1,003,000 or roughly 25.1 percent of total project costs. The A.I.U. contribution will total \$3,000,000 (or about 74.9 percent of the total) and will finance:

1. Building materials required to construct 100 classrooms/60 schools, 15 teacher houses and 2 industrial arts workshops;
2. The purchase of basic equipment to operate 2 industrial art workshops;
3. The local construction of school furniture to equip 100 classrooms and 2 workshops;
4. The provision of short-term consultant services for the construction and training components; and
5. Basic instructional materials and equipment required by participants of training programs to instruct their new skills in their classrooms.

b. AID Contribution

	FY 78	FY 79	FY 80	TOTAL
Technical Assistance	159	89	63	311
Equipment and Commodities	318	62	516	896
Building Materials and Supplies	(300)	(30)	(461)	(791)
Instruction Materials	(18)	(32)	(55)	(105)
Local Cost	100	383	560	1,043
Construction	(44)	(241)	(405)	(690)
School Furniture	(-)	(100)	(155)	(255)
Training	(56)	(42)	(-)	(98)
Contingency	<u>123</u>	<u>166</u>	<u>461</u>	<u>450</u>
	700	700	1,600	3,000

Summary of Estimated Construction Costs

Local Currency (given in US \$ equivalent)

Labor	\$595,053
School Furniture	254,528
Millwork	105,217
	<u>\$954,798</u>

U.S. Dollar Costs

Materials and Supplies	573,470
38% Freight and Handling	217,919
	<u>791,389</u>
Plus Local Currency Costs	954,798
	<u>1,746,187</u>
	750,000
	<u>2,496,187</u>

TABLE 3 F

No. Rooms	Basic Constr.	Summary Estimated Unit Costs				Unit Costs	
		Desks Tables Chairs	Cabiners Shelves	Kitchen Canteen Storage	ESC	SUS	Sav.
1	504,471	60,000	10,000	20,000	594,471	18,069	18,100
2	754,566	120,000	20,000	20,000	914,566	27,798	27,800
3	1,020,650	180,000	30,000	25,000	1,255,650	38,166	38,200
4	1,286,728	240,000	40,000	25,000	1,591,728	48,381	48,500
5	1,552,806	300,000	50,000	25,000	1,927,805	58,596	59,000
10	2,935,628	600,000	100,000	40,000	3,135,628	95,308	96,000
12	3,507,854	720,000	120,000	40,000	4,387,854	133,369	133,500
Moadias	559,270	-	incl.	incl.	559,270	16,947	17,000
Oficinas	583,229	Furn. 83,750	Tools 282,940	-	949,919	28,873	30,000

(See detailed Estimated Budgets in Annex)

Educational Equipment

<u>Quantity</u>	<u>Item</u>	<u>Unit Cost</u>	<u>Total</u>
60	Set of 8 world political maps; approx. 56" x 36"; pull-down type; cloth-plastic laminate; w/mounting board*	\$ 150	9,000
30	Set of 8 world physical maps; approx. 56" x 36"; pull-down type; cloth plastic laminate; w/mounting board*	150	4,500
30	12" world political globe w/stationary stand; plastic coated*	40	1,200
60	6 x 10 tumbling mats w/heavy duty plastic surface (1/school)	60	3,600
200	Soccer balls, official size, heavy duty rubber cover (2/classroom)	5	1,000
200 boxes	Chalk, white (2/classroom)	4	800
100 boxes	Chalk, colored (1/classroom)	5	500
			\$ 20,600

*Distribution of maps and globes.

	Polit. Maps	Phys. Maps	Polit. Globe	Phys. Globe
(30) one-room schools	1 ea			1 ea
(20) two-room schools	1 ea	1 ea	1 ea	
(10) three-room schools	<u>1 ea</u>	<u>1 ea</u>	<u>1 ea</u>	
Total	60	30	30	30

C. Social Analysis

1. Setting

After five hundred years of colonial rule, the new republic is faced with the task of reorganization of Cape Verde's economic and social development. Basic education, then a privilege of the few, was centered in the two urban areas of Praia and Mindelo. It was modeled after the European and more specifically, the Portuguese reality - a system where materials, content, and methodology were products of a reality alien to Cape Verde. An obvious outcome of the system is the high illiteracy rate in Cape Verde - between 65 and 70 percent. This figure is closer to 90 percent in the rural areas.

Due to the relative absence of natural resources, the government has given top priority to the development of its human resources. Emphasis is placed on the development of a universal system of primary and secondary education adapted to the needs and realities of Cape Verde.

The new philosophy of education is an ambitious though very realistic orientation toward the economic and social needs of the country. It emphasizes the value of work with one's hands, of contributing to the work ethic, of rebuilding the Cape Verdean nation. Curriculum in the elementary level reflects the practical, everyday necessities of life in Cape Verde. Since it is an agricultural, basically, rural country, more direction is given to interpreting education via this reality.

A typical course of study includes language, mathematics, sciences, manual arts, Cape Verdean history and culture, and health and nutrition. The student not only gains an awareness and appreciation of his local environment, but also realizes a positive image of himself and of his people.

Until independence, the average Cape Verdean was unaware of his own history, his own literary tradition, and of his own identity. He knew, however, that to be able to read and write was a step towards improving his living conditions, that the literate person had a far greater opportunity of getting a good-paying job in the government or in some other public service. Many of those who did succeed in getting an education in Cape Verde not only fulfilled local administrative and service functions, but also carried out such duties in all the other colonies of Portuguese Africa. They were university professors, judges, lawyers, communications workers, small businessmen, and government officials. It is generally

accepted that the number of Cape Verdean professionals in those colonies (now all independent) far exceeded the proportion of her own population. This demonstrates the ambition and capabilities of her people when given the opportunity to study and to work.

Since 1747, some 250,000 Cape Verdeans have died from the effects of famine. Because of Cape Verde's geographic location in the Sahelian belt, she too is victim to droughts, long spells of no rain which have forced thousands to emigrate. They have gone to Portugal, Brazil, Angola and other African countries, Holland, France, Germany, Italy, but by far most Cape Verdeans have found refuge in the United States. Some 300,000 Americans of Cape Verdean ancestry reside in the New England, California and New York areas. Their economic assistance to relatives in Cape Verde is of significant proportions, both in terms of monies and in terms of goods.

But emigration is not available to most Cape Verdeans. The idea is not to leave the country, but to rebuild her. The National School Construction Program is a step in this direction. More and improved educational facilities are needed to accommodate the growing population as well as the new directions of the government. The total population of 302,086 (1977) includes nearly half the population aged 15 years and younger. The annual birth-rate is between two and three percent.

Primary school enrollments have steadily increased from 40,685 in 1969 to 70,000 in 1977. Of this total, approximately 95% or 67,000 are elementary-age students. Half of all elementary school facilities (about 320) are rented from private owners because of lack of public space. These schools, in both rural and urban areas, are completely inadequate, substandard rooms where little opportunity for learning is provided. These are to be replaced.

2. Beneficiaries

The current USAID project would provide modern, though basic educational facilities on three islands as designated by the GOVC: San Tiago, Fogo, and Brava. More specifically - schools to be built in Sao Tiago island would serve a total of 5,700 students (72 classrooms utilized twice per day) in addition to classes using the proposed workshop facility. On Fogo island, students served would total about 1,400 (18 classrooms) plus class use of its proposed workshop. In Brava, the smallest and least populated of the archipelago, the total would be about 320 pupils served daily. An additional 2,000-3,000 students

will benefit from the new educational facilities on the three islands. These students, who are mostly studying on a part time or non-formal basis bring the total number of direct beneficiaries to close to 10,000. Moreover, the 200 trained teachers and 15 administrators, and 10,000 students receiving direct benefits under this project will in turn help improve the human resource base of 60 communities.

The workshops to be constructed and equipped under the projects will be the first such innovation for elementary education in Cape Verde. They are for use in grades five and six when students may opt for the "non-formal program". Here students will learn the fundamentals of carpentry and electricity. This is consistent with the new philosophy of formal education stressing manual labor as a valuable contribution to life, particularly to life in Cape Verde where there is a scarcity of such skilled workers. In several interviews with officials and the people of the communities, this need for handy-men was repeated.

Other than the immediate beneficiaries of the project, i.e. the pupils, the teachers, numbering 102, will be afforded adequate facilities for carrying out their duties. School designs are practical, including adequate space for 35-40 students; a canteen for the preparation of milk is provided; sanitary facilities (currently non-existent in elementary schools) will be installed; storage facilities for materials and supplies are included. The classrooms will act as a large multi-purpose area for community as well as student use. This last item is a major innovation in the educational system of Cape Verde, affording adults the opportunity to attend evening classes, run community affairs, and participate in the local government, thus better integrating the school into the life of the community. In addition, the "polivalente" or patio concept to be added later by the GOCV, is a step in the government's plan to invite the entire community to participate in the educational process. In the school, classes in literacy, handicrafts, health care, nutrition, fundamentals of government, and other courses of study will be pursued. There is, at present, a pilot literacy program being conducted in the city of Praia. Here some one hundred construction workers are learning how to read and write by teachers from a school nearby the construction site, during the customary afternoon lunch break while on the job. Unfortunately, the outcomes of the program were not available at this writing.

In addition to improved teaching facilities, some 15 married teachers with families or up to 60 single teachers will receive housing located near schools in rural areas. Presently, most

teachers find it necessary to share quarters with acquaintances or relatives in the area to which they have been assigned. Therefore, they have preferred to teach in the more urban areas. The GOCV, recognizing this problem, has placed priority on the construction of housing for teachers in these outlying areas. This project proposes to provide structures in Sao Tiago and in Brava, further assuring basic education to the rural inhabitants of Cape Verde.

Along with improved physical facilities, a critical component in the overall reconstruction of the educational system in Cape Verde is teacher training. Although the number of available teachers is not in short supply, only 20% of them can be considered as qualified. Most of the elementary school teachers have themselves an elementary-level education. Few have received proper training or preparation to teach.

The present government has initiated a virtuous campaign to upgrade the other 80 percent of instructors, requiring their participation in a series of workshops both in content areas and in methodology. Unfortunately, this has been a slow process since lack of qualified training personnel and the geographic dispersion of the islands impede greater progress. The upgrading process consists of a cursory, forty-day in-country program covering all subject areas in elementary education. To date, there remain about 150 (50%) of these teachers to be upgraded. It is a fact that the Minister of Education himself, along with other top administrators in the Ministry, is conducting workshops and classes for these teachers. It is hoped that by 1979 all the teaching staff will be sufficiently qualified to perform their duties. The obvious willingness and eagerness of both administrators and teachers in this program demonstrate their determination to succeed.

Technical assistance for this project is aimed specifically at the upgrading of about 190 of these teachers and instruction for 15 industrial arts teachers. Also participating will be 15 administrators assigned to teacher-training functions in the Ministry. Emphasis will be placed on the methodologies of teaching in the following areas as requested by M.E.C. officials:

- (1) health and sanitation
- (2) nutrition
- (3) music appreciation
- (4) arts and crafts
- (5) basic industrial arts
- (6) natural sciences
- (7) mathematics

The first two areas are aimed at teachers working in rural areas where health problems are severe and persistent, where lack of medical facilities and personnel require the local teacher to act as a "health agent" for the community. The GOCV requires all elementary teachers to train in the basics of health techniques, identification of diseases, administration of vaccines, guidance in nutrition, and medical record-keeping. Along with the proposed facilities providing a sanitary environment, the better-trained teacher will serve the local community more effectively.

The project would provide assistance to these teachers in how to teach simple health care to children - by doing, rather than by telling. The children will learn about foods and body growth, about personal hygiene, and about family health needs. In effect the children, too, become "agents of change".

Beside these areas, the teachers will learn how to teach the fundamentals of music. Fortunately, their students already have a sophisticated, though, untutored propensity for music. With instruments made out of local materials, the children will learn to develop this side of the Cape Verdean culture. In the area of arts and crafts, again, use will be made of local materials - stone, sisal, coconut...in handicrafts activities. This is another avenue for providing an economic as well as aesthetic base for Cape Verde's future.

The spread effect resulting from this technical assistance would be immediately realized in the sixty villages and towns surrounding the schools. The better-trained teacher will be of service to the immediate community. Their students will go on to secondary education better prepared to pursue their life's aspirations. The administrators participating in the workshops will be far better prepared to teach these methodologies to new teachers in their training institutions. The process would be on-going.

The social, cultural and political environment of Cape Verde will determine the products of her educational system. Until 1975, the system was stagnant and regressive, irresponsible to the needs of the people. With the realization of this school construction program along with improvements in the water supply and in the agricultural and industrial productivity efforts now in progress throughout the archipelago, the overall effects of educating the children and illiterate adults will contribute substantially to the desired development of the human resources in Cape Verde.

D. Economic Analysis

Investments made under this project to elementary education in Cape Verde will ultimately contribute to the improvement of the internal organization and administration of elementary education and, consequently enable the system to produce better, more productive students without any heavy increases in expenditures. Only long term assessment, however, can determine actual correlations between specific types of investments, recurrent costs, and general increases in the productivity of learned skills gained by the graduate. A lack of experience and data on comparable types of investments made in primary and non-formal education in Cape Verde make it difficult to measure accurately any probable economic benefit of this project to society.

However, particular investments of the project which focus on more immediate learning "outputs" or skills, such as nutrition, will permit more detailed analysis during the second year of the project. For example, obvious changes in curriculum supported by project investments will help eliminate irrelevant subject matter and enable the student to adapt his/her newly learned skills to specific work experiences required by economic development. Newly instructed students in industrial arts, mechanics and rural crafts will be able to satisfy community demands for related services. Students receiving training in health education will be able to help combat local health and sanitation problems that have resulted in malnutrition and disease.

Changes in curriculum and teaching methodology will also contribute to more efficient use and increased productivity of education equipment and materials. Teachers receiving better training, improved facilities and teaching materials under this project will be able to help students learn more within a given classroom hour. At the same time, increases in the teachers' own marginal utility or more effective instruction per classroom hour and per subject created from a better mix of educational equipment and instructional resources, will enable the GOCV to reduce its dependency on foreign technical assistance to education. Therefore, some teachers will also be eligible for promotion within the system which implies increased salaries and better professional motivation.

More immediate benefits from this project will accrue to the labor component working in the construction, furniture building and teacher training activities of the project. Though limited to a specific portion of the population, employment opportunities and income

generation originating under the project will be instrument to further expansion of employment and income (a multiplier effect created by more income and resulting increased demand for goods and services). For example, close to \$600,000 in income will be generated from construction employment under the project. In other words, 360 workers constructing 77 buildings will receive an average of \$1653 income as compared to the estimated national \$120 per capita income

	No. of Buildings		Crew	Days	Rate	
1 Classroom Schools	30	x	55	x 77	x 50	6,352,500
2 Classroom Schools	20	x	75	x 77	x 50	5,775,000
3 Classroom Schools	10	x	95	x 77	x 50	3,657,500
Teacher's Quarters	15	x	55	x 77	x 50	3,176,250
Workshops	2	x	80	x 77	x 50	616,000
						Escudos 19,577,250

@ 32.9 Escudos = \$1.00 US = \$595,053

PART IV. IMPLEMENTATION ARRANGEMENTS

A. Administrative Arrangements

1. Recipient's Arrangements

The MOP will carry out the final design and supervision of all construction projects. Empresa Estatal das Construcoes MOP will contract with (EMEC) for the actual construction work on the island of Sao Tiago and for the furnishing of the school furniture and the mill work. MEC will procure the actual school sites and have them surveyed and the site and foundation plans made for each site. The GOCV will have the acquisition and the designs for the first six sites completed on or before the project begins on August 1, 1978.

The GOCV will make arrangements for housing the members of the Technical Assistance Team members but the actual payment for the housing shall be made by the members of the team.

The GOCV will make all arrangements to acquire the materials that will be needed before the arrival of the U.S. procured materials.

These materials will be furnished by the GOCV on a reimbursable basis for materials procured in the U.S. as soon as materials arrive from the U.S. The G.O.C.V. will make arrangements to have all necessary materials, supplies, equipment and labor available before the actual day of usage.

2. AID's Arrangements

AID will expedite the procurement and shipment of U.S. procured materials to arrive in a timely manner as shown in the Implementation Bar Graph and the Project Performance Tracking Chart (Annex G).

AID will furnish the services of one well experienced Portuguese speaking engineer for a period of three months to work in close liaison with the executing agency's engineers to assist in the orderly organization and prosecution of the project.

AID shall make desposits into a special fund set up in the Ministry of Finance of the GOCV for payments for labor and other local expenses against vouchers and payroll sheets.

AID shall pay for any necessary in-country travel as requested by and arranged by the GOCV.

The individual technicians will make all payments for housing that has been arranged by the GOCV.

3. Implementation Plan

1. Schedule

The basic elements of the project were developed and approved in conjunction with officials of the Ministry of Education and the Ministry of International Cooperation. In addition, representatives of the Ministry of Public Works were involved in planning construction phases of the project.

Two graphic documents were developed to outline all major steps from project-approval to completion. These include: (1) A Planned Performance Tracking Network Chart ; and (2) and Implementation Bar Graph (Annex G). In addition, "Implementation Schedules" for the construction and education technical assistance phases outline specific relevant activities for both phases.

Critical events that will serve as indicators of progress of the implementation are outlined as follows:

<u>Event</u>	<u>Responsibility</u>	<u>Date</u>
Complete Project Paper	IQC/AID/GOCV	March
1. Project Authorization	AID/W <u>1978</u>	April
2. Sign Project Agreement	CDO/GOCV	May
3. Prepare PIO/T	CDO	May
4. Start Site Acquisition	GOCV (MEC)	June
5. Survey and make Topo. maps of school sites	GOCV (MOP)	July
6. Arrange Labor	GOCV (EMEC)	July
7. Sign Contract (US institution)	AID/W	August
8. Prepare PIO/C	Contractor	September
9. U.S. Engineer arrives	U.S. Contractor	September
10. Local materials delivered	GOCV (EMEC)	
- to initial sites		September
- to remaining sites		January (79)
11. Deliver local equipment to sites	GOCV (EMEC)	September
12. Construction begins	GOCV (EMEC)	September
13. First building completed	GOCV (EMEC)	February (79)
14. Evaluation	AID/Contractor/GOCV	June (79)

Implementation Schedule - 1978

<u>Activity</u>	<u>Agency</u>	<u>Date of Initiation</u>	<u>Duration</u>
1. Search T.A.	A.I.D.	April	4 weeks
2. Select T.A.	A.I.D.	April	6 weeks
3. Arrange Training Program C.V.	Mission/M.E.C.	May	14 weeks
4. T.A. Orientation/ Planning -Arrange for C.V.	M.E.C.	June	10 weeks
5. T.A. Orientation	A.I.D.	July	3 weeks
6. Arrange T.A. Travel - C.V.	Contractor	July	6 weeks
7. T.A. Planning/ Program Devel.	T.A./MEC	July	4 weeks
8. Final Review/ Planning Training Program	Mission/ T.A./M.E.C.	August	3 days

<u>Activity</u>	<u>Agency</u>	<u>Date of Initiation</u>	<u>Duration</u>
9. T.A. Meet MEC Administrators	T.A./MEC Counterpart	August	3 days
10. Training Program Developed	T.A./MEC	August	3 weeks
11. Training Program	T.A./MEC	September	4 weeks
12. Develop 1979 Program	MEC/Mission	September	8 weeks
13. Evaluation	T.A./MEC	October	5 days
14. Field Follow-Up	T.A.	October	12 days
15. Finalize Program	T.A./MEC	October	2 days
16. Program Evaluation		February	2 weeks

Second year (1979) program will follow approximately the same format developed for the above 1978 program.

Implementation Schedule - 1979

<u>Activity</u>	<u>Agency</u>	<u>Date of Initiation</u>	<u>Duration</u>
1. 1978 Program Evaluation	A.I.D./Mission	February	2 weeks
2. Search for and identify T.A. contractor	A.I.D./W	February	8 weeks
3. Select T.A.	A.I.D./M.E.C.	April	2 weeks
4. Arrange for training facilities, administrators and teacher participants	M.E.C. counterpart	May	16 weeks

<u>Activity</u>	<u>Agency</u>	<u>Date of Initiation</u>	<u>Duration</u>
5. T.A. orientation and team planning session in Wash,D.C.	Contract/ A.I.D. T.A. team	June	12 days
6. Arrange T.A. travel to C.V.	Contract	June	10 weeks
7. In-country orientation and planning period	Contractor/ M.E.C. counterpart	August	18 days
8. T.A. training	Contractor	September	26 days
9. Participant evaluation	M.E.C. counterpart/T.A. team coordinator	September	1 day
10. Field Follow-Up	Contractor	October	12 days
- 1980 -			
11. Evaluation of project	A.I.D./M.E.C./ Contractor	February	1 week

5 Teacher Trainers Schedule - 1978

July Orientation-planning session in U.S.
 Aug Orientation and planning in Cape Verde
 Sept In-country training for teachers
 Oct Evaluation and field follow-up in Cape Verde

4 Teacher Trainers Schedule - 1979

June Orientation and planning session in U.S.
 Aug Orientation and planning in Cape Verde
 Sept In-country training for teachers and administrators
 Oct Evaluation and field follow-up in Cape Verde

Team Leader Schedule - 1978

June Staff selection and pre-planning
July Orientation-planning session in U.S.
July Follow-up; ordering supplies
Aug Orientation and planning in Cape Verde
Sept In-country training session
Oct Evaluation and field follow-up in Cape Verde

Team Leader Schedule - 1979

May Staff selection and pre-planning
June Orientation - planning session in U.S.
Aug Orientation planning in Cape Verde
Sept In-cOuntry training session
Oct Evaluation and field follow-up in Cape Verde

2. Logistical Support

The successful completion of this education project will depend on the coordination and responsiveness of GOCV and AID logistical support. For the in-country training program this means viable transport arrangements to get trainees and trainers to their appointed destinations and arranging for a receptive environment for learning.

For the construction and instruction activities, logistical arrangements must focus on proper procurement, storage and delivery of supplies. Given the present situation, the GOCV and AID have the capacity to fulfill logistical needs. The additional workload caused by the project, does not appear to put a strain on the two. Careful attention, however, will need to be given to this area and appropriate changes suggested as experience dictates.

3. Unresolved Issues

Day-to-day decisions related to construction will be the responsibility of MOP and designated personnel. Decisions concerning educational technical assistance will be the responsibility of the contracted T.A. team coordinator and contract agency. The AID Mission project manager will be responsible for the annotation and approval of all U.S. inputs.

In the event problems of implementation cannot be resolved through informal collaboration of parties involved, special meetings will be held with appropriate AID staff and GOCV officials.

4. Local Involvement

From the outset principal officials from the Ministry of Education and Ministry of Public Works have been involved in developing the overall project. It is anticipated that day-to-day operations will also include representatives of the two ministries plus those from the E.M.E.C. In addition, participants in education training sessions will be asked to provide informal feedback during the training period and a formal evaluation will be obtained from the participants at the end of the training period. MEC officials will also be involved in selection of technical assistants, identification of participants and in final planning stages of the training programs.

5. Staffing

a. Construction Engineer

The engineer who will be working closely with the GOCV technical supervision team should have the following qualifications:

- (1) Be able to speak Portuguese.
- (2) Have depth of background in labor-intensive construction procedures in developing countries.
- (3) Have the ability to work well with other personnel, both local and otherwise.

The engineer will be required to:

- (1) Work closely with the GOCV supervisory staff in organizing the labor and equipment for execution of the work.
- (2) Assist the GOCV staff in cash, time and quality control of the project.
- (3) Assist the GOCV staff to set up an effective cost control system to obtain unit cost information.
- (4) At the end of his three months tour, the engineer will submit a report of his findings with recommendations for any changes to be made.

The engineer shall arrive in the Cape Verde Islands in September, 1978. He will work with the GOCV for a period of three months. He will be required to return for one week in June 1979 for evaluation purposes.

b. Education

- (1) Participate in a two-week orientation and planning session in the United States.
- (2) Order and arrange for instructional materials to be used in training sessions in Cape Verde.

- (3) Participate in the planning sessions in Cape Verde.
- (4) Provide instruction for Cape Verde educators in the methodologies of a teaching speciality and education administration. (In 1978 there will be 5 trainers - a health sector, a rural crafts teacher, music teacher, industrial arts teacher and a nutritionalist. In 1979 4 trainers will be required - a math teacher, a natural science teacher, a physical education teacher and a school administration instructor).
- (5) Assist in a three-day orientation and instruction session for school administrators in Cape Verde.
- (6) Plan and implement an evaluation of the training program.
- (7) Conduct visits to schools of selected participants to further evaluate the impact of the training session and to provide additional training as needed.

Team Leader

- (1) Assist in the selection of team members.
- (2) Plan and coordinate the team orientation and planning session in the United States and Cape Verde.
- (3) Coordinate team activities with Cape Verde counterpart and oversee logistics of room and board, training sessions, travel, etc., of team members.
- (4) Coordinate evaluation activities including:
 - (a) participant evaluations of training session; and
 - (b) team evaluation of program.
- (5) Prepare reports as required including an evaluation report and recommendations for subsequent program year.

C. Evaluation Plan

1. Construction

Because of the relatively short time since independence the Cape Verde is still undergoing changes resulting in stabilization of the social, and economic structure. Therefore, estimates for costs and production norms although based on the best data available should be checked in the field during actual construction. In order to achieve this purpose and to provide guidance for improved performance the responsibility should be shared by the Contractor, Mission and when necessary, AFR/REDSO/WA.

a. The Contractor shall do the following:

- (1) Prepare a Project Performance Network showing critical dates for performance and financial expenditure schedules.
- (2) Provide the services of a Portuguese speaking engineer for the initial period of three months to assist the GOCV in the initiation of the construction and for the organization of the activities. The engineer shall have good background experience in procedures in labor-intensive construction practices in developing nations.
- (3) At the end of the three months period and in June 1979, the engineer shall submit an evaluation of the project in terms of the capabilities of the GOCV to maintain the scheduled construction program. He shall also submit recommendation for changes needed, if any, to complete the project as scheduled.

b. The Mission shall be responsible for making on-site inspections of construction quality and progress at least quarterly with observations forwarded to REDSO/WA and the contractor. At the end of each year the Mission shall prepare a summary evaluation of the progress according to a format to be prepared by the contractor.

c. AID Mission will also be responsible to keep current on the following:

- (1) Information and documents produced by the Contractor.
- (2) Quarterly and annual activity reports by the Mission.
- (3) All contractor's evaluation reports.

If the AID officer feels that any special evaluations are in order he may call for a special evaluation. The AID Officer shall write an annual evaluation report on project activities including an evaluation of the contractor's performance.

Within six months of the termination of the project the Program Officer shall arrange for an independent study and evaluation of the project to determine if a recommendation should be made to continue with a second phase of the activity. He shall also evaluate the performance of the contractor at this time.

2. Education

Evaluation is basic to the training program. Assessment procedures that are used should not only produce useful information for the education phase, but should also serve as a model for those being trained. Factors to be considered and a schedule of evaluation activities are outlined below:

a. Evaluation Factors

- (1) Adequacy of planning procedures and planning outcomes.
- (2) Appropriateness of: (a) content; (b) materials; and (c) instructional methods used in training sessions.
- (3) Quality of instruction.
- (4) Knowledge and skills acquired by trainees.
- (5) Ability of trainees to apply knowledge and skills learned.
- (6) Adaptability of team members to local conditions.
- (7) Leadership.

b. Schedule of Evaluation Activities

- (1) Develop specific criteria by which technical assistance will be measured.
- (2) Evaluate team pre-planning with M.E.C. counterpart prior to training period.
- (3) Evaluate team pre-planning with school administrators (1978 only).

- (4) Plan with M.E.C. counterpart, the evaluation of the training session by the participants.
- (5) Team to assess the trainees as to their knowledge, skill and ability to make applications in the classroom.
- (6) Team self-evaluation during and at the end of in-country activities.
- (7) Solicit feedback from M.E.C. counterpart.
- (8) A.I.D. Mission follow-up evaluation.

D. Conditions Precedent to Disbursement

As conditions precedent to disbursement under this project, the Government of Cape Verde will submit, in form and substance satisfactory to AID, the following items:

- (1) A plan for assigning specific personnel, equipment, and office space necessary for project implementation as indicated on page 42 of the PP.
- (2) A plan for procurement of all project commodities.
- (3) A plan for maintenance of all schools and related facilities to be supplied under the project.
- (4) An accounting system for financing all project activities.

ANNEX A

Logical Framework

LOGICAL FRAMEWORK MATRIX - PROP WORKSHEET

Narrative Summary	Indicators	Means of Verification	Assumptions
<p>A.1. Goal Improve the quality of life through an effective program of elementary education</p>	<p>A.2. Measurement of Goal Achievement Improved conditions of health and sanitation Increased worker capacity and economic capability</p>	<p>Reports of: 1. G.O.C.V. 2. A.I.D. engineer 3. Education technical assistant teams 4. Project evaluations</p>	<p>A.2. (as related to goal) 1. The G.O.C.V. will maintain existing education priorities 2. The G.O.C.V. will provide basic financial support as scheduled 3. Population growth and distribution will follow current trend.</p>
<p>B.1. Purpose Construct and equip needed school facilities. Upgrade the professional skills of teachers and school administrators.</p>	<p>B.2. End of Project Indicators 1. Replace 10% of the sub-standard rented classrooms 2. Provide teaching housing in 15 rural or critical living areas 3. Establish ability of G.O.C.V. to plan, construct and equip appropriate school facilities 4. Improved instruction in basic elementary subjects 5. Increased supervisory capacity of school administrators 6. Industrial arts specialists trained in teaching methodology</p>	<p>Baseline information to measure progress will be developed during project implementation</p>	<p>B.2. (as related to purpose)</p>
<p>C.1. Output School construction: 1. Construction of 60 small schools 2. Build 15 teacher housing units in rural and critical housing areas 3. Provide 2 industrial arts workshops Education Training Program: 4. Up-grade teachers at lowest level 5. Train industrial arts specialists in teaching methodology 6. Improve skills of teachers in critical areas 7. In-service administrators in supervisory skills</p>	<p>C.2. Output Indicators School construction: a. 10 one-room schools b. 20 two-room schools c. 10 three-room schools d. 15 teachers houses e. 2 industrial arts workshops f. 100 personnel g. 100 teachers trained in methods of teaching h. 10 industrial arts specialists trained in teaching methodology i. 75 teachers provided in-service training in critical areas j. 15 administrators trained in supervisory techniques</p>	<p>School construction As in A.2 above</p> <p>Training a. G.O.C.V. end-of-training evaluations b. Assessment of instructional applications via classroom follow-up (1978) c. AID Mission assessment</p> <p>As in A.2 above</p>	<p>C.2 (as related to output) 1. The training methods meet the needs of participant teachers and administrators 2. The trainees will complete training as planned 3. Construction completed as planned</p>
<p>D.1. Budget 1. Construction materials, labor costs and building equipment 2. Technical assistance in engineering and education 3. Instructional materials, equipment supplies 4. Travel & per diem/participants G.O.C.V. 5. Building sites 6. Final design and siting 7. Rock, sand & water delivered 8. Construction management 9. Logistic support/technical assistance (housing, travel, work facilities)</p>	<p>D.2. Budget Schedule Budget AID T.A. Contracts Training Cost Equipment & Commodities Labor Agency G.O.C.V. Personnel Materials</p>	<p>1978 1979 1980</p>	<p>D.2 (as related to output) 1. AID representative will provide regular monitoring services 2. The services of qualified technical assistants can be secured 3. The materials and equipment can be obtained and delivered on a timely basis 4. That the G.O.C.V. will provide adequate administrative and logistical support 5. H.E.C. will assist in in-country orientation and planning</p>

-continued-

10

B.1. Purpose

B.2. End of Project Status

B.3. (as related to purpose)

C.1. Outputs

C.2. Output Indicators

C.3. (as related to outputs)

D.1. Inputs

D.2. Budget/Schedule

D.3. (as related to inputs)

Schedule

	1978	1979	1980
1. Construction	8 classrms.	40 classrms.	52 classrms.
	1 tchr. unit.	6 tchr. unit	8 tchr. unit
	1 shop	1 shop	0 shop
2. Engin. Tech. Asst.	1/13 wks.	0	0
3. Educ. Tech. Assta.	6/12 wks.	5/9 wks.	0
4. Travel & per diem/ participants	110	90	0
5. Instructional materials/partic.	110	90	0

-continued-

LOGICAL FRAMEWORK MATRIX - PROP WORKSHEET - Pg. -3-

B.1. Purpose

B.2. End of Project Status

B.3. (as related to purpose)

C.1. Outputs

C.2. Output Indicators

C.3. (as related to outputs)

D.1. Inputs

D.2. Budget/Schedule

D.3. (as related to inputs)

G.O.C.V. As per AID schedule above
 6. Sites for schools & tchr. houses above
 7. Final building design & siting
 8. Construction materials: rock, sand, water delivered;
 9. Fabricate millwork & furniture (AID Grant to fund)
 10. Construction management & supervision
 11. Logistic support/eng. technicians
 12. Logistic support/educ. technicians

ANNEX B

611(a) Certification

Department of State

TELEGRAM

3393

PAGE 01

DAKAR 03777 192127Z

ACTION AID-31

AFR
Key S. L...

INFO OCT-01 AF-10 SSO-00 /042 W

-----048006 192131Z /64

J P 191605Z MAY 78

FM AMEMBASSY DAKAR

TO SECSTATE WASHDC IMMEDIATE 4195

INFO AMEMBASSY ABIDJAN PRIORITY

AMEMBASSY BISSAU

AMEMBASSY PRAIA POUCH

611(a)
Info

UNCLAS DAKAR 3777

AIDAC

E.O. 11652: N/A

SUBJECT: PRIMARY NON-FORMAL EDUCATION PROJECT, CAPE VERDE

REF: TELECON MAHER/MEARES 5/18

1. POUCHED 5/18 TO MEARES COPY LETTER OF GOCY REQUESTING SUBJECT PROJECT.
2. CDO/BISSAU BY CHANCE MET TODAY WITH BARNETT REDSO ENGINEER WHO CONTINUES RECOMMEND INCREASE OF PROJECT 30 PERCENT AS HAS BEEN DONE BY AID/W. AS A RESULT THIS MEETING CDO/BISSAU ASSURED BARNETT THAT INCREASE HAD BEEN INCLUDED IN PROJECT BY AID/W AND HE THEREFORE RECOMMENDS 611A BE GRANTED AT INCREASED LEVEL. CDO/BISSAU CONCURS IN ISSUANCE OF 611A CERTIFICATION FOR PROJECT.
3. ASSUME THESE ARE ONLY TWO OBSTACLES DELAYING PROJECT AND WE WILL RECEIVE PROJECT AGREEMENT FROM AID/W NEAR FUTURE.
4. ADVISE.
COHEN

UNCLASSIFIED

ANNEX C

611(e) Certification

UNCLASSIFIED
Department of State

INCOMING
TELEGRAM

2988

PAGE 01 BISSAU 00490 290840Z
ACTION AID-31

INFO OCT-01 /032 W

-----138772 300843Z /23

R 280800Z APR 78
FM AMEMBASSY BISSAU
TO SECSTATE WASHDC 1112
INFO AMEMBASSY DAKAR
AMEMBASSY PRAIA

UNCLAS BISSAU 0490

AIDAC

E. O: 11852: N/A

TAGS:

SUBJ: CAPE VERDE - PRIMARY AND NON-FORMAL EDUCATION 855-0008
CERTIFICATE PURSUANT TO SECTION 611E OF THE FOREIGN
ASSISTANCE ACT OF 1961, AS AMENDED

1. I, JAMES O'D MAHER, USAID REPRESENTATIVE IN CAPE VERDE,
DO HEREBY CERTIFY THAT IN MY JUDGMENT THE REPUBLIC OF CAPE
VERDE WILL HAVE THE FINANCIAL AND HUMAN RESOURCES CAPABILITIES
TO IMPLEMENT, MAINTAIN AND UTILIZE THE SUBJECT CAPITAL
ASSISTANCE PROJECT. THIS CERTIFICATION TAKES INTO CONSIDERA-
TION THE REQUIREMENTS PLACED ON THE REPUBLIC OF CAPE VERDE
TO MAINTAIN AND UTILIZE OTHER PROJECTS PREVIOUSLY FINANCED
OR ASSISTED BY THE UNITED STATES.

THIS JUDGMENT IS BASED ON THE HIGH PRIORITY THE GOCV
HAS ASSIGNED TO EDUCATIONAL DEVELOPMENT IN GENERAL, AND THIS
PROJECT IN PARTICULAR, AND THE GOCV'S PAST
PERFORMANCE IN MAINTAINING AND UTILIZING SUCCESSFULLY
ASSISTANCE PROVIDED UNDER AID PROJECTS.

(SIGNED)
JAMES O'D MAHER

2. POUCHING COPIES ABOVE CERTIFICATION. MARKS

611(e)

ANNEX D

Letter Requesting Assistance

0048



Fraia, 29-Março-1978

Care Senhor,

O sector da Educação é um dos que recebem maior atenção do Governo de Cabo Verde. Particularmente a educação primária tem constituído uma constante preocupação para os responsáveis caboverdianos, já que aí repousa a base de todo o sistema educacional.

Como sabe a maior parte da população do país é extremamente jovem e o ritmo de crescimento da camada em idade escolar é bastante elevado. A tarefa exige pois grandes esforços, tendo o Governo de fazer face a várias dificuldades ligadas principalmente ao reduzido número de salas de aula disponíveis e à insuficiente preparação dos professores.

É nesse contexto que a pedido do Governo esteve recentemente em Cabo Verde uma equipa da AID a fim de estudar connosco a assistência que o Estados Unidos da América podem prestar neste importante domínio.

Dada as dificuldades económicas com que se debate o país, permitimo-nos de solicitar os seus bons officios no sentido de pôr à consideração do Governo dos Estados Unidos da América o financiamento das acções previstas no quadro do projecto.

Queira aceitar os nossos melhores cumprimentos.

BEST AVAILABLE DOCUMENT

Sr. JAMES O'D MAHER
COUNTRY DEVELOPMENT OFFICER

USAID

AMERICAN EMBASSY - B I S S A U

Adão Zecha

/Director Geral/

Rough Translation

Dear Sir:

The education sector is one of the sectors requiring major attention of the GOCV. Primary education particularly has been one of the constant preoccupations of all responsible Cape Verdeans because it is the base for the entire educational system.

As you know the majority of the population of the country is extremely young and the rate of increase of the school aged population is very high. This requires great efforts especially since the government will have to face various difficulties involving, principally the reduced number of available school rooms and the inadequate preparation of the professors.

It was in this context that, at the request of the Government, a team from A.I.D. was recently in Cape Verde to study with us the assistance which the U.S.A. could provide to this important sector.

Given the economic difficulties in the country permit us to solicit your good offices to assure consideration of the Government of U.S.A. for the financing required for the activities set out in the project.

Adao Rocha

ANNEX E

Environmental Impact Identification and Evaluation

INITIAL ENVIRONMENTAL EXAMINATION

Project Country: Cape Verde

Project Title: Primary And Non Formal Education

Funding: FY(s) 78-81 \$ 3,000,000

Period of Project: Four years, beginning in FY-78 and ending in FY-81.

IEE Prepared by: Richard Ray Solem, AFR/DR/CAWARAP

Environmental Action Recommended: Negative Determination

Concurrence: RT
Graham Thompson, AFR/DR

Date: 5/15/78

Assistant Administrator Decision:

APPROVED RT
DISAPPROVED _____
DATE 6/15/78

INITIAL ENVIRONMENTAL EXAMINATION

I. EXAMINATION OF NATURE, SCOPE, AND MAGNITUDE OF ENVIRONMENTAL IMPACTS

A. Description of Project.

The project consists of the construction of 60 primary schools (100 classrooms) and 15 teacher's houses with an estimated cost of \$2,500,000 on three islands of the Cape Verde Republic.

It will also provide technical assistance in the construction of the facilities and a two-stage teacher's training program. The project will provide a vehicle through which G.O.C.V. can improve primary education thus contributing to the overall development of Cape Verde. Working through local agencies the project will provide improved educational facilities to replace currently inadequate and overcrowded, rented and government-owned facilities.

Implementation will be carried out in cooperation with several government agencies, the construction sub-project with MOP/EMEC and the teachers training sub-project with MEC.

To provide necessary technical support, services contracts will be signed with a US civil engineer to assist in the initial phase of the construction sub-project and with a US organization having specific competence in teacher's training and primary education in Portuguese-speaking Africa. The contractors will act in various ways to provide technical assistance to local counterparts and assist in the periodic evaluations of the project.

B. Identification and Evaluation of Environmental Impacts

The project will not have a significant effect on the environment, especially on the technical assistance component.

However, there is reason to assume that most of the impact - if not entirely - will be positive in socio-economic terms. A significant part of the project, \$2,000,000, will consist of schools and teacher housing construction and equipment. The impacts considered most relevant are:

1. Educational facilities

- a. Minimal physical impact on land use. Most of the sites considered are level and only require small earth movement for wall foundations, cisterns and dry latrines. All sites have been identified and viewed by the Project Team.
- b. The health impact will be most positive since the project will provide sanitary facilities (e.g., dry latrines, lavatories) which are currently absent. Furthermore, the project will provide adequate and hygienic food storage and kitchens to prepare meals (currently powdered milk in paper bags is kept on the floor). Teachers will be better prepared to teach nutrition and hygiene.
- c. The provision of adequate water cisterns to capture storm water and/or water pumped from the ground will offer new opportunities for the children's hygiene as well as to cultivate small vegetable gardens on the school grounds.
- d. The orientation and fenestration of classrooms and provisions for cross ventilation will offer a better quality of space and enhance health conditions (even lighting, ventilation).

2. Technical Assistance

Of the remaining funds, the relatively small portion of \$460,000, will be used for technical assistance in the construction sub-project (\$40,000), the balance will be used to conduct two teacher's training courses (1978 and 1979) in the areas of physical education, health and sanitation, nutrition, rural arts and crafts, industrial arts, indigenous music, mathematics, and natural sciences. The above programs will concentrate in training and will be confined to workshops and seminars in one or two urban centers. It is unlikely that any significant impact will result aside from the beneficial effects on the community resulting from better-trained teachers that would act as community extension agents in the training areas cited.

II. RECOMMENDATION FOR ENVIRONMENTAL ACTION

As indicated above, the project is not expected to have a significant impact on the environment. Therefore, a Negative Determination for the project is recommended.

IMPACT IDENTIFICATION AND EVALUATION FORM

<u>Impact Areas and Sub-areas 1/</u>	<u>Impact Identification and Evaluation 2/</u>
A. LAND USE	
1. Changing the character of the land through:	
a. Increasing the population -----	L
b. Extracting natural resources -----	L
c. Land clearing -----	L
d. Changing soil character -----	N
2. Altering natural defenses -----	N
3. Foreclosing important uses -----	N
4. Jeopardizing man or his works -----	N
5. Other factors	
_____	N
_____	_____
B. WATER QUALITY	
1. Physical state of water -----	N
2. Chemical and biological states -----	N
3. Ecological balance -----	N
4. Other factors	
_____	N
_____	_____

1/ See Explanatory Notes for this form.

2/ Use the following symbols: N - No environmental impact
 L - Little environmental impact
 M - Moderate environmental impact
 H - High environmental impact
 U - Unknown environmental impact

August 1976

IMPACT IDENTIFICATION AND EVALUATION FORM

C. ATMOSPHERIC

- 1. Air quality ----- N
- 2. Air pollution ----- N
- 3. Noise pollution ----- N
- 4. Other factors
- N
-

D. NATURAL RESOURCES

- 1. Diversion, altered use of water ----- L
- 2. Irreversible, inefficient commitments ----- N
- 3. Other factors
- N
-

E. CULTURAL

- 1. Altering physical symbols ----- N
- 2. Dilution of cultural traditions ----- N
- 3. Other factors
- N
-

F. SOCIOECONOMIC

- 1. Changes in economic/employment patterns ----- M
- 2. Changes in population ----- L
- 3. Changes in cultural patterns ----- L
- 4. Other factors
- N
-

IMPACT IDENTIFICATION AND EVALUATION FORM

G. HEALTH

- 1. Changing a natural environment ----- N
- 2. Eliminating an ecosystem element ----- N
- 3. Other factors
- POSITIVE HEALTH IMPACT (Health
education, better sanitary facilities and
improved living and teaching conditions) ----- L

H. GENERAL

- 1. International impacts ----- N
- 2. Controversial impacts ----- N
- 3. Larger program impacts ----- N
- 4. Other factors:
- _____ N
- _____

1. OTHER POSSIBLE IMPACTS (not listed above)

- _____
- _____
- _____

ANNEX F

Statutory Checklists

AID HANDBOOK 3, App 5C	Part I	TRANS. MEMO NO. 3:19	EFFECTIVE DATE February 15, 1978	PAGE NO. 5C(1)-1
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5C(1) - COUNTRY CHECKLIST

Listed below are, first, statutory criteria applicable generally to FAA funds, and then criteria applicable to individual fund sources: Development Assistance and Security Supporting Assistance funds.

A. GENERAL CRITERIA FOR COUNTRY

1. FAA Sec. 116. Can it be demonstrated that contemplated assistance will directly benefit the needy? If not, has the Department of State determined that this government has engaged in consistent pattern of gross violations of internationally recognized human rights? Yes

2. FAA Sec. 481. Has it been determined that the government of recipient country has failed to take adequate steps to prevent narcotics drugs and other controlled substances (as defined by the Comprehensive Drug Abuse Prevention and Control Act of 1970) produced or processed, in whole or in part, in such country, or transported through such country, from being sold illegally within the jurisdiction of such country to U.S. Government personnel or their dependents, or from entering the U.S. unlawfully? No

3. FAA Sec. 620(a). Does recipient country furnish assistance to Cuba or fail to take appropriate steps to prevent ships or aircraft under its flag from carrying cargoes to or from Cuba? No

4. FAA Sec. 620(b). If assistance is to a government, has the Secretary of State determined that it is not controlled by the international Communist movement? Yes

5. FAA Sec. 620(c). If assistance is to government, is the government liable as debtor or unconditional guarantor on any debt to a U.S. citizen for goods or services furnished or ordered where (a) such citizen has exhausted available legal remedies and (b) debt is not denied or contested by such government? No

6. FAA Sec. 620(e) (1). If assistance is to a government, has it (including government agencies or subdivisions) taken any action which has the effect of nationalizing, expropriating, or otherwise seizing ownership or control of property of U.S. citizens or entities beneficially owned by them without taking steps to discharge its obligations toward such citizens or entities? No

PAGE NO.	EFFECTIVE DATE	TRANS. MEMO NO.	AID HANDBOOK	
5C(1)-2	February 15, 1978	3:19	3, App. 5C	

- A
7. FAA Sec. 620(f); Aon. Sec. 108. Is recipient country a Communist country? Will assistance be provided to the Democratic Republic of Vietnam (North Vietnam), South Vietnam, Cambodia or Laos? No
 8. FAA Sec. 620(i). Is recipient country in any way involved in (a) subversion of, or military aggression against, the United States or any country receiving U.S. assistance, or (b) the planning of such subversion or aggression? No
 9. FAA Sec. 620(j). Has the country permitted, or failed to take adequate measures to prevent, the damage or destruction, by mob action, of U.S. property? N/A
 10. FAA Sec. 620(l). If the country has failed to institute the investment guaranty program for the specific risks of expropriation, inconvertibility or confiscation, has the AID Administrator within the past year considered denying assistance to such government for this reason? N/A
 11. FAA Sec. 620(o); Fishermen's Protective Act, Sec. 3. If country has seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters,
 - a. has any deduction required by Fishermen's Protective Act been made? No
 - b. has complete denial of assistance been considered by AID Administrator? No
 12. FAA Sec. 620(a); App. Sec. 504. (a) Is the government of the recipient country in default on interest or principal of any AID loan to the country? (b) Is country in default exceeding one year on interest or principal on U.S. loan under program for which App. Act appropriates funds, unless debt was earlier disputed, or appropriate steps taken to cure default? N/A
 - *13. FAA Sec. 620(s). "If contemplated assistance is development loan (including Alliance loan) or security supporting assistance, has the Administrator taken into account the percentage of the country's budget which is for military expenditures, the amount of foreign exchange spent on military equipment and the amount spent for the purchase of sophisticated weapons systems?" (An affirmative answer may refer to the record of the taking into account, e.g.: "Yes as reported in annual report on implementation of Sec. 620(s)." This report is prepared at the time of approval by the Administrator of the Operational Year Budget.*

Less than 7% of the National Budget is appropriated to National Defense.

AID HANDBOOK 3, App 5C	TRANS. MEMO NO 3:19	EFFECTIVE DATE February 15, 1978	PAGE NO. 5C(1)-3
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A13

* Upward changes in the Sec. 620(s) factors occurring in the course of the year, of sufficient significance to indicate that an affirmative answer might need review should still be reported, but the statutory checklist will not normally be the preferred vehicle to do so.) *

N/A

14. FAA Sec. 620(t). Has the country severed diplomatic relations with the United States? If so, have they been resumed and have new bilateral assistance agreements been negotiated and entered into since such resumption?

No.

15. FAA Sec. 620(u). What is the payment status of the country's U.N. obligations? If the country is in arrears, were such arrearages taken into account by the AID Administrator in determining the current AID Operational Year Budget?

The United Nations has placed Cape Verde on its LDC list.

16. FAA Sec. 520A. Has the country granted sanctuary from prosecution to any individual or group which has committed an act of international terrorism?

No

17. FAA Sec. 566. Does the country object, on basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. there to carry out economic development program under FAA?

No

18. FAA Sec. 669. Has the country delivered or received nuclear reprocessing or enrichment equipment, materials or technology, without specified arrangements on safeguards, etc.?

No

19. FAA Sec. 901. Has the country denied its citizens the right or opportunity to emigrate?

No

8. FUNDING CRITERIA FOR COUNTRY

1. Development Assistance Country Criteria

a. FAA Sec. 102(c), (d). Have criteria been established, and taken into account, to assess commitment and progress of country in effectively involving the poor in development, on such indexes as: (1) small-farm labor intensive agriculture, (2) reduced infant mortality, (3) population growth, (4) equality of income distribution, and (5) unemployment.

Most of the funds made available for development projects are used to generate employment for the majority of the people.

b. FAA Sec. 201(b)(5), (7) & (8); Sec. 208; 211(a)(4), (7). Describe extent to which country is:

(1) Making appropriate efforts to increase food production and improve means for food storage and distribution.

A number of projects concentrating on water resource management and soil conservation employ a large portion of the population to combat

* Revised

PAGE NO.	EFFECTIVE DATE	TRANS. MEMO NO.	AID HANDBOOK 3, App. 5C
5C(1)-4	February 15, 1978	3:19	

81b

- (2) Creating a favorable climate for foreign and domestic private enterprise and investment.
- (3) Increasing the public's role in the developmental process.
- (4) (a) Allocating available budgetary resources to development.

(b) Diverting such resources for unnecessary military expenditure and intervention in affairs of other free and independent nations.
- (5) Making economic, social, and political reforms such as tax collection improvements and changes in land tenure arrangements, and making progress toward respect for the rule of law, freedom of expression and of the press, and recognizing the importance of individual freedom, initiative, and private enterprise.
- (6) Otherwise responding to the vital economic, political, and social concerns of its people, and demonstrating a clear determination to take effective self-help measures.

c. FAA Sec. 201(b), 211(a). Is the country among the 20 countries in which development assistance loans may be made in this fiscal year, or among the 40 in which development assistance grants (other than for self-help projects) may be made?

d. FAA Sec. 115. Will country be furnished, in same fiscal year, either security supporting assistance, or Middle East peace funds? If so, is assistance for population programs, humanitarian aid through international organizations, or regional programs?

2. Security Supporting Assistance Country Criteria

a. FAA Sec. 502B. Has the country engaged in a consistent pattern of gross violations of internationally recognized human rights? Is program in accordance with policy of this Section?

b. FAA Sec. 531. Is the Assistance to be furnished to a friendly country, organization, or body eligible to receive assistance?

c. FAA Sec. 609. If commodities are to be granted so that sale proceeds will accrue to the recipient country, have Special Account (counterpart) arrangements been made?

unemployment and prepare land for domestic food production.

Cape Verde maintains a favorable climate for foreign and domestic private enterprise and investment.

A major aim is to increase the public participation in the development process.

See the Financial Section of the PP

See Resume of National Budget, Financial Analysis.

These are all objectives of the TGCV,

Cape Verde is one of the 40 countries in which development assistance grants may be made.

No.

N/A

N.A.

N.A.

AID HANDBOOK 3, App 5C	TRANS. MEMO NO. 3:19	EFFECTIVE DATE February 15, 1978	PAGE NO. 5C(2)-1
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5C(2) - PROJECT CHECKLIST

Listed below are, first, statutory criteria applicable generally to projects with FAA funds, and then project criteria applicable to individual fund sources: Development Assistance (with a sub-category for criteria applicable only to loans); and Security Supporting Assistance funds.

CROSS REFERENCES: IS COUNTRY CHECKLIST UP TO DATE? IDENTIFY. HAS STANDARD ITEM CHECKLIST BEEN REVIEWED FOR THIS PROJECT?

A. GENERAL CRITERIA FOR PROJECT.1. App. Unnumbered; FAA Sec. 653(b)

(a) Describe how Committees on Appropriations of Senate and House have been or will be notified concerning the project;
(b) is assistance within (Operational Year Budget) country or international organization allocation reported to Congress (or not more than \$1 million over that figure plus 10%)?

By the established congressional notification procedure.

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,000, will there be (a) engineering, financial, and other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

Yes. An engineer has developed a methodology for the modest construction to be carried out under the project. The cost of the project components have been reasonably estimated.

3. FAA Sec. 611(a)(2). If further legislative action is required within recipient country, what is basis for reasonable expectation that such action will be completed in time to permit orderly accomplishment of purpose of the assistance?

none required.

4. FAA Sec. 611(b); App. Sec. 101. If for water or water-related land resource construction, has project met the standards and criteria as per Memorandum of the President dated Sept. 5, 1973 (replaces Memorandum of May 15, 1962; see Fed. Register, Vol 38, No. 174, Part III, Sept. 10, 1973)?

N.A.

5. FAA Sec. 611(e). If project is capital assistance (e.g., construction), and all U.S. assistance for it will exceed \$1 million, has Mission Director certified the country's capability effectively to maintain and utilize the project?

Yes.

PAGE NO.	EFFECTIVE DATE	TRANS. MEMO NO.	AID HANDBOOK
5C(2)-2	February 15, 1978	3:19	3, App. 5C

A.

6. FAA Sec. 209, 519. Is project susceptible of execution as part of regional or multi-lateral project? If so why is project not so executed? Information and conclusion whether assistance will encourage regional development programs. If assistance is for newly independent country, is it furnished through multi-lateral organizations or plans to the maximum extent appropriate?

No.

7. FAA Sec. 601(a); (2nd Sec. 201(f) for development loans). Information and conclusions whether project will encourage efforts of the country to: (a) increase the flow of international trade; (b) foster private initiative and competition; (c) encourage development and use of cooperatives, credit unions, and savings and loan associations; (d) discourage monopolistic practices; (e) improve technical efficiency of industry, agriculture and commerce; and (f) strengthen free labor unions.

This project will help improve the level of manpower skills available to industry, agriculture and commerce.

8. FAA Sec. 601(b). Information and conclusion on how project will encourage U.S. private trade and investment abroad and encourage private U.S. participation in foreign assistance programs (including use of private trade channels and the services of U.S. private enterprise).

U.S. commodities, notably for construction will be purchased under this project.

9. FAA Sec. 612(b); Sec. 636(h). Describe steps taken to assure that, to the maximum extent possible, the country is contributing local currencies to meet the cost of contractual and other services, and foreign currencies owned by the U.S. are utilized to meet the cost of contractual and other services.

The Government of Cape Verde will provide logistic support to U.S. technicians. It will also provide local labor and other project's local costs.

10. FAA Sec. 612(d). Does the U.S. own excess foreign currency and, if so, what arrangements have been made for its release?

No.

FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(c); Sec. 111; Sec. 281a. Extent to which activity will (a) affectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production, spreading investment out from cities to small towns and rural areas; and (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and otherwise encourage democratic private and local governmental institutions?

The project will be implemented primarily in rural areas and will expand the availability of elementary education to poor rural farmers.

AID HANDBOOK 3, App 5C.	TRANS. MEMO NO. 3:19	EFFECTIVE DATE February 15, 1978	PAGE NO. 5C(2)-3
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81

b. FAA Sec. 103, 103A, 104, 105, 106, 107. Is assistance being made available: [Include only applicable paragraph -- e.g., a, b, etc. -- which corresponds to source of funds used. If more than one fund source is used for project, include relevant paragraph for each fund source.]

(1) [103] for agriculture, rural development or nutrition; if so, extent to which activity is specifically designed to increase productivity and income of rural poor; [103A] if for agricultural research, is full account taken of needs of small farmers;

N.A.

(2) [104] for population planning or health; if so, extent to which activity extends low-cost, integrated delivery systems to provide health and family planning services, especially to rural areas and poor;

N.A.

(3) [105] for education, public administration, or human resources development; if so, extent to which activity strengthens nonformal education, makes formal education more relevant, especially for rural families and urban poor, or strengthens management capability of institutions enabling the poor to participate in development;

Teachers will receive training to improve their skills in instruction of nutrition, rural crafts, health education, industrial arts, and natural sciences. A primary concern of the GOCV is the applicability of these subjects to the development needs of the community served by the school.

(4) [106] for technical assistance, energy, research, reconstruction, and selected development problems; if so, extent activity is:

N.A.

(a) technical cooperation and development, especially with U.S. private and voluntary, or regional and international development, organizations;

(b) to help alleviate energy problem;

(c) research into, and evaluation of, economic development processes and techniques;

(d) reconstruction after natural or manmade disaster;

(e) for special development problem, and to enable proper utilization of earlier U.S. infrastructure, etc., assistance;

(f) for programs of urban development, especially small labor-intensive enterprises, marketing systems, and financial or other institutions to help urban poor participate in economic and social development.

PAGE NO. 5C(2)-4	EFFECTIVE DATE February 15, 1978	TRANS. MEMO NO. 3:19	AID HANDBOOK 3, App. 5C
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31

- (5) [107] by grants for coordinated private effort to develop and disseminate intermediate technologies appropriate for developing countries.

c. FAA Sec. 110(a); Sec. 208(e). Is the recipient country willing to contribute funds to the project, and in what manner has or will it provide assurances that it will provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or has the latter cost-sharing requirement been waived for a "relatively least-developed" country)?

d. FAA Sec. 110(b). Will grant capital assistance be disbursed for project over more than 3 years? If so, has justification satisfactory to Congress been made, and efforts for other financing?

e. FAA Sec. 207; Sec. 113. Extent to which assistance reflects appropriate emphasis on; (1) encouraging development of democratic, economic, political, and social institutions; (2) self-help in meeting the country's food needs; (3) improving availability of trained worker-power in the country; (4) programs designed to meet the country's health needs; (5) other important areas of economic, political, and social development, including industry; free labor unions, cooperatives, and Voluntary Agencies; transportation and communication; planning and public administration; urban development, and modernization of existing laws; or (6) integrating women into the recipient country's national economy.

f. FAA Sec. 281(b). Describe extent to which program recognizes the particular needs, desires, and capacities of the people of the country; utilizes the country's intellectual resources to encourage institutional development; and supports civic education and training in skills required for effective participation in governmental and political processes essential to self-government.

The government of Cape Verde will provide 35% of the project's total cost. Its contribution includes the value of the land, buildings, logistic support, local labor, and counterpart personnel.

No.

This project will make available to a majority of the population a better and more relevant elementary education. Part of the training component deals with up-grading the health conditions of the country. Another component will include the training of industrial arts teachers who will in turn be able to better instruct skills needed by local industry.

The project responds to the GOCV's own priorities and will be largely implemented by the GOCV.

AID HANDBOOK 3, App 5C	TRANS. MEMO NO. 3:19	EFFECTIVE DATE February 15, 1978	PAGE NO. 5C(2)-5
------------------------	-------------------------	-------------------------------------	---------------------

81

g. FAA Sec. 201(b)(2)-(4) and -(8); Sec. 201(e); Sec. 211(a)(1)-(3) and -(8). Does the activity give reasonable promise of contributing to the development: of economic resources, or to the increase of productive capacities and self-sustaining economic growth; or of educational or other institutions directed toward social progress? Is it related to and consistent with other development activities, and will it contribute to realizable long-range objectives? And does project paper provide information and conclusion on an activity's economic and technical soundness?

This project will contribute to the improvement of human resources and consequently help increase the productive capacities and skills of the population.

h. FAA Sec. 201(b)(6); Sec. 211(a)(5), (6). Information and conclusion on possible effects of the assistance on U.S. economy, with special reference to areas of substantial labor surplus, and extent to which U.S. commodities and assistance are furnished in a manner consistent with improving or safeguarding the U.S. balance-of-payments position.

The project will have no detrimental effects on the U.S. economy. To the contrary, U.S. technicians will be employed on a short term basis and commodities procured from the U.S.

2. Development Assistance Project Criteria (Loans only)

a. FAA Sec. 201(b)(1). Information and conclusion on availability of financing from other free-world sources, including private sources within U.S.

N.A.

b. FAA Sec. 201(b)(2); 201(d). Information and conclusion on (1) capacity of the country to repay the loan, including reasonableness of repayment prospects, and (2) reasonableness and legality (under laws of country and U.S.) of lending and relending terms of the loan.

N/A

c. FAA Sec. 201(e). If loan is not made pursuant to a multilateral plan, and the amount of the loan exceeds \$100,000, has country submitted to AID an application for such funds together with assurances to indicate that funds will be used in an economically and technically sound manner?

N/A

d. FAA Sec. 201(f). Does project paper describe how project will promote the country's economic development taking into account the country's human and material resources requirements and relationship between ultimate objectives of the project and overall economic development?

N/A

PAGE NO.	EFFECTIVE DATE	TRANS. MEMO NO.	AID HANDBOOK
5C(2)-6	February 15, 1978	3:19	3, Add. 5C

82

e. FAA Sec. 202(a). Total amount of money under loan which is going directly to private enterprise, is going to intermediate credit institutions or other borrowers for use by private enterprise, is being used to finance imports from private sources, or is otherwise being used to finance procurements from private sources?

N/A

f. FAA Sec. 620(d). If assistance is for any productive enterprise which will compete in the U.S. with U.S. enterprise, is there an agreement by the recipient country to prevent export to the U.S. of more than 20% of the enterprise's annual production during the life of the loan?

N/A

3. Project Criteria Solely for Security Supporting Assistance

FAA Sec. 531. How will this assistance support promote economic or political stability?

N/A

4. Additional Criteria for Alliance for Progress

[Note: Alliance for Progress projects should add the following two items to a project checklist.]

N/A

a. FAA Sec. 251(b)(1), -(8). Does assistance take into account principles of the Act of Bogota and the Charter of Punta del Este; and to what extent will the activity contribute to the economic or political integration of Latin America?

N/A

b. FAA Sec. 251(b)(8); 251(h). For loans, has there been taken into account the effort made by recipient nation to repatriate capital invested in other countries by their own citizens? Is loan consistent with the findings and recommendations of the Inter-American Committee for the Alliance for Progress (now "CEPCIES," the Permanent Executive Committee of the OAS) in its annual review of national development activities?

N/A

AID HANDBOOK 3, App 5C	TRANS. MEMO NO. 3:19	EFFECTIVE DATE/ February 15, 1978	PAGE NO. 5C(3)-1
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5C(3) - STANDARD ITEM CHECKLIST

Listed below are statutory items which normally will be covered routinely in those provisions of an assistance agreement dealing with its implementation, or covered in the agreement by exclusion (as where certain uses of funds are permitted, but other uses not).

These items are arranged under the general headings of (A) Procurement, (B) Construction, and (C) Other Restrictions.

A. Procurement

1. FAA Sec. 602. Are there arrangements to permit U.S. small business to participate equitably in the furnishing of goods and services financed? Yes.
2. FAA Sec. 604(a). Will all commodity procurement financed be from the U.S. except as otherwise determined by the President or under delegation from him? Yes.
3. FAA Sec. 604(d). If the cooperating country discriminates against U.S. marine insurance companies, will agreement require that marine insurance be placed in the U.S. on commodities financed? Yes.
4. FAA Sec. 604(e). If offshore procurement of agricultural commodity or product is to be financed, is there provision against such procurement when the domestic price of such commodity is less than parity? None to be financed.
5. FAA Sec. 608(a). Will U.S. Government excess personal property be utilized wherever practicable in lieu of the procurement of new items? Yes.
6. MMA Sec. 901(b). (a) Compliance with requirement that at least 50 per centum of the gross tonnage of commodities (computed separately for dry bulk carriers, dry cargo liners, and tankers) financed shall be transported on privately owned U.S.-flag commercial vessels to the extent that such vessels are available at fair and reasonable rates. Yes.
7. FAA Sec. 521. If technical assistance is financed, will such assistance be furnished to the fullest extent practicable as goods and professional and other services from private enterprise on a contract basis? If the facilities of other Federal agencies will be utilized, Yes.

PAGE NO.	EFFECTIVE DATE	TRANS. MEMO NO.	AID HANDBOOK
5C(3)-2	February 15, 1978	3:19	3, App. 5C

A7

are they particularly suitable, not competitive with private enterprise, and made available without undue interference with domestic programs?

8. International Air Transport. Fair Competitive Practices Act, 1974

If air transportation of persons or property is financed on grant basis, will provision be made that U.S.-flag carriers will be utilized to the extent such service is available?

Yes.

8. Construction

1. FAA Sec. 601(d). If a capital (e.g., construction) project, are engineering and professional services of U.S. firms and their affiliates to be used to the maximum extent consistent with the national interest?

Yes.

2. FAA Sec. 611(c). If contracts for construction are to be financed, will they be let on a competitive basis to maximum extent practicable?

Yes.

3. FAA Sec. 620(k). If for construction of productive enterprise, will aggregate value of assistance to be furnished by the U.S. not exceed \$100 million?

N.A.

C. Other Restrictions

1. FAA Sec. 201(d). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter?

N.A.

2. FAA Sec. 301(d). If fund is established solely by U.S. contributions and administered by an international organization, does Comptroller General have audit rights?

N.A.

3. FAA Sec. 620(h). Do arrangements preclude promoting or assisting the foreign aid projects or activities of Communist-Bloc countries, contrary to the best interests of the U.S.?

Yes.

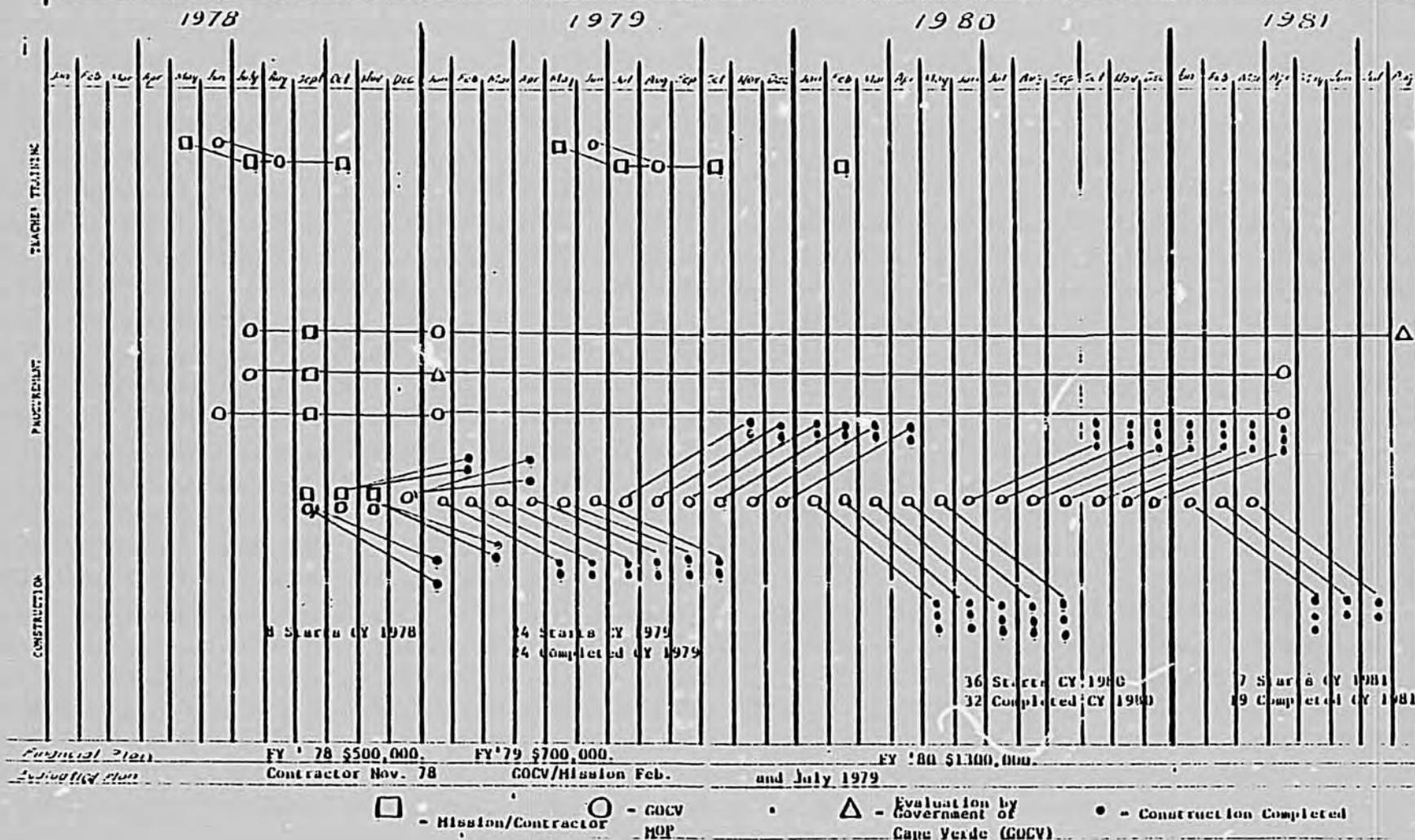
4. FAA Sec. 636(i). Is financing not permitted to be used, without waiver, for purchase, long-term lease, or exchange of motor vehicle manufactured outside the U.S. or guaranty of such transaction?

Yes.

ANNEX G

**Project Performance Network Chart
and Bar Chart**

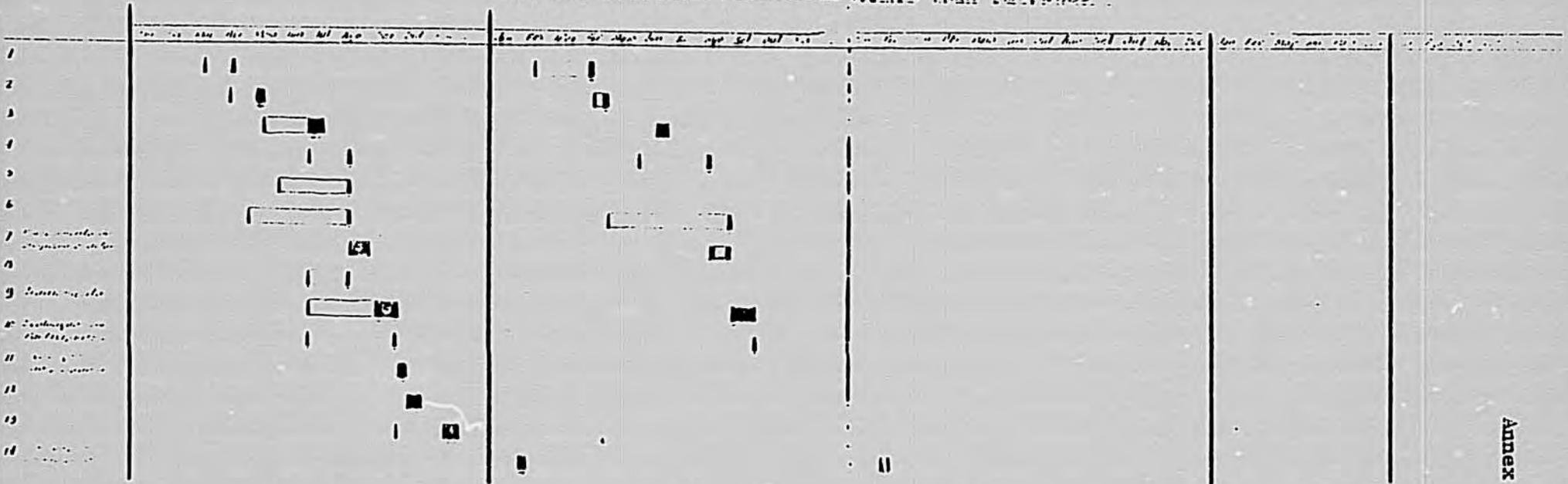
Country Cape Verde	Project No 655-0008	Project Title PRIMARY AND NON-FORMAL EDUCATION	Date 6/1/78	Original Est. #	FPI type
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PROGRAMA PARA CONDIÇÕES NAS SALAS DAS AULAS ARCADES E VESINAS



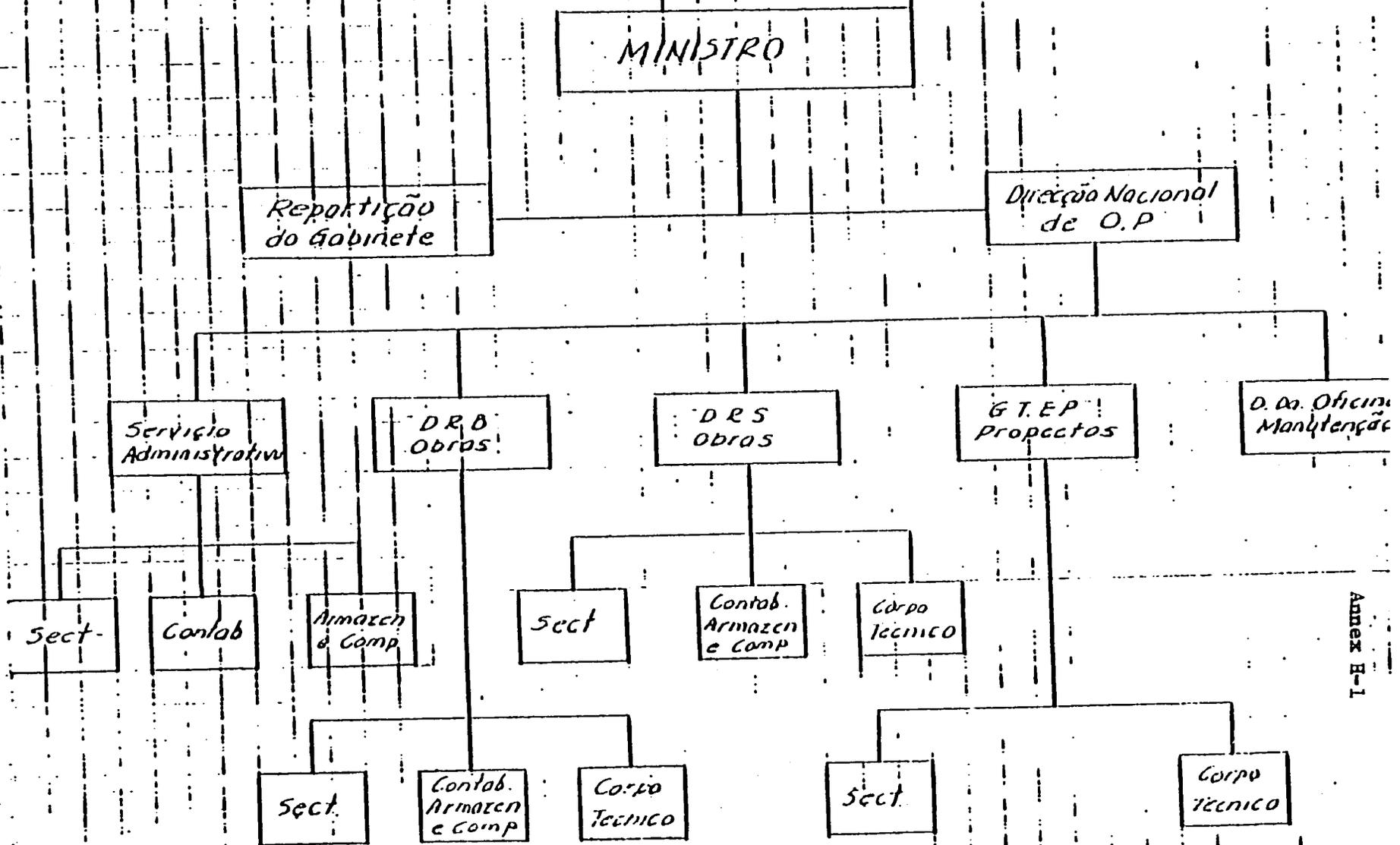
PROGRAMA PARA ASSISTÊNCIA TÉCNICA NAS SALAS



ANNEX H

Technical Details

MINISTÉRIO DE OBRAS PÚBLICAS



Attendance By School Level/1975-76

School Level	No. Students	%
Secondary Schools	2,131	3.1
Technical Schools	680	1.0
Cycle of Preparation	5,368	7.7
Teacher Training (women)	362	.5
Elementary School	61,000	87.7
	69,541	100.0

ELEMENTARY School Attendance/1965 - 1976

Year	Number of Students	Percent of Population
1965/66	12,161	5%
1966/67	12,323	5%
1967/68	12,473	5%
1968/69	23,381	8%
1969/70	40,685	13%
1970/71	45,103	15%
1971/72	55,062	19%
1972/73	59,655	19%
1973/74	62,180	20%
1974/75	65,683	22%
1975/76	61,000 ^{1/}	(24.5%) 20.3%

^{1/} The drop in numbers of students reflects cancellation of the pre-primary program; for grades one through four, the percent of enrollment was estimated to be 24.5%.

School Building Utilization/1975-76
and Teacher Assignments

Concelhos (County:)	No. Rooms		Total Rooms	No. Students	No. Teachers
	state- owned	Rented			
Praia	34	78	112	9700	216
S. Catarina	34	53	87	9800	193
S. Cruz	21	32	53	5650	115
Tarrafal	20	36	56	5380	121
Fogo	36	27	63	5750	134
Brava	17	—	17	1600	39
Maio	8	4	12	950	23
Total					
Sotavento	170	230	400	38830	841
S. Vicente	56	13	69	7700	143
Paul	13	6	19	1430	33
R. Grande	26	40	66	5400	136
Porto Novo	12	22	34	2380	66
S. Nicolau	12	22	40	2900	80
Sal	33	7	12	1150	20
Escavista	11	1	10	710	23
Total					
Barlavento	160	90	250 ^{1/}	22170	509
Total/Country	330	320	650	61000	1350

^{1/} There is a modest discrepancy in the Barlavento classroom total; the variance was not judged significant in the overall context of the project.

Training Levels of Elementary School

Teachers ^{1/}

Year	Magistério Primário		Posto Escolar		Monitores		Total
	No.	%	No.	%	No.	%	
1971-72	112	13.0	352	41.0	393	45.8	857
1972-73	78	8.0	425	43.6	470	48.3	973
1973-74	75	6.8	513	47.0	501	45.4	1094
1974-75	82	6.6	739	59.7	475	33.5	1296
1975-76	53	3.9	938	69.4	359	26.5	1354

Note: By July, 1978, it is estimated there will be only 150 teachers in the "Monitor" classification.

^{1/} Ministry of Education and Culture. National Meeting of Educational Personnel. Vol. II, Conclusions and Related Documents. Statistical Data, p. 10.
Cape Verde: M.E.C., 1977.

SUMMARY OF PROJECT-SUPPORTED SCHOOL CONSTRUCTIONSchool Facilities by Concelho

<u>Concelhos</u>	<u>1 Class- room</u>	<u>2 Class- rooms</u>	<u>3 Class- rooms</u>	<u>Moradias</u>	<u>Workshops</u>
Tarrafal	8	4	2	4	
Santa Catarina	5	4	1	4	
Santa Cruz	5	4	1	3	
Praia	6	4	4	3	1
FOGO	5	5	1	-	1
Brava	1	-	1	1	
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Total	30	20	10	15	2

Locations and Types of Facilities
Within Each ConcelhoTARRAFAL

<u>1 Classroom</u>	<u>2 Classroom</u>	<u>3 Classroom</u>	<u>Moradias</u>
Monte Pousada	Mato Mendes	Monte Vermelho	Chacha
Ponta Verde	Gomgom	Riberata	Gomgom
Lagoa (Biscainhos)	Ribeira Flamengo		Milho Branco
Chacha	Biscainhos		Mato Brazil
Riberão Milho			
Pilão Cão			
Milho Branco			
Garcota			

SANTA CATARINA

<u>1 Classroom</u>	<u>2 Classrooms</u>	<u>3 Classrooms</u>	<u>Moradias</u>
Achada Leicão	Achada Lém	Saltos Acima	Rincão
Rincão	Palha Carga		Picos Acima
Tomba Touro	Mato Gágé		Bur-Bur
Furna	Chã de Tanque		Entre os Picos-Reda

SANTA CRUZ

Mercado dos Orgãos	João Teves	Jalalo Ramos	Jolalo Ramos
Cancelo	Renque Purga		Cancelo
Orgãos Pequeno	Pedro Badejo		Fundura
Laje	Porto Madeira		
Fundura			

PRAIA

Chã de Igreja	Rui Vaz	Achadinha	Dacabalaio
Dacabalaio	Santana	Schada St ^o António	Belém
" de Baixo	Portal	Achada Grande	Porto dos Mosquito
São Tomé	Cidade Veio	Vila Nova	
S. Martinho Pequeno			
Lém Ferreira			

Also construct one workshop in Praia

Estatísticas das Escolas no Conselho de Praia, São Tiago

Localidade	Salas das Aulas			Numeros dos			Necessidades
	do Governo	Alugados	Cedidas	Professores	Turmas	Alunos	Salas
Achadinha Praia	1	11	-	24	36	1126	12
Achada S. António Praia	6	9	0	29	42	1270	9
Praia Platot Praia	4	5	-	15	17	585	2
Achada Grande Praia	1	2	-	6	9	227	2
Lém Ferreira Praia	1	-	-	2	3	167	-
Vila Nova Praia	2	4	-	12	18	607	4
Calabaceira Praia	-	2	-	4	6	207	2
Achada S. Filipe Praia	-	1	-	4	5	117	1
Fazenda Praia	-	1	-	2	3	101	1
Paiol Praia	2	2	-	8	12	430	2
Lém Cachorro Praia	2	-	-	4	4	153	-
Chã de Igreja	-	1	-	2	3	136	-
Ruí Vaz	2	-	-	6	6	158	-
Santana	1	-	-	4	6	170	1
Dacabalaio Cina	-	1	-	2	3	136	1
Portal	-	2	-	4	5	146	2
Dacabalaio Baixo	-	1	-	1	2	28	1
S. Tomé	1	-	-	2	2	43	-
Cidade Velha	1	1	-	4	5	155	1
S. Domingos	2	2	-	10	14	500	2
Trinidade	-	1	-	2	3	69	1
S. Martino Pequeno	1	-	-	2	7	89	-
Praia a Baixo	1	1	-	4	4	96	-
Salineiro	1	1	-	4	4	144	1
Menda Faleiro	1	1	-	4	6	202	1
Fontes	1	1	-	4	4	121	-
Belém	-	2	-	2	3	85	1
Curral Grande	-	1	-	2	2	48	1
Praia Formosa	-	1	-	2	2	66	1
Pedregal S. Filipe	-	1	-	2	2	25	1
Chaminé	-	1	-	2	3	69	1
Varzea	-	-	-	?	2	113	-
Mato Afonso	-	1	-	2	3	102	1
Água de Gato	-	2	-	4	6	173	2
Baío	-	1	-	2	3	74	1
Mato Serrado	1	-	-	2	2	65	1
Porto do Mosquitos	-	1	-	2	3	59	1
Veneza	-	1	-	2	2	35	1
Mendes Faleiro Cabral	-	1	-	2	2	31	1

Estatísticas das Escolas no Conselho de Stã Catarina, São Tiago

Localidade	Salas das Aulas			Numeros dos			Nec
	do Governo	Alugados	Cedidas	Professores	Turmas	Alunos	Salas
Assomada	4	1	3	17	20	729	4
Acha Lém	1	4	-	9	13	513	4
Achada Leitão	1	1	-	3	5	148	1
Palha Carga	3	1	-	7	11	421	1
Saltos Acima	-	2	-	4	5	146	2
Mato Gége	2	-	-	4	6	235	1
Rincão	1	-	-	2	3	91	-
Achada Igreja	4	2	1	14	17	593	3
Achada Falcao	4	3	-	15	22	851	3
Chã de Tanque	2	-	2	8	9	356	2
Riberão da Barca	3	-	-	6	8	349	-
Chã Grande	-	-	2	4	5	164	2
Riberão Manuel	2	-	-	4	6	223	-
Bombardeiro	-	2	-	4	6	230	2
Picos Acima	-	2	-	4	6	209	2
Tomba Touro	-	2	-	2	4	155	2
Bur Bur	1	-	1	3	4	104	1
Covão Grande	-	1	1	4	4	127	2
Fonte Lima	1	1	-	4	6	227	1
Furna	-	1	-	2	3	111	1
Pau Verde	-	1	-	2	3	139	1
Purgueira	-	1	-	2	3	87	1
Faveta	-	1	-	2	3	78	1
Boa Entrada	-	2	-	4	6	208	2
Pinha do Engenho	-	2	-	4	6	176	2
Boa Entradinha	-	3	-	4	6	197	3
Nhagar	-	2	-	3	3	93	2
Gil Bispo	2	1	-	4	7	228	1
Fondura	-	1	-	2	3	163	1
Pingo de Chuva	2	1	-	4	7	252	1
Pedroso	1	-	-	1	2	42	-
Figuera das Naus	3	-	-	6	9	358	-
Liberão	-	1	-	1	2	79	1
Curral d'Asno	-	2	1	2	3	111	2
Entre Picos-Roda	-	1	-	1	1	34	1
Riberão Isabel	-	2	-	2	4	143	2
Charco	-	1	-	1	2	69	1
Achada Alazão	-	1	-	1	2	50	1
Mato Sancho	1	-	-	1	2	77	-
Lugar Velho	-	1	-	1	2	81	1

Estatísticas das Escolas no Conselho de São Catarina, São Tiago -

Localidade	Salas das Aulas			Numeros dos			Salas
	do Governo	Alugados	Cedidas	Professores	Turmas	Alunos	
Achada Leite	1	1	1	1	2	47	3
Leitão Grande	1	2	1	4	4	138	4
João Dias	1	2	1	4	5	167	7
					Classrooms Buildings		61 36
					1 Classroom		17
					2 Classroom		14
					3 Classroom		1
					4 Classroom		2

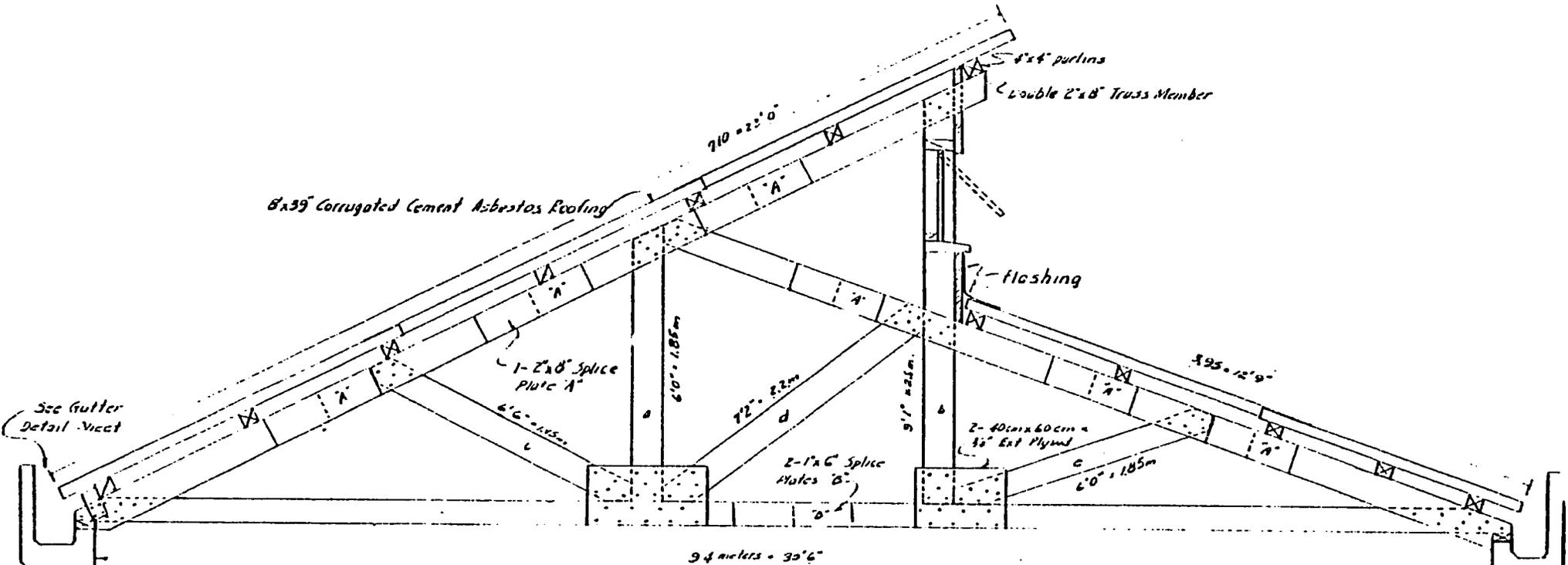
Estatística Do Humero Das Salas Alugados, As Do
 Governo; Salas E. Moradias Precisas.

Fogo	Salas			Pessoal E Escolar			Os Requisitos.			
	Do Governo	Alugadas	Cedidas	Professores	Turmas	Alunos	Salas	Morodias	Ciclos	Officinas
1. San Filipe	-	1	1							
2. Compina de Cima	-	1	-							
3. Tinteira	-	1	-							
4. Curral Granda	-	1	1							
5. Atalaia	-	1	-							
6. Fonsuco	-	2	-							
7. Compina Boixo	1	1	-							
8. Faginazinho	2	1	-							
9. Feijoal	1	1	-							
10. Igreja Mast.	1	1	1							
11. Achada Grande	1	1	-							
12. Ponta Verde	2	1	-							
13. San Domingos	1	1	1							
14. San Jorge	1	1	-							
15. Ribeira do Ilheu.	1	1	-							
16. Cova Figueira	1	1	1							
17. Saltos	1	-	1							
18. Lagarico	1	-	1							
19. Miguel Gonsal.	1	-	-							
20. Relva	?	-	-							
21. Filomena	?	-	-							
22. Ribeiro Filipe	?	-	-							
23. Figueira Pavao	-	-	-							
24. Maria do Cruz.	-	1	-							
25. Pe do Monte	2	1	-							

SUMMARY

	Number	Trusses Req'd	Mbm	Plate (in meter)	Mbm	Purlins ^{1/2}	All... 2000	Water tower
1 Classroom Schools	30	150	36,330			120		
2 " "	20	140	29,141			720		
3 " "	10	40	14,008			400		
Teachers Quarters	15	Special	13,020			165		
Annual Pls shops	2	H	2,737			120		
			96,233			2,300		

1.0000 Mb. e 500/ft. = 60000



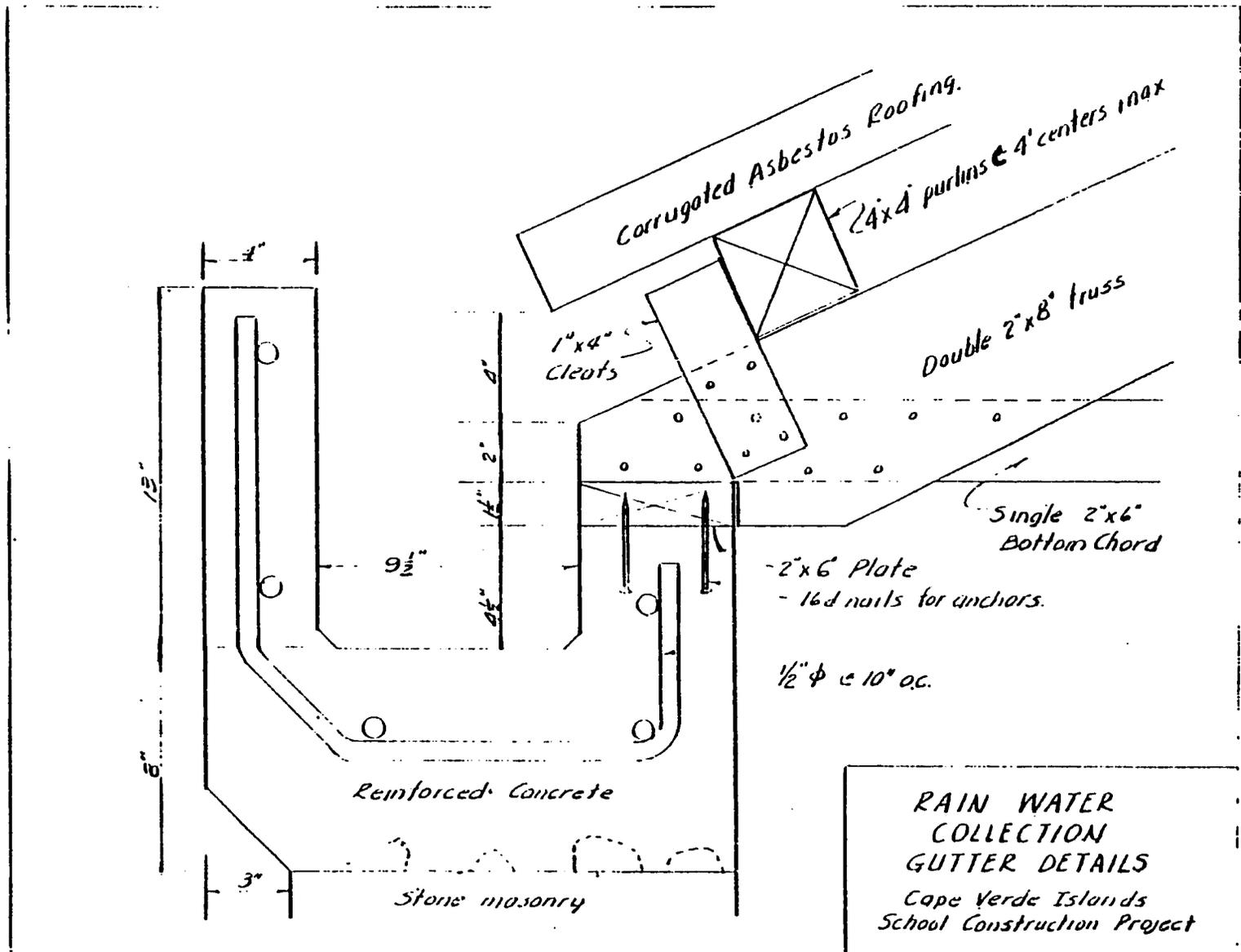
MEMBER	MATERIAL	SIZE (length) req'd	ALLU
Top Chord (long)	2x8	alternate 14' 10" per side	59
" " (short)	2x8	" 14' 10" and 16' 4" or 10' x 10"	54
Bottom Chord	2x6	Use 2-16" or 1-12" + 2-10"	32
Vertical a	2x6	Cut 1 ea at c from 12"	8
Vertical b	2x8	Cut from 10'	14
Diagonal c	2x8	Cut 1 ea from 14'	19
Diagonal d	2x8		
Diagonal e	2x8	See a above	8
Gusset Plates	1/2" Ext. Ply.	14" X 32"	1/2 sheet = 7.1 sq ft.
Gusset Plates	" "	16" X 24"	1/2 sheet = 5.3 sq ft.
A Splice Plates	2x8	24" - 1 req'd ea. truss	10.6
B Splice Plates	1x6	24" - 4 req'd ea. truss	40
CL003	1x4	8" - 16 req'd ea. truss	2.6

Nails Required/Truss:	
16d	10 ea
"	35 ea
"	10 ea
"	20 ea
"	10 ea
"	10 ea
"	10 ea
8d	60 ea
8d	40 ea
16d	50 ea
8d	50 ea
6d	50 ea

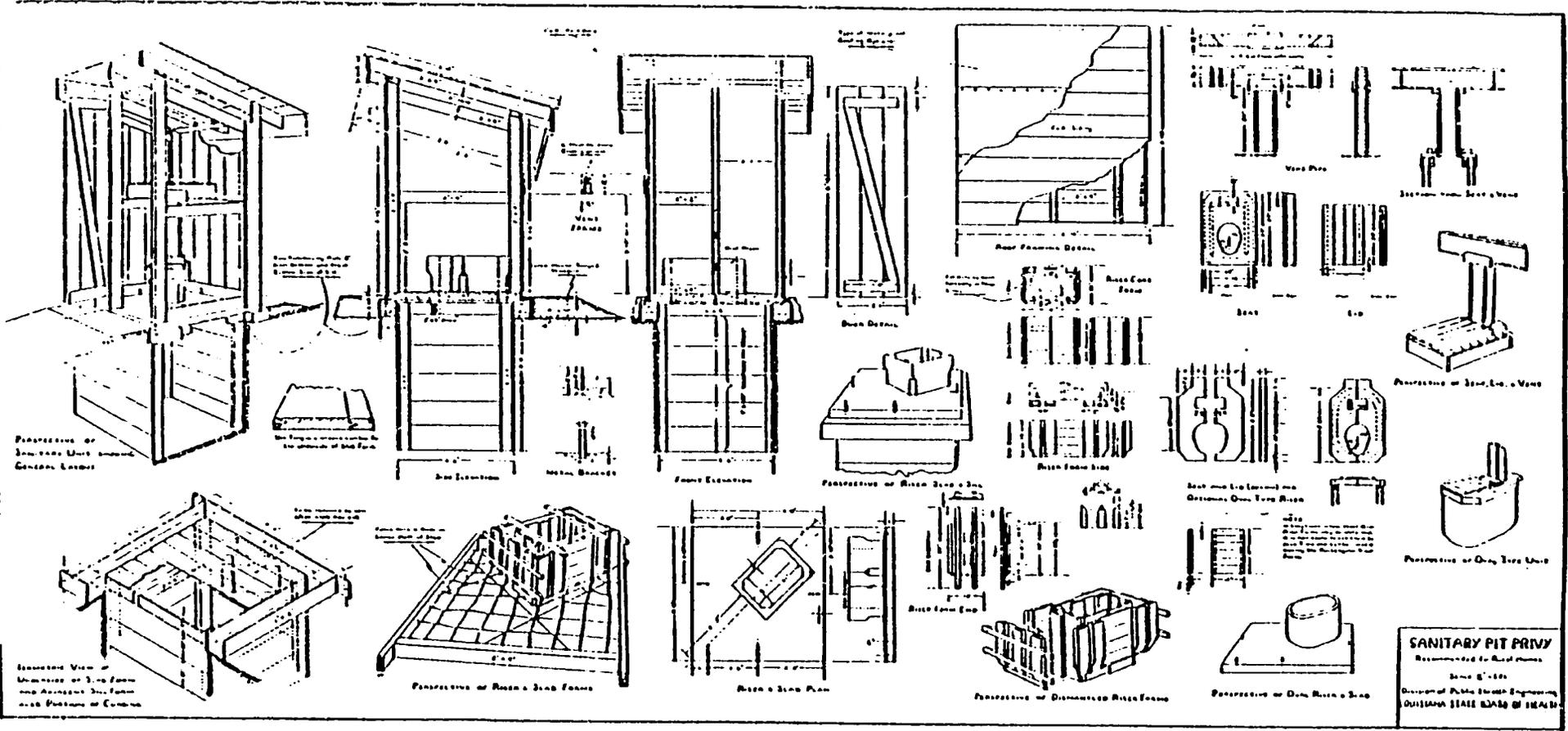
6d 0.3 lbs
8d 1.6 lbs
16d 3.3 lbs

TRUSS DETAILS
and
Bill of Materials
Cape Verde Islands
School Construction Project

ADDD 2-8-80 (T)



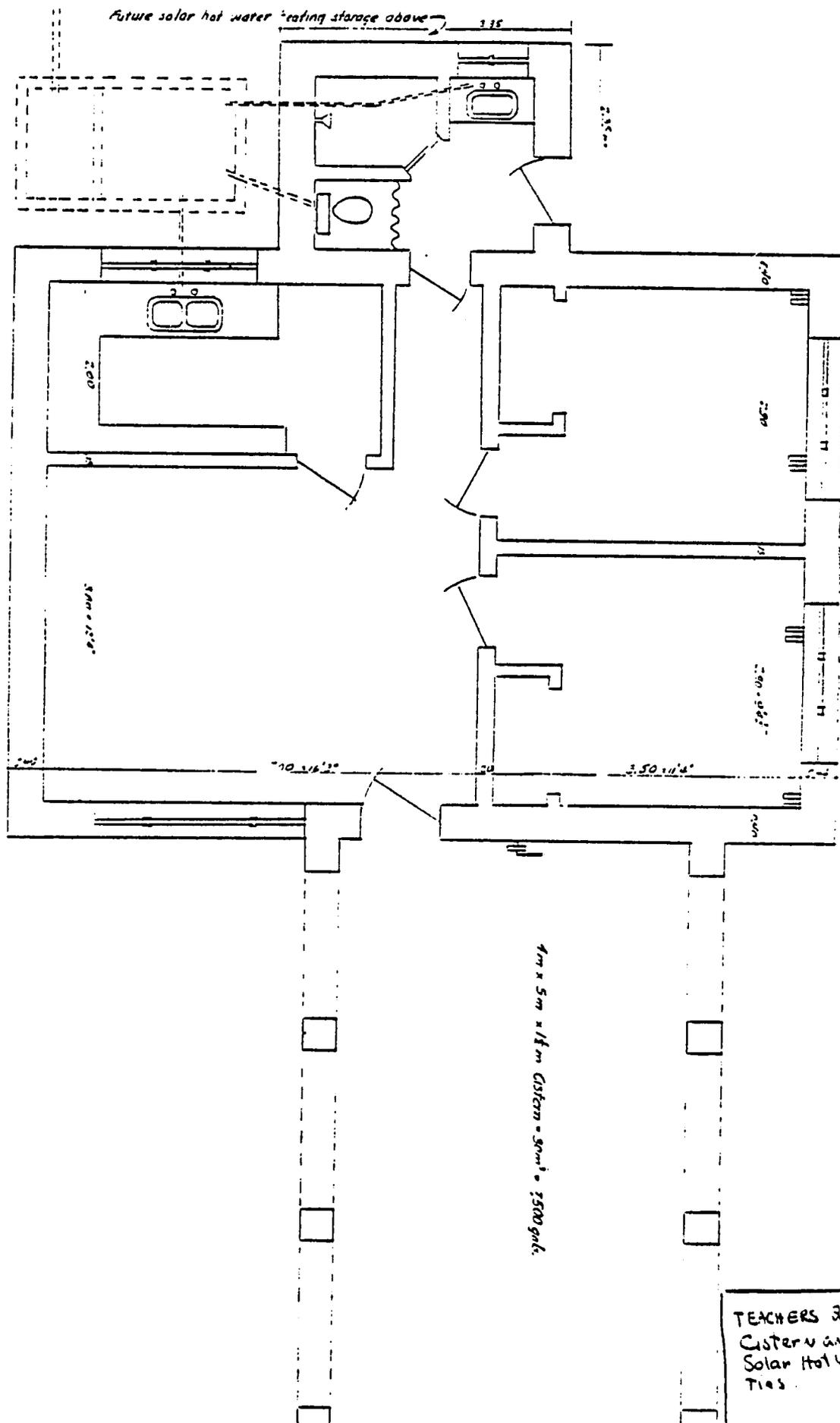
RAIN WATER
 COLLECTION
 GUTTER DETAILS
 Cape Verde Islands
 School Construction Project



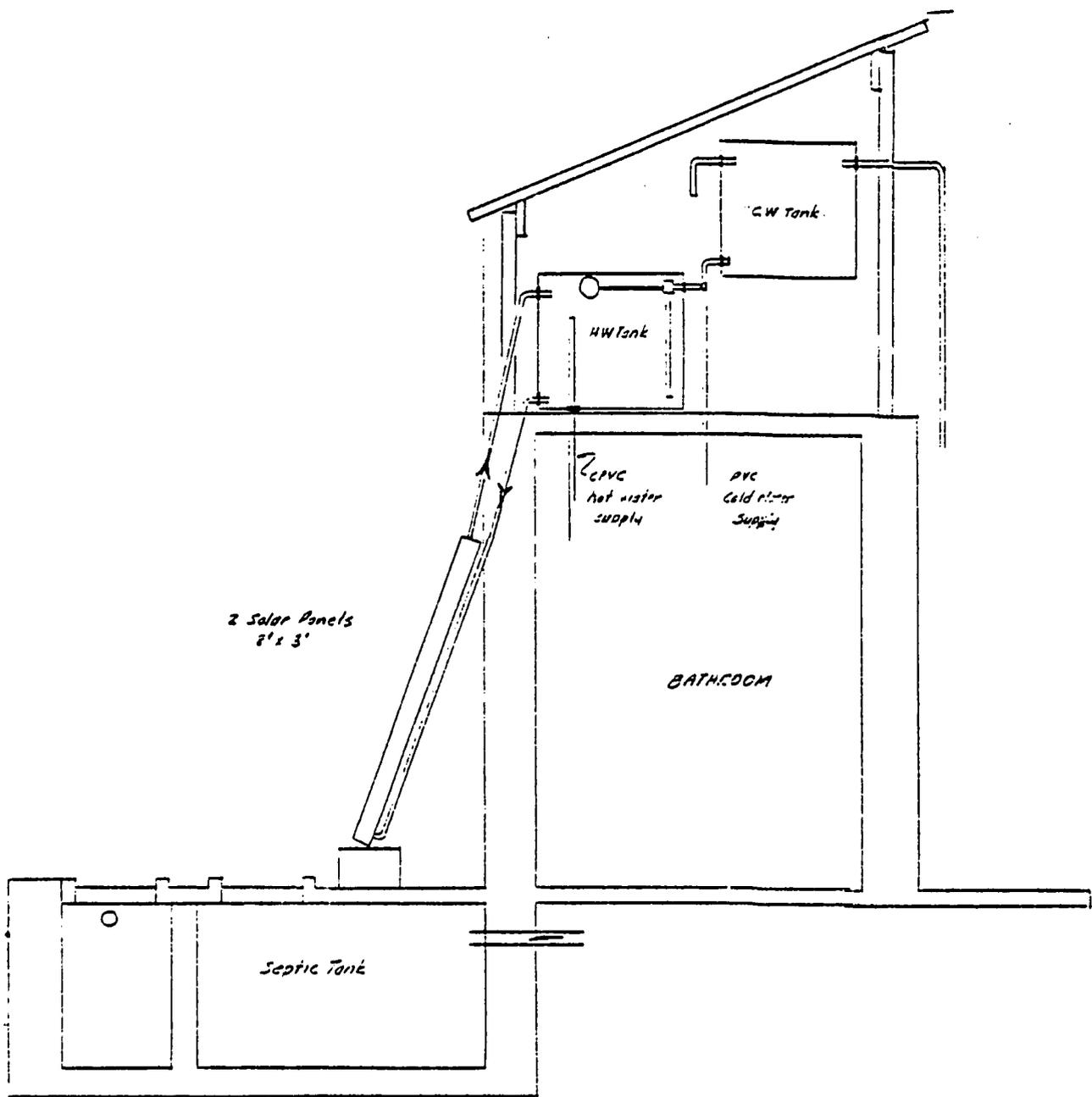
SANITARY PIT PRIVY
 Recommended to Rural Areas
 June 1914
 Division of Public Health Engineering
 LOUISIANA STATE BOARD OF HEALTH

TO BE ADAPTED USING TURKISH STYLE "SQUAT" TYPE TOILETS, MULTIPLE STALLS

Annex H-9



TEACHERS Quarters with
Cistern and Future
Solar Hot Water Facili-
ties.



SOLAR HOT WATER HEATER.

Educational Specifications

Introduction

It is the purpose of these specifications to describe in general terms the educational needs to be accommodated by buildings and outside structures which will be used to provide facilities for: (1) students in grades one through four; and (2) students in grades five and six.

School facilities carefully planned can do much to enhance the teaching conditions, facilitate learning, humanize the educational setting and encourage community development. It is important, therefore, that school architects and engineers be well acquainted with the educational needs for which they will design facilities.

Site Development

Sites for the facilities to be built will be located in several different localities on the three islands of Sao Tiago, Fogo and Brava. The overall plan concept for each site includes provisions for instruction indoors, outside service areas and, for some sites, residential buildings. This is graphically represented below:

Instructional and Related
Facilities

Outdoor instructional,
recreational and community
service areas

Residential Facilities ^{1/}

Master Plan Concept
Basic Components

^{1/} To be included in most but not all sites

Indoor Instructional Area

General Needs: Each classroom will require space for thirty-five children whose age will range from seven to fourteen. (It is possible the same space may be used by adults on occasion). Historically instruction has emphasized teacher-directed, lecture-type methods of instruction where students remain in their seats while in the classroom. Such methods require a minimum of space, perhaps no more than one and a half square meters per child. As more modern methods of instruction are introduced wherein students are more actively involved in the learning process, additional space will greatly enhance the learning environment.

Learning spaces will need to provide for the curriculum of the school as summarized below:

1. Portuguese
2. Mathematics
3. Social Studies
4. Arts and Crafts
5. Music Education
6. Useful Work
7. Physical Education

Seating: Most of the seating now used consists of a one-piece seat and desk combination which accommodates two and often three students. Classroom teachers consistently recommended that single seating units were preferable for two basic reasons: (1) students tend to disrupt one another when they are so closely confined to share seats and desks; and (2) it is more difficult to adapt variations

in classroom seating arrangements are greatly expanded through the use of individual seating units. This in turn, allows for more instructional options such as grouping techniques.

A modest size, durable teachers desk and chair are basic items. A plastic, formica-type top is desirable and drawers would be helpful.

Instructional wall space: A major instructional aid is adequate chalkboard space. It is recommended that ten to twelve linear feet of board be located preferably in the front of the room at a height accessible to all children.^{2/} The chalkboard should be of top quality non-glare composition. If space allows, an additional chalk board of equal length or less would be desirable.^{3/}

Another basic requirement is bulletin board space having approximately ten linear feet and positioned to be accessible to students. The board should be located at the rear or to one side of the classroom. Also desirable is a small display cabinet (approximately 10"x30"x40") that can be located about the room as instructional needs received.

Storage: Because two and three different groups of students regularly use each classroom at least three substantial, independently-locking storage cabinets are essential to the instructional process. Shelving should be adjustable and a drawer would be optional.

^{2/} Because adults may also use the classrooms, an extra wide board (top to bottom) would make multiple use more feasible.

^{3/} Chalkboards and bulletin boards should have mounting rail to support pull down maps and other materials.

Environment Factors:

Teaching and learning are affected by several environmental factors. These are briefly reviewed to alert architects and engineers to elements that need to be considered in the layout of learning spaces.

An even distribution of non-glare light is essential. (Many existing classrooms lack adequate light or have light which glares on chalk-board surfaces). Because most classrooms will not have electricity available, natural light sources must be given careful consideration.

Some means of variable light control is important. Shutters on windows are now used in many schools for this purpose. They are relatively durable but have the disadvantage of blocking all light as they are opaque rather than having some degree of translucence. An additional problem with many shutters is that they project into the classroom space in such a way as to present a physical hazard for students. Lighting control is also essential as a means of temperature regulation.

Oral communication in teaching spaces is basic to instruction. Good acoustical design should reduce or eliminate unwanted sounds (from the interior and exterior) and reinforce desirable sounds.

Although the climate in Cape Verde is such that special heating or cooling equipment is not required, consideration must be given to proper ventilation, elimination of heat build-up, protection against wind, rain, blowing sand and cooler temperatures.

The relatively high concentration of individuals and the active nature of children requires that special attention be given to a maximum degree of safety. Examples of features to be avoided include:

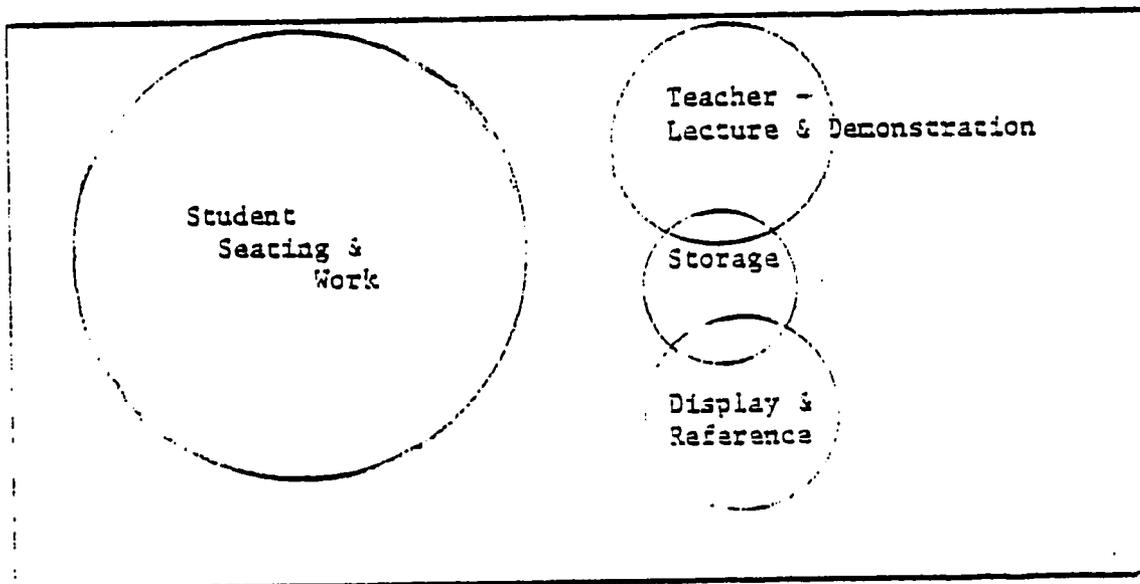
1. Combustible materials
2. Doors or windows which open into walkways
3. Slippery floors
4. Sharp corners and other protuberances

The school should be a model of good sanitation. Some specific suggestions are as follows:

1. Bathrooms and food facilities should be easy to clean.
2. Drinking facilities should be designed to avoid the spread of disease.
3. There should be an adequate waste disposal system(s).
4. Floors, walks, counters, desks, etc., should be designed for easy and thorough cleaning.

Finally, it is urged that the practicality of form not eliminate attention to aesthetics. Attractive facilities can serve as a model of that which is artistically pleasing and at the same time engender pride in the school and in schooling.

The classroom instructional area is graphically summarized below:



Classroom Space

Other Indoor Areas

Additional instructional support areas will include toilet facilities and food preparation. Secure, sanitary food and utensil storage is essential as well as facilities for washing food containers.

Of substantial importance is ample and secure storage space for school supplies and equipment. Items to be stored include: athletic equipment, books, paper, maintenance supplies, and other instructional materials and equipment. Access to such storage likely should be outside of the classroom. Due to the diversity of materials, two or three separate storage areas are indicated.

Outdoor Area

The relatively moderate climate makes possible options to use outdoor space to good advantage. Four different functions are contemplated, as noted under "Site Development".

The outdoor instruction area anticipates the ability to involve an entire class, or sub-groups thereof, in learning activities. Screening for wind and sun, therefore, become factors in building orientation and layout. The outdoor space will want to be relatively close to the indoor classroom area but attention must be given to possible sound and visual distractions. The same space will have other functional possibilities. It could also serve as an outdoor lunch "room", class space for adults, a small games area and as a commons (gathering) area. Some built-in seating may be appropriate.

Further from the classroom area space will be needed for recreation and physical education.

Modification of the curriculum now requires a relatively new feature in the form of space for growing plants, especially those which produce foods. Basic factors such as soil type, water needs, wind sunlight, etc. must be considered. In many localities, it will be necessary to include some means for protecting the school garden against animals, especially goats.

Another relatively new concept is providing, whenever possible, space for community use. Without interrupting learning activities, it is proposed that the school could serve as a center for community activities. Discussion and visiting space would be important along with seating, provisions for posting notices, etc. While these facilities may not be built at the outset, architectural plans could provide the basics upon which such facilities could subsequently be developed by the community.

List of tools for Manual Arts Workshops
(carpentry, plumbing and electrical)

No of students per tool	Description of tool	No. req'd	unit price	cost.
10	Wood Plane, Stanley #3	3	8.00	24.00
10	" " " #4	3	10.00	10.00
10	" " " #5	3	15.00	45.00
10	Back Saw, 14" x 3"	3	12.00	36.00
10	Handsaw, crosscut, 10 pts/in. 18"	3	12.00	36.00
10	Handsaw, crosscut, 8 pts/in. 24"	3	15.00	45.00
10	Handsaw, rip, 24"	3	15.00	45.00
10	Wood chisels, set of 4, 1/4" to 1" by 1/4"	3	15.00	45.00
10	Rasp, half round, coarse, 10"	3	8.00	24.00
10	" " " fine, 8"	3	7.00	21.00
10	" , round, rat tail 10", med. cut.	3	8.00	7.00
10	" " " " 8", fine	3	7.00	21.00
10	Mill File, 10"	3	2.00	6.00
15	Wood Carving set, 6 piece, 9" long	2	35.00	70.00
5	Hammers, nail, fiberglass handle, 16 oz head	6	10.00	60.00
15	Back Saw	2	7.00	14.00
-	Back Saw Blades, 22 teeth/in.	1 doz	10.00	10.00
10	Pliers, slip joint, utility, 8"	3	3.50	10.50
10	Pliers, long chain nose, 6"	3	6.00	18.00
15	Pliers, diagonal cutting, 7"	2	7.00	14.00
15	Pliers, locking (vise grip type) 8"	2	5.00	10.00
10	Screw Drivers, assortment, set of 8	3	5.00	15.00
15	Pipe Wrench, heavy duty, 12"	2	10.00	20.00
15	" " " " 12"	2	12.00	24.00
10	Corner miter box clamp set of four	3	12.00	36.00
5	Gluing Clamps (use with 1/2" steel pipe)	6 sets	5.00	30.00
2	Wood Vise for workbench	20	30.00	600.00
2	Adjustable gluing clamps, wooden	10	7.00	70.00
2	Bench Brush, 8" sweep	20	3.50	70.00
5	Trysquare, 6" blade	6	7.00	42.00
6	Bench Vise, 4" cap. swivel type	5	30.00	150.00
10	Ball Pein Hammers, 8 oz head	3	5.00	15.00
10	" " " " 16 " "	3	6.00	18.00
10	File, triangular for saw filing, 8"	1 doz	22.00	22.00
10	Woodworker's marking gauge	3	4.00	12.00
5	Sanding Block, rubber, 4" x 1 1/2"	6	3.00	18.00
15	Hand drill, 2 position handle, 12" length	2	10.00	20.00
-	Expansive auger bit, 7/8" to 3", interchangeable cutters	1	8.00	3.00
-	Saw Set, pistol grip, adjustable for hand saws	1	6.00	6.00
15	Carpenter's framing square	2	7.50	15.00
5	Cabinet scrapers, set of three shapes, w/burnisher	6	8.00	48.00
-	Carving chisel sharpeners, set of 4 shapes	1	15.00	15.00
15	Calipers, inside, 8"	2	10.00	10.00
15	Calipers, outside, 8"	2	10.00	10.00
10	Coping saw	3	9.00	17.00
-	Coping saw blades, lot of 100	1	9.00	9.00
10	Bevel, adjustable, 8" blade	3	6.00	18.00
10	Glass Cutter, turret head, six cutters	3	3.50	10.50
				<u>1900.00</u>

List of Tools for the Manual Arts Workshop (continued)Equipment mainly for shop use

Twist drill bits, set of 13 bits from 1/16" to 1/2" by 64ths. 3 sets	30.00
File Brush (wire brush), 10", 2 @ \$5.00	10.00
Pry bar and nail puller, 2"x15", 2 req'd @ 6.00	12.00
Staple gun, heavy duty	15.00
Staples, 1/4", 3/8", 1/2", box of 1000 ea.	12.00
"C" Clamps, gluing, 4" opening, 10 ea. @ \$4.00	40.00
" " " 6" " 10 ea. @ 6.00	60.00
" " " 9" " 10 ea. @ 7.50	75.00
Carpenter's Level, 24", aluminum	8.50
" " 18" "	7.50
Brace and Bit set, with set of 6 bits 1/4" to 1"	35.00
Miter Box with 16" x 3 1/2" backsaw	50.00
Socket set, 16 piece, metric with reversable ratchet	30.00
Combination box and end wrench set of 10, metric	26.00
Adjustable wrench (Crescent type) 8"	7.00
" " " " 10"	8.00
" " " " 16"	16.00
Assortment of wooden dowels, hardwood, 100 @	10.00
Sharpening Stone, double sided, silicon carbide, 8"x2"x1"	10.00
Pipe Cutter, 1/8" to 2" capacity, with extra cutters	30.00
Pipe Vise, chain type, 1/8" to 2" capacity	25.00
Grinder, hand operated, 6"x1" wheel, silicon carbide, med. grit	25.00
Extra grinding wheel for above,	12.00
Sheet metal shears, 12"	10.00
	<u>564.00</u>

From page one 1900.00
 Per workshop \$ 2464.00

For two workshops \$ 4,928

May 5,000

PLUMBING PIPES, FEATURES, AND ACCESSORIES

<u>Item</u>	<u>No. Req'd</u>	<u>Unit Cost</u>	<u>Total Cost</u>
1/2" Galv. Foot Valve	75	12.00	900.00
1/2" to 1" Galv. bushing	75	1.50	112.50
1/2" to 3/4" " "	75	0.90	67.50
Rotary gear hand pump 3/4"	75	37.20	2,835.00
3/4" Galv. steel pipe	1350	70.00/C	945.00
3/4" Galv. Ell	180	0.53	95.40
3/4" Union	135	1.29	174.15
3/4" Galv. coupling	75	0.53	39.75
1/2" Galv. pipe plug	60	0.39	23.40
1/2" Galv. steel pipe	400	50.00/C	200.00
1/2" Brass close nipple	75	1.50	112.50
1/2" Brass locknut	150	0.76	114.00
3/4" Brass close nipple	75	0.58	43.50
3/4" Brass locknut	150	0.52	78.00
1/2" PVC pipe	600	0.129	77.40
1/2" PVC "T"	75	0.55	41.25
1/2" to 3/4" PVC bushing	75	0.25	18.75
3/4" PVC pipe	2800	0.099	277.20
1/4" PVC male adapter	75	0.17	12.75
1/4" PVC female adapter	75	0.22	16.50
1/4" PVC Ell	255	0.25	63.75
1/4" PVC "T"	315	0.25	78.75
1/4" PVC Coupling	400	0.15	60.00
1/4" to 1/2" female adapter	150	0.19	28.50
1/4" to 1/2" PVC bushing	150	0.19	28.50
1/2" PVC Pipe	650	0.085	55.25
1/2" PVC "T"	255	.44	112.20
1/2" PVC Female adapter	270	.19	51.30
1/2" PVC Male adapter	150	.15	22.50
1/2" PVC Ells	165	.19	31.35
chromed faucet w/x handle	130	6.00	1080.00
chromed lavatory faucet	15	9.00	135.00
toilet, 2 piece, jet siphon, w/installation kit and supply kit	135	60.00	8100.00
lavatory, 19" x 17" basin, w/1/2" trap to floor, waste and supply kit	135	35.00	4725.00
lower kit, head, 2 valves	15	10.00	150.00
Extra Toilet Seats, wooden, enameled	12	6.00	72.00

DOOR AND WINDOW HARDWARE

	<u>McMaster's Cat. No.</u>	<u>Description</u>	<u>No. Req'd.</u>	<u>Unit Cost</u>	<u>Total Cost</u>
Exterior door	1361E2	Exposed parts bronzed	316 ea.	8.70	2749.20
Interior door	8091A11	Latch bolt operated by knob	120 ea.	3.86	463.20
Door hinges	1488A11	3"X2 3/4" Brushed stain- less. Screws not included.	867 pr.	2.11	1829.37
Window hinges Tool Cabinet Hinges	1601A34	3"X2" Steel with brass finish with wood screws	1330 pr.	1.63	2167.90
Panel Locks for Tool cabinet	1683E2	For wood cabinet, keyed alike	12 ea.	2.60	31.20
Window Latch	1664A1	Steel, bright brass fi- nish	1200 ea.	0.59	708.00
Brass Cup Hooks	9417K5	Wire size. 120 brass	4600 ea.	.066	303.50
Brass Chain	3609W24	Weldless, stamped, bright brass finish. Size #91	1500 ft.	37.76/C	566.40
Hook and Eye	1779A13	Zinc plated 2"	50	4.70	4.70
Window Operator	1072A15	Wood Casement window operators. Screws furnished	135	6.11	824.85
Flat Head Screws	9006A110	1/4"X1/4", zinc plated, steel 6 boxes		.81	4.86
" " "	9006A151	3/4"X1/4" " " " 6 "	6 "	.92	5.52
" " "	9006A153	1"X1/4" " " " 6 "	6 "	1.12	6.72
" " "	9006A199	1"X1/8" " " " 110 "	110 "	1.24	136.40
" " "	9006A203	1 1/4" X1/8" " " " 6 "	6 "	1.64	9.84
" " "	9006A253	2"X1/10" " " " 6 "	6 "	2.48	14.88
Eight Steel Brads	97828A666	1/4"X1/8" " " " 2 "	2 "	1.36	2.72
" " "	97828A668	3/4"X1/16" " " " 2 "	2 "	1.09	2.18
" " "	97828A600	1"X1/16" " " " 2 "	2 "	1.06	2.12
					<u>\$9,833.66</u>

Wiring and Electrical Needs for the Workshops (provisional)Materials List per Workshop

Indoor/Outdoor Romex , 250' roll, 2-12 plus grd.			\$ 30.00
Staples, 250 @ \$1.00/C			2.50
4" Octagon boxes with clamps for Romex	20 ea.	0.90	18.00
Flat cover for above boxes	20 ea	0.25	5.00
Toggle switch, 15 amp rating	6	1.50	9.00
Circuit Breaker Panels, 100 amp. 10 circuits	1	45.00	45.00
Circuit Breakers, 15 amp	6	7.00	42.00
Flourescent Lights, 2 tube, 48", w/reflector	12	12.00	144.00
Distribution Box, 6 circuits (panel box)	1	24.00	24.00
Circuit Breakers, 20 amp.	4	3.00	12.00
Romex, 2-14 plus grd. , 1/2 of 250 ft roll	1/2 roll	15.00	15.00
Transformer, 5KVA.	1	200.00	200.00
			<u>546.00</u>

Electrical tools for Workshops (Do not order until further notice)

Electric Drill, 3/8", 1/2 HP motor, variable speed	35.00
Saber saw, 1/2 Hp, variable speed	40.00
Extra saw blades for above, 16 to set, 4 sets @ \$5.00	20.00
Rotary Grinder, variable speed, with 15 bits for carving	80.00
Soldering iron, with six replaceable tips,	20.00
Resin core solder, 16 gage, 1/2 lb. roll	4.00
	<u>\$ 199.00</u>

Glazing (Lexan)

size	No. Req'd	Total Sq. Ft.
18" x 18"	165	372
18" x 24"	2148	6444
18" x 36"	30	135
18" x 48"	20	120
36" x 48"	15	180
		<u>7251</u> sq. ft. @ \$2.00/ sq. ft. = \$14,502

Glazing Putty	5 gallon Pail, for wooden sash	\$28.00
Wire brads for glazing	3/4" long, 16 gage, 10 lbs @ 1.25	<u>12.50</u>
		40.50
	Say	\$15,000

Blackboards 4' x 8' 204 req'd @ \$40.00 8,160

Bulletin Boards 4' x 8' 100 req'd @ 30.00 3,000

REVISED ESTIMATES

<u>Item</u>	<u>Unit</u>	<u>Unit Cost</u>	<u>Original</u>	<u>Revised</u>
<i>Cement</i> Cement	Ton	\$ 65	110,000	130,000
Steel	Ton	400	27,200	27,200
Timber (Treated)	Mbm	500	67,500	60,000
Plywood	Sheet	20	3,600	4,000
Tiles	100# keg	130	600	1,500
Door and Window Edw.	Lot		5,000	10,000
Paint and Tools	Lot		5,000	5,000
Iron. Asb. Roofing		180	180,000	100,000
Glass (glazing)		200	10,000	15,000
Sanitary Fixtures	Lot		34,030	15,000
Piping and Accessories	Lot		5,000	5,978
Blackboards	Each	40	81,600 (error)	8,160
Aluminum boards	Each	30	3,000	3,000
Miscellaneous			<u>10,000</u>	<u>157,692</u>
			542,530	542,530

Deferred Purchases:

Electrical Wiring for shops (both shops)	\$1092.00
Electrical Tools " "	400.00
Solar Hot Water Heater for Moradias, \$450 X 15	<u>6750.00</u>
	\$8242.00

General Criteria for the Construction
of Primary Schools
of

A. Classrooms

- 1 Classroom
- 2 Classrooms
- 3 Classrooms
4. Classrooms
- 6 Classrooms

B. Residences for Teachers

C. Manual Arts workshops

I. Fundamental Premises for the Construction Project for the Primary Schools

- 1.1 The construction of schools at the primary level as planned by the Minister of Education on a national level consists of five types of schools: 1,2,3,4, and 6 classroom schools. However, in the first phase, the emphasis will be on schools of one and two classrooms in rural areas but schools of 4 and 6 classrooms will be of more importance in more populated areas.
- 1.2 All of the schools of whatever size must be based on the concept of the evolution of the basic unit concept.
- 1.3 The basic school unit will consist of the following elements:

Elemento I 1 classroom

Element II 1 covered area serving as a recreation area and for the distribution of milk or other light foods.

Element III Sanitary installations.

Element IV Sports facilities

Element V Facilities for teachers, a secretary and storage facilities for books and supplies. (Only for facilities of three classrooms or more).

- 1.4 The basic elements of construction will be used in the following manner:

Element I (Classrooms) The basic classroom units will be repeated as required

Element II (covered area) The size of this portion will be increased depending on the number of students served.

Element III (Sanitary installations) The capacity will be increased depending on the number of students served.

Element IV (Sports Facilities) For schools of 1 and 2 classrooms, the area will be sufficient for a volley ball court. For schools larger than 3 classrooms, the area will be sufficient for a basketball court.

Element V (teacher's and administrative Facilities) To be constructed only for schools of more than 3 classrooms.

- 1.5 It is planned that the students will have other activities than formal classroom studies. For this extra-curricular activity an open air area will be provided for small presentations and recitals.

2. Basic Parameters for the Project

2.1 Geographical

- 2.1.1 The schools will be constructed on relatively level land in the case of Sal and Boa Vista and on the best land available on the other islands.

2.1.2 As yet only the general location of the actual site for the school is known, but it is expected that the schools will be sited in locations where the depth of the foundations will not exceed 1.00 meters. Also, since the schools will be one story structures, no exceptional foundation problems are foreseen. However, in case of need, the use of special foundations may be required.

2.2 Climate and Altitude

2.2.1 The country is located between latitudes 15 degrees 17 degrees.

The average latitude of the leeward islands is 15 degrees
For the windward side the average is 17 degrees.

2.2.2 Wind Currents

Except for the months of August and September when the winds blow from the south, southeast or west, the winds blow primarily from the Northeast.

2.2.3 The Climate

The climate is typically hot and dry between November and June

From July through October it is hot and humid

The lowest temperatures occur in December through Feb.

The temperature is the highest between August and Oct.

For constructions located on the coasts below the altitude of 400 meters above sea level, cross ventilation is necessary.

Those located above 400 meters do not need cross ventilation and curtains and drapes are not required.

There is more precipitation in areas above 400 meters.

The days are very bright at altitudes below 400 meters and is generally less bright above this altitude especially during the months of December through February.

2.3 Locally available construction materials

2.3.1 Materials

Stones: basaltic
calcareous
sandstones of the type called "Fontes or Santa Catarina"

Sand Black (basaltic)
white (calcareous, broken seashells)
lime production limited.

Pozzalin From Santo Antao

2.3.2 Imported Materials

Cement
hydrated lime
wood
glass

2.3.2 continued

steel and hardware
roofing tiles of fired clay and sheets of corrugated
asbestos cement roofing
plywood and particle board

2.3.3 Building materials produced locally
concrete blocks

3. Construction Methods and Procedures.

3.1 Traditional Procedures

3.1.1 Foundation walls

stone masonry
block masonry

3.1.2 Floors

colored terrazo type concrete slabs
natural flagstones

3.1.3 Roofing

concrete or wooden trusses
corrugated cement asbestos sheets
roofing tiles of fired clay

3.1.4 Millwork (Carpintaria)

millwork (doors and windows) wooden of local fabrication
glazing 3mm (3/16")

3.1.5 Painting

Walls- Water soluble paints or whitewash
Woodwork- Oil base paints, three coats

3.1.6 Piping (canalizaceos)

Potable water- galvanized iron or P.V.C.
Sanitary- cast iron, cement asbestos or P.V.C.

3.1.7 Sewage treatment

Septic tank with leaching pit or leaching field where water
is available.

Temporary pit latrines where water is not yet available.

4. Organization of functional spaces as presented

4.1 Each element of the school is organized as follows:

One Classroom Schools will have:

Element I, Element II, Element III and Element IV plus an
open air multipurpose area (anfiteatro)

Two Classroom Schools

Same as for the one classroom school except that there will be two classrooms instead of one.

Three Classroom Schools

Same as above except for three classrooms and the addition of Element V, the administrative center and teacher's lounge.

Four Classroom Schools

Same as for the three classroom school except for the four classrooms.

Six Classroom Schools

Same as for the four classroom schools except for the extra classrooms.

4.2 Organization

All functional spaces of the school complex shall be constructed around a central patio which will be used as a multipurpose area or open air amphitheater.

The classrooms, the teacher's room and the entrances will be on the circumference of the nucleus.

The covered areas, the sanitary installations and the playfield shall be located in the most convenient location in the complex.

The two main entrances shall be located for the most convenient access to the classrooms and the playing field.

At the confluence of the movements from the two entrances will be situated the teacher's lounge.

Each complex shall be made up of individual elements but will function as one integrated unit with the following objectives:

- a) To create the feeling of the traditional housing complexes where each functional area is separated but act as a unit.
- b)
- c) To arrange each construction so that it can be completed in phases as financing and needs become available.
- d) To individualize each functional area with a low wall, not with the idea of separating each area but to emphasize the idea that each functional area is a part of the total complex.

4.3 Open Areas

The open areas contained in this project shall be used for the following functions:

For vehicles for the delivery of supplies and materials.

Open air multipurpose areas (anfiteatro) or sports fields.

Gardening (Hortos Escolares) where water is available.

5. Construction Methods and Procedures

5.1 Fundamentals

One of the problems of the country is to utilize the common labor available throughout the country.

These common laborers are experienced in certain technologies which are related to the use of local and imported materials.

There is an extreme urgency to utilize to the best advantage the scarce local materials available.

5.2 Decision

Therefore it is recommended that traditional methods of construction be used.

Thus:

5.3 Construction

5.3.1 Foundations

Foundations walls to be made of local stone masonry with a 1:5 mortar mix in trenches with a minimum depth of 0.70 meters.

The backfill shall be compacted earth or small stone chips (waste) with the minimum open spaces possible.

The open areas inside the foundation walls shall be backfilled with compacted earth up to within 8" (20 centimeters) of the bottom of the floor slab. Over this shall be laid a stone foundation as a bed for the 3" (7 centimeter) concrete floor -arked off in 1 meter squares. The floor shall be laid in alternate squares.

5.3.2 Above grade walls

The above grade walls shall be made of stone masonry 16" (40 centimeters) thick laid with a 1:6 mix (1:4:10).

Walls 20 centimeters and 10 centimeters thick shall be constructed of concrete block (interior non-bearing walls).

5.3.3 Roofing structure

The roofing shall be corrugated cement asbestos sheets with small corrugations approximately 6" from crest to crest (miniondas) fastened with lag screws or special fastening hooks as recommended by the manufacturer.

A ceiling of celotex (Playtex) is recommended for the classrooms and the teacher's lounge.

5.3.4 Floors

In the teacher's lounge, the area for the preparation of the milk sanitary areas and the play area the floor should be of the terrazo type with small pea gravel concrete with coloring added. This surfacing shall be 1" thick.

5.3.5 Plastering

The front and back walls of the classrooms shall be plastered only to the height of 2.3 meters. The walls containing openings for doors and windows shall be plastered in its entirety.

Internal walls of the sanitary areas and the area for the preparation of milk shall be smooth plastered up to wainscoting height or tiled up to a height of 1.5 meters.

All other walls inside and outside shall be plastered and painted or whitewashed.

The plaster shall be a mix of 1:6 and a finish coat with a 1:2 mix and not more than 1/8" thick shall be applied.

5.3.6 Millwork (carpintaria)

All millwork shall be of wood.

All door and window hardware shall be chrome plated

All locks shall be of the type "YALE" and shall be surface mounted.

All glazing shall be 3mm (3/16")

5.3.7 Piping for potable water

All piping after the overhead tank shall be of galvanized steel pipe.

All construction shall have a cistern if financing is available.

All faucets shall be brass.

All piping shall be surface mounted.

5.3.8 Sewage piping

All sewage piping shall be of cement asbestos 3" in diameter (80 millimeters) for "grey" water from wash basins and showers and 4" in diameter (100 millimeters) for all "black" or sewage waters from toilets. These pipes shall lead to a septic tank with a leaching pit or a leaching field.

5.4 Sanitary fixtures

As shown in the drawings it is preferable to use "squat type" (retretes turcas) instead of the traditional "sit down" type.

A shallow concrete trough with multiple faucets may be substituted for the wash basins.

5.5 Dishwashing Facilities

A stainless steel sink of 1 meter shall be installed in the milk preparation area.

5.6 Painting

Plastered walls shall be painted with a water soluble paint or whitewashed.

All woodwork shall have a triple coating of oil base paint.