

UNCLASSIFIED

UNITED STATES INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
AGENCY FOR INTERNATIONAL DEVELOPMENT
Washington, D. C. 20523

CARIBBEAN REGIONAL

PROJECT PAPER

EPIDEMIOLOGICAL SURVEILLANCE & TRAINING

LAC/DR:79-015/1

Project Number:538-0027

UNCLASSIFIED

PROJECT DATA SHEET

1. TRANSACTION CODE

A = Add
 C = Change
 D = Delete

Amendment Number
one

DOCUMENT
 CODE
3

2. COUNTRY/ENTITY

Caribbean Regional

3. PROJECT NUMBER

538-0027

4. BUREAU/OFFICE

LAC, RDO/C

05

5. PROJECT TITLE (maximum 40 characters)

Epidemiological Surveillance & Training

6. PROJECT ASSISTANCE COMPLETION DATE (PACD)

MM DD YY
1 | 2 | 3 | 1 | 8 | 4

7. ESTIMATED DATE OF OBLIGATION

(Under 'B.' below, enter 1, 2, 3, or 4)

A. Initial FY 79

B. Quarter

C. Final FY 83

8. COSTS (\$000 OR EQUIVALENT \$1 =)

A. FUNDING SOURCE	FIRST FY <u>79</u>			LIFE OF PROJECT		
	B. FX	C. L/C	D. Total	E. FX	F. L/C	G. Total
AID Appropriated Total						
(Grant)	(388.9)	()	(388.9)	(1,960.0)	()	(1,960.0)
(Loan)	()	()	()	()	()	()
Other U.S.						
1.						
2.						
Host Country						
Other Donor(s)		135.1	135.1		610.0	610.0
TOTALS	388.9	135.1	524.0	1,960.0	610.0	2,570.0

9. SCHEDULE OF AID FUNDING (\$000)

A. APPROPRIATION	B. PRIMARY PURPOSE CODE	C. PRIMARY TECH. CODE		D. OBLIGATIONS TO DATE		E. AMOUNT APPROVED THIS ACTION		F. LIFE OF PROJECT	
		1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan	1. Grant	2. Loan
(1) PH	510	500		1,160.0		800		1,960.0	
(2)									
(3)									
(4)									
TOTALS				1,160.0		800		1,960.0	

10. SECONDARY TECHNICAL CODES (maximum 6 codes of 3 positions each)

11. SECONDARY PURPOSE CODE

12. SPECIAL CONCERNS CODES (maximum 7 codes of 4 positions each)

A. Code

B. Amount

13. PROJECT PURPOSE (maximum 480 characters)

- 1.) To increase CAREC capability to assist CMCs in laboratory and surveillance activities.
- 2.) To improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease
- 3.) To further West Indian middle management at CAREC

14. SCHEDULED EVALUATIONS

15. SOURCE/ORIGIN OF GOODS AND SERVICES

Interim MM YY MM YY Final MM YY
0 | 3 | 8 | 5

000 941 Local Other (Specify)

16. AMENDMENTS/NATURE OF CHANGE PROPOSED (This is page 1 of a _____ page PP Amendment.)

17. APPROVED BY

Signature

William B. Wheeler

Title: William B. Wheeler
 Director, RDO/C

Date Signed

MM DD YY
0 | 3 | 5 | 8 | 3

18. DATE DOCUMENT RECEIVED IN AID/W, OR FOR AID/W DOCUMENTS, DATE OF DISTRIBUTION

MM DD YY

PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS
AMENDMENT NUMBER ONE

NAME OF ENTITY: Pan American Health Organization

NAME OF PROJECT: Epidemiological Surveillance and Training

PROJECT NUMBER: 538-0027

Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, the Epidemiological Surveillance and Training Project was authorized on May 4, 1979. That authorization is hereby amended as follows:

1. The total amount of A.I.D. appropriated funding is increased from One Million One Hundred and Sixty Thousand Dollars (\$1,160,000) to a new total of not to exceed One Million Nine Hundred and Sixty Thousand Dollars (\$1,960,000) to be grant funded from the date of this authorization to June 30, 1985.
2. The project will: 1) increase the Caribbean Epidemiology Centre's (CAREC) capability to assist CAREC member countries (CMCs) in laboratory and surveillance activities, 2) improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease, 3) and further develop West Indian middle management at CAREC.
3. Funds available under this agreement shall be utilized for laboratory and surveillance training of nationals from only the countries of; Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts/Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Turks and Caicos.
4. Conditions Precedent to Disbursement of funds for this Amendment to the Project Agreement are as follows:

Prior to any disbursement, or the issuance of any commitment documents under this Project Agreement Amendment, other than for technical assistance, PAHO/CAREC, unless A.I.D. agrees otherwise in writing, shall furnish to A.I.D., in form and substance satisfactory to A.I.D:

- a) Evidence of the nature and extent of PAHO's continued support to CAREC through at least 1987.
 - b) A workplan for the first year of the Project Agreement Amendment which shall indicate the costs to be financed with A.I.D. grant resources under this amendment.
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5. Special Covenants for the Project Agreement Amendment are as follows:

PAHO/CAREC covenant that they will:

- a) Exert their best efforts over the life of the amendment to increase the proportion of the core budget financed by CMC contributions.
- b) Fill the Statistical Officer position in the CAREC Surveillance Unit by July 1, 1983.
- c) Fund the Audio-Visual Technician position in the CAREC Training Unit from the CAREC core budget by January 1, 1985.
- d) Establish a Deputy Epidemiologist position within the CAREC Surveillance Unit, to be funded from CAREC's core budget, by January 1, 1985.
- e) Conduct with A.I.D. a final evaluation of the grant prior to the termination of the Grant Amendment.

The authorization cited above remains in full force and effect except as hereby specifically amended.

William B. Wheeler

William B. Wheeler
Director, RDO/C

March 25, 1983
Date

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EPIDEMIOLOGICAL SURVEILLANCE & TRAINING

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PROJECT REVIEW COMMITTEE

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I. SUMMARY AND RECOMMENDATIONS

A. Face Sheet

See preceding Face Sheet for summary of fiscal data.

B. Recommendations

The Project Amendment Design Team recommends authorization of an increase in grant financing of \$800,000 to a new total of \$1,960,000 for the Epidemiological Surveillance and Training Project to be implemented by the Pan American Health Organization/Caribbean Epidemiology Centre.

C. Grantee

The Grantee for the project is the Pan American Health Organization (PAHO). The executing agency is the Caribbean Epidemiology Centre (CAREC) in Port-of-Spain, Trinidad. CAREC is a center of the Pan American Health Organization established in 1975 for the purpose of improving epidemiological services to its member countries and the Caribbean region as a whole. CAREC member countries (CMCs) are: Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts/Nevis, St. Vincent and the Grenadines, St. Lucia, Suriname, Trinidad and Tobago, Turks & Caicos.

D. Project Summary

The goal of the amended project is to improve the health status of Caribbean populations through a reduction in the incidence and prevalence of communicable/infectious diseases. The purposes of the project are:

1. To increase CAREC capability to assist CMCs in laboratory and surveillance activities.
2. To improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease.
3. To further develop West Indian middle management at CAREC.

Specific project activities as they relate to the sub-purposes are as follows:

1. To increase CAREC capability to assist CMCs in laboratory and surveillance activities.
 - a) Continued support of the three person Training Unit through December 1984 when its functions will have been taken up by core budget funded units at CAREC.
 - b) Preparation of teaching manuals and audio-visual materials.
 - c) Development of a continuing education program for CMC surveillance personnel.

- d) Support of a U.S. Centers for Disease Control epidemiologist who will fill training and technical assistance roles in the Surveillance Unit.
 - e) Support of a trainee non-medical epidemiologist in the Surveillance Unit.
2. To improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease:
- a) Traineeships at CAREC for medical officers and medical students, and other public health officials.
 - b) Workshops for laboratory directors, laboratory technicians, designated epidemiologists, deputy epidemiologists, surveillance statistical officers, animal health assistants.
 - c) In-country workshops on epidemiology and primary health care.
 - d) Workshops in the teaching of epidemiology for nursing and environmental health inspector tutors.
 - e) On-site strengthening of laboratory management, laboratory techniques, data collection and use.
 - f) Provision of epidemic investigation supplies, laboratory proficiency testing materials, and refrigerators for immunization programs.
 - g) Provision of surveillance and laboratory teaching materials for in-country use.
 - h) In-country workshops and technical assistance on sexually transmitted diseases.
3. To further develop West Indian middle management at CAREC.
- a) Support of management and technical training for CAREC core staff.
 - b) Training of West Indian medical and non-medical epidemiologists in the Surveillance Unit.

E. Summary Findings

Both the mid-term evaluation (January-February 1981) of the original grant and the review of project progress that was conducted as a part of the project amendment design (November-December 1982) found that almost all the objectives of the original grant were being met on schedule and with a high degree of quality.

Financial, Institutional, Social, Technical and Economic Analyses have found the project amendment to be both sound and needed. A negative environmental threshold decision was made for the original project; as there are no basic changes in the types of activities to be conducted under the amendment a new determination is not necessary. The design team concludes that the proposed amendment to this grant is feasible and needed. In order to consolidate existing activities, increase the skills of surveillance and laboratory personnel and improve the host country institutions that are responsible for epidemiologic surveillance, an amendment to extend the length and breadth of the existing grant is proposed.

F. Conditions and Covenants

The standard provisions contained in the original grant agreement will be utilized for the amendment.

A. Source and Origin of Goods and Services

Except for ocean shipping, goods and services financed by AID under the grant amendment shall have their source and origin in Geographic Code 000 (foreign exchange costs) and the member countries of CAREC (local costs), except as AID may otherwise agree in writing. Ocean shipping under the original grant and this amendment will be from Geographic Code 935.

B. Conditions Precedent to Initial Disbursement

Prior to any disbursement, or the issuance of any commitment documents under this Project Agreement Amendment, other than for technical assistance, PAHO/CAREC, unless AID agrees otherwise in writing, shall furnish to AID in form and substance satisfactory to AID:

- 1) Evidence of the nature and extent of PAHO's continued support to CAREC at least through 1987.
- 2) A workplan for the first year of the Amendment which shall indicate the costs to be financed with AID Grant resources under the Amendment.

C. COVENANTS

PAHO/CAREC covenant that they will:

- 1) Exert their best efforts over the life of the Amendment to increase the proportion of the core budget financed by CMC contributions.
- 2) Fill the Statistical Officer position in the CAREC Surveillance Unit by July 1, 1983.
- 3) Fund the Audio Visual Technician position in the CAREC Training Unit from the CAREC core budget by January 1, 1985.

- 1-
- 4) Establish a Deputy Epidemiologist position within the CAREC Surveillance Unit, to be funded from CAREC's core budget, by January 1, 1985.
 - 5) Conduct with A.I.D. a final evaluation of the Grant prior to the termination of the Grant Amendment. This evaluation:
 - a) will be designed and conducted by CAREC staff, member country professionals, A.I.D. health staff, and outside experts;
 - b) will involve both the review of CAREC records, interviews with CAREC staff and visits to member countries;
 - c) will consider both process measures of project accomplishments (e.g. numbers of courses/trainees) and impact of the project in terms of institutional strengthening of CAREC and improvement of member country capabilities in surveillance outbreak investigation, laboratory analysis and surveillance data utilization;
 - d) will be printed and distributed to member countries and other donors to CAREC.

G. Waivers

The following waivers were approved for the original grant and will apply to this amendment.

A. Waiver from Code to Code 935 for AID Financing of Shipping Costs

The Caribbean region, particularly the LDC's which will participate in this project are simply not able to comply with the normal shipping source requirements. American flag carriers do not call at these islands with sufficient frequency to enable grant financed commodities such as refrigerators to be secured in a timely manner. Although these items do not compose a large portion of the grant budget they are critical to the program and delays in arrival would jepordize implementation. These countries are well served by other Code 935 flag carriers.

(B.) Waiver of 50-50 Shipping Requirement

Because of the scarcity of U.S. Flag carriers servicing the countries participating in the project, it is impossible to expect that 50% of the gross tonage and 50% of the gross freight revenue generated by ocean shipment of project goods be on U.S. flag vessels.

H. Eligible Countries

Countries eligible for assistance under this Amendment are: Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts/Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Turks and Caicos.

I. SUMMARY FINANCIAL PLAN

	<u>ORIGINAL GRANT BUDGET</u>	<u>AMENDMENT</u>	<u>TOTAL</u>
I. POST-TECHNICAL ASSISTANCE			
A. Technical Unit	126,430	131,300	257,730
B. Surveillance Unit	-	132,525	132,525
II. TRAINING			
A. Attachments	206,718	31,719	238,437
B. Workshops/Courses	349,015	259,620	608,635
C. On-the-bench Lab Training	21,000	19,200	40,200
III. EQUIPMENT/SUPPLIES			
A. Laboratory Equipment	41,000	-	41,000
B. Laboratory Supplies	30,759	14,300	45,059
C. Immunization Equipment	14,476	23,100	37,576
D. Information System	58,700	-	58,700
IV. OTHER ACTIVITIES			
A. Training & A-V Materials/Supplies	16,000	25,200	41,200
B. Zoonoses Survey	25,000	-	25,000
C. Evaluation	25,000	11,000	36,000
D. STD Program	-	50,000	50,000
E. CAREC Staff Development Training	-	10,000	10,000
IV. CONTINGENCY	45,705	-	45,705
V. PROGRAM SUPPORT COSTS	<u>191,961^{1/}</u>	<u>92,036^{2/}</u>	<u>283,997</u>
TOTAL BUDGET	1,151,764	800,000	1,951,764
AMOUNT AUTHORIZED	1,160,000	800,000	1,960,000

1/ Calculated at 20%

2/ Calculated at 13%

II. BACKGROUND

A. Previous AID Support to CAREC

In 1979 AID granted \$1,160,000 to CAREC. The purposes of the grant were to 1) increase CAREC capability to assist CMCs in laboratory and surveillance activities, 2) improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease, and 3) further develop West Indian middle management at CAREC.

To achieve these purposes, necessary laboratory and cold chain equipment was provided for CAREC and CMC's. A Training Unit was established at CAREC. Training materials were developed and numerous training exercises directed at improving CMC capabilities were conducted. Funds were also provided to train a West Indian to take the Statistical Officer position at CAREC.

An intensive AID/CDC/CAREC mid term evaluation of the project (Annex C) and a review of project activities by the design team for this amendment (Annex E) both concluded that project outputs have been produced in a timely manner. CAREC has effectively promoted and helped develop national disease surveillance and public health laboratory infrastructures and has provided a regional focal point for information and skill interchange. All CMCs now have designated epidemiologists, deputy epidemiologists (except Anguilla), surveillance statistical officers and designated laboratorians that have been trained by CAREC under the original grant. As a result of the training there have significant increases in CMC capabilities. CAREC has assisted rapidly and effectively when problems have occurred whose extent was beyond national capabilities and/or whose implications were regional.

CAREC Capabilities

Using AID grant funds CAREC has developed an impressive training capacity. There are programs for design, scheduling and evaluation of training sessions. Teaching methods have been improved. There are a new and updated series of training materials, a series of field manuals for in-country use, and a workshop capable of producing high quality audio-visual and printed teaching materials. This increased capacity can be seen in the fact that in 1979, prior to the AID, grant CAREC ran 40 training activities. In 1982 there were 130 separate training activities. Another significant change has been the movement of the training to the CMCs, thus allowing broader participation in a more realistic setting. In 1979, 40% of training was conducted outside of CAREC; in 1982 it was 87%.

CAREC's Surveillance Unit has been strengthened under the original grant through a training program for a junior statistician. This individual is slated to become the Centre's Statistical Officer at the conclusion of the original grant.

CAREC's laboratory Unit has effectively used equipment provided under the original grant to improve training programs, particularly their proficiency testing program for CMC laboratories.

CMC Capabilities

The impact of grant activities on CMC capabilities is displayed in Table 3. All CMCs have the staff necessary for effective surveillance, outbreak investigation and laboratory work. This represents an additional 21 individuals who did not have responsibilities in these areas prior to the grant. Some countries have staffed their Surveillance Teams at levels greater than was originally anticipated.

There have been significant increases in surveillance and outbreak investigation capabilities (Table 6). Laboratory capabilities have shown a respectable, although somewhat lesser, improvement. All basic equipment necessary for CMC laboratories to perform at the levels that are projected as "End of Project Status" has been provided under the original grant. Cold chain equipment needed for immunization programs has been provided and is in use.

B. Rationale for Continued AID Support

Although CMC capability levels in surveillance, outbreak investigation and laboratory analysis have improved significantly, they are still not at the levels projected in the original project design. However, these capability levels are technically achievable by the CMCs and all necessary personnel and equipment is in place. There are compelling technical and financial needs for the CMCs to fully develop these potential capabilities. Response times for outbreaks and lab analysis is much less if work is done in country. Also important, is the fact that CAREC services are expensive to maintain and provide. To the extent CMC's can handle routine matters on their own, they are freeing up CAREC resources that can then be applied to problems that are either regional in nature or are truly beyond the capabilities of the country and thus appropriate for the highly trained personnel at CAREC to address.

Continued AID assistance will thus focus on the "topping off" of CMC capabilities through further training. At the end of the grant amendment, CMCs will have these basic capabilities. CAREC's training program can then phase over to a skills maintenance and continuing education mode.

CAREC's Surveillance and Laboratory Units, with the assistance of an audio-visual technician producing training materials, will be able to manage this less intensive training program. This transition in training focus and responsibility will be accomplished under the grant amendment.

The grant amendment will also support several new activities directly related to the phase out of AID funding. One is a series of in-country workshops designed to assist CMCs with the utilization of the surveillance data they are producing for planning, programming and evaluative purposes. The extensive data being produced is now utilized for surveillance and outbreak functions in CMCs and at CAREC. These data have much broader applications which the amendment will foster. The area of sexually transmitted diseases will be utilized as a specific example in this effort.

Development of CAREC capabilities in training was a major focus of the original grant. Although of lesser priority under the amendment, there are still CAREC capabilities that need to be expanded, primarily in the Surveillance Unit. Since CAREC's inception, the Surveillance Unit has had an epidemiologist seconded from the Centers for Disease Control. Due to budget cuts within the U.S. Government, CDC will not be able to continue provision of these services. CDC and AID will jointly sponsor the extension of the CDC epidemiologist in the Surveillance Unit. This individual will, in turn, train a CAREC staff medical epidemiologist and a trainee non-medical epidemiologist to assume his duties. At the completion of the training period the Surveillance Unit will have sufficient, trained West Indian personnel to continue its functions without external assistance.

A final activity focusing on CAREC capabilities and West Indianization of middle management is training of CAREC staff. The amendment will sponsor limited training in such areas as laboratory management and the development of improved maintenance programs for the extensive equipment at CAREC.

III. PROJECT DESCRIPTION

A. PURPOSE

The project purpose remains the same as that of the original grant; specifically:

- To increase CAREC capability to assist CMCs in laboratory and surveillance activities.
- To improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease.
- To further develop West Indian middle management at CAREC.

B. PROJECT ACTIVITIES

Table 1 summarizes those activities completed under the original grant, changes under the amendment and those activities which will be incorporated on a long term basis into CAREC's core activity at the cessation of AID funding. A fuller description of those activities follows:

1. Posts/Technical Assistance

a. Training Unit

Under the initial grant a Training Unit was established consisting of a training officer on audio-visual technician and a secretary. The Training Unit develops training materials, plans and administers training throughout the region (with technical course elements delivered by core CAREC staff) and is charged with producing and disseminating audio-visual materials on surveillance and laboratory methods.

Without continued AID support for the Training Unit the advances made over the past years in developing national staff might be significantly diminished. The Training Unit's posts that will continue to be supported include the training officer, an audio-visual technician and a secretary. This staff will be required to arrange and support approximately 18 regional workshops, as well as 36 national seminars/workshops over the course of the amendment. In addition, new sets of training aids will be necessary such as home study materials and slide/cassette packages. Training activities for 1983, 1984 and 1985 are listed below. They include workshops at CAREC and other West Indian sites, individual consultations in each country, and attachments for medical officers, medical students, and other key CMC staff at CAREC. Particular effort will be made to train instructors in nursing and public health inspector schools, as well as those responsible for in-service training, so that they can pass on needed epidemiological information and skills.

The activities of the Training Unit will be intensive and attempt to anticipate future needs. With the end of this grant, the Training Unit will be phased down as a separate organizational entity, maintaining only the audio-visual technician. Its other functions will be incorporated into the other CAREC operational divisions, Surveillance and Laboratory. An objective of the Training Unit during the course of the

ACTIVITY SUMMARY FOR CARIBBEAN EPIDEMIOLOGICAL CENTRE

AID FUNDED ACTIVITIES

	<u>ORIGINAL GRANT</u>	<u>GRANT AMENDMENT</u>	<u>CONTINUING AFTER AID FINANCING CEASES</u>	<u>COMMENTS</u>
I. Post/Technical Assistance				
A. Training Unit				
Training Officer	X	X	-	A-V technician will continue routine production of training materials after AID grant terminates. Training functions to be assumed by Surveillance and Laboratory Units.
A-V Technician	X	X	X	
Secretary	X	X	-	
B. Surveillance Unit				
Medical Epidemiologist	-	X	-	Core budget financed medical epidemiological plus non-medical epidemiologist to be trained by AID funded medical epidemiologist will continue surveillance work after end of AID grant. Statistical trainee to move to core position beginning July, 1983.
Non-medical Epidemiologist	-	X	X	
Statistical Trainee	X	X	X	
II. Training				
A. Traineeships/Attachments (numbers)				
Medical Officer	12	4	X	Grant funds utilized to upgrade skills of national surveillance teams and introduce medical students to concepts of epidemiology under original grant. Amendment will provide funds for CAREC traineeships for workers still in need of additional training. Traineeships, to meet attrition, will continue after the termination of AID funding.
Dept. Epidemiologists	50	-	X	
Surveillance Statistical Officers	2	-	X	
Lab. Technicians	6	-	X	
Medical Students	5	2	X	
PHI/PHN/Others	3	6	X	
B. Training Course(#of courses/# of participants)				
1. Surveillance/Data Utilization				
Designated Epidemiologist	3/60	2/36	X	Surveillance and laboratory courses at CAREC and in-country will continue on reduced (as needed) basis after termination of AID funding. Continuing education programs utilizing written and A-V materials to allow in-country self-study will be developed so that essential training can continue, but at less cost.
Deputy Epidemiologist	4/82	4/52	X	
Surveillance Statistical Officers	4/47	1/17	X	
Animal Health Assistants	2/29	1/10	-	
Nurse and EHO Tutors	-	2/30	-	
On-Site Immunization Workshops	12/153	-	X	
On-Site Surveillance/Epiemiology workshops	33/816	-	X	
On-Site Primary Care/Epidemiology workshops	-	17/400	-	
2. Laboratory				
Lab. Directors	4/57	1/17	X	
Lab. Technicians	9/154	4/68	X	
On-Site Lab Courses	5/98	-	X	
On-Site Lab. follow-up	23 visits	24 visits	X	
III. Equipment				
Lab. Equipment for CAREC	X	-	-	All essential lab equipment for surveillance activities in CMCs and training at CAREC provided under original grant. After termination of AID funding CAREC and/or CMCs will meet continuing need for surveillance and proficiency testing supplies.
Lab. Equipment for CMCs	X	-	-	
Surveillance Supplies	X	X	X	
Proficiency Testing Supplies	X	X	X	
Immunization Equipment	X	X	-	
Information System	X	-	-	
A-V Equipment	X	-	-	
IV. Other Activities				
Zoonoses Survey	X	-	-	Animal Health Assistant Workshops (II B.1 above) is to follow-up on recommendations of the zoonoses survey. Other activities in this category are designed so as not to require continuing inputs from CAREC.
CAREC Staff Development	-	X	-	
STD Program	-	X	-	
Evaluation				

project extension will be to transfer both training materials and also training methodology to these other units to permit them to continue to provide high quality training programs at the conclusion of AID funding.

Amendment funding for the Training Unit is \$131,300.

b. Surveillance Unit

Since 1975, CAREC has had at least three trained staff epidemiologists in its Surveillance Unit (including at least two physician-epidemiologists). One of these has always been a Centers for Disease Control (CDC) staff epidemiologist. However, due to reductions in the CDC budget, CDC will not be able to continue full support for such an assignment at CAREC after June 1983. This will leave two remaining epidemiologist posts in surveillance and training at CAREC, one is currently being recruited for, and the other has responsibilities which also include substantial administrative duties (Center Director: Dr. Diggory). The training load of over 20 regional workshops and the need for 1-3 visits per year to each of 19 countries demands the services of at least two experienced full-time epidemiologists.

To help fill this need for epidemiological expertise, AID and CDC will jointly support a CDC epidemiologist to work at CAREC over two years. The proposed ratio of support is 60% AID and 40% CDC. This additional assistance from a CDC epidemiologist will enable CAREC to respond expertly to a wider range of disease problems and training needs.

The CDC epidemiologist will also play a training role within CAREC. PAHO is currently recruiting an epidemiologist to fill a staff position at CAREC that was vacated by a PAHO epidemiologist in July 1981. This post is expected to be filled by May 1983. West Indian nationals are being encouraged to apply. This person is expected to have had little training or experience in epidemiology. Consequently, the AID/CDC sponsored epidemiologist and CAREC staff will be required to devote time and effort to training and assisting this developing epidemiologist. The complementary skills and available time of both the CAREC and another experienced epidemiologist will be necessary to produce a competent epidemiologist after what will essentially be apprentice training. At the end of this project the Surveillance Unit will thus have at least one additional West Indian epidemiologist-physician on its staff.

Without this AID/CDC supported epidemiologist, current levels of training, surveillance and epidemic aid cannot be maintained and it would be most difficult to develop new activities such as training programs relating to the in-country use of surveillance data and the sexually transmitted disease program.

Given the continuing problems that CAREC has had in recruiting West Indian physician-epidemiologists for the Surveillance Unit the grant will fund something that CAREC has strongly promoted to CMC's, a deputy epidemiologist. This non-physician, locally hired trainee will assist with the regular duties of the Surveillance Unit, i.e. training, in-country follow-up, and technical assistance. This person may be either a public health nurse or public health inspector. Such a person will bring local experience and knowledge and provide CAREC with better rapport with non-physician workers on CMC surveillance teams. If this experimental

position works out, it is anticipated that it will be picked up under CAREC's core budget beginning in 1985. This approach may prove to be one way to deal with the fact that the work load of the Surveillance Unit is such that a physician cannot have a private practice, yet the salary scales are far below what a physician in private practice can expect to earn in Trinidad.

Amendment funding for the Surveillance Unit is \$132,525.

2. Training

a. Attachments and Traineeships

Under the initial grant, assistance was provided for traineeships for medical officers of health, deputy epidemiologists, medical epidemiologists, bio-statisticians, laboratory technicians and medical student elective clerkships (see pages 16-19 of the original Project Paper). Based on discussions with CAREC, host country officials and former trainees, limited assistance will be provided for traineeships for medical officers of health (4 for one month each) medical students (2 for 2 months each) and public health inspectors/nurses (6 for short-term) under the amendment. Approximately 20% of resources under the original grant were devoted to these traineeships. Five percent of the amendment funds (\$31,719) will be used for this purpose. While these traineeships have been quite successful to date, the technical design committee and CAREC believe that the cadres of workers already trained under traineeships and attachments can best be served by emphasizing consolidation of these traineeships through continuing education, on-site training and formal training courses (see below). The emphasis of this training activity will be on upgrading skills of individuals who are in positions critical to the development or maintenance of in-country surveillance and outbreak control programs and whose needs cannot be met through regional or in-country courses. Competitively awarded traineeships for UWI medical students will also be continued. These are designed to introduce upcoming leaders of the medical profession to the concepts and practice of epidemiology.

b. Training Courses

In addition to the traineeships and attachments provided under the original grant, extensive training was provided both at CAREC and on-site in surveillance and laboratory techniques. This training will be continued under the amendment with provision of the following courses:

- (a) Continuing education for Deputy Epidemiologists (four workshops with a total of 52 participants).
- (b) Surveillance Statistical Officer training (one workshop with 17 participants).
- (c) Designated Epidemiologist Workshop (two workshops with a total of 36 participants)
- (d) On-site Surveillance and Primary Care Workshops (17 workshops, with follow-up visits to 17 countries per year x 3 years).

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- (e) Lab technician training courses (4 courses, 17 participants each).
 - (f) Lab Directors' Workshop (1 workshop, 17 participants).
 - (g) On-site lab training (24 country visits).
 - (h) Tutor training (2 workshops, 30 participants).
 - (i) Animal Health Assistant Course (1 course, 10 participants).

The purpose of the regional workshops for deputy epidemiologists, surveillance statistical officers, designated epidemiologists, lab. technicians, lab. directors and on-site laboratory training is to further improve in-country surveillance, outbreak investigation and laboratory capabilities. The levels of improvement that are expected are shown in Table 3. An additional purpose will be to further institutionalize the routine reporting and technical assistance roles that apply between CMCs and CAREC. CAREC's technical assistance capacity is good, although further improvement is possible. CMC reporting is accurate but often times slow. For example, for December 1982 of the 19 CMCs; five had reported December data, three November data, four October data, three September data, three August data, and one had not reported since February.

The on-site Surveillance and Primary Care Workshops will provide an opportunity to involve all relevant members of national Ministries of Health plus private sector individuals (i.e., not just those with specific responsibilities in surveillance, outbreak investigation and labs) in the planning and development of national epidemiological capabilities. It is felt by the design team and by CAREC that CMC individuals have received sufficient basic training in epidemiology that the process of identifying in-country bottlenecks, evaluating required national capabilities and instituting programs to either maintain or further develop these capabilities could successfully be accelerated. The proposed workshops will be used to this end. In addition, CAREC will use these workshops to demonstrate the interface between epidemiology and the primary health care programs that are underway in most CMCs. A final area to be addressed in these workshops is a review of the ways in which CMCs can utilize the surveillance data they are producing for program planning and evaluation.

In addition to these training courses which will build and consolidate training for MOH personnel already on board, a new training effort will be directed at tutors in national schools of nursing and in environmental health officer training programs (2 workshops, 15 participants each). The purpose will be to introduce epidemiological concepts and expertise into the programs that train the front line health workers in the CMCs.

The training course for Animal Health Assistants (AHA) is the second such course to be conducted by CAREC. The first, in October 1982, was for AHA's from the Leewards. The second will be for AHAs from the Windwards. These workshops are to introduce epidemiological concepts into the day to day operations of CMC veterinary services and are responsive to the recommendations emanating from the zoonoses survey conducted under the original grant.

The schedule for these training programs and budget is shown more fully in Table 2. This Amendment provides \$278,820 for these courses.

3. Equipment and Supplies

The Expanded Program for Immunization (EPI) is a key component of all the primary health care programs of the CAREC member countries. This program provides technical assistance, material, and co-ordination for immunization programs against polio , diphtheria, tetanus, pertussis, and measles.

Under the original grant, 12 in-country workshops designed to improve national EPI programs were held and equipment needed to begin expanding secure cold chains for vaccine storage and distribution were provided (5 freezers, 23 refrigerators and 96 vaccine carriers). The following chart gives an indication of progress that has been made in polio immunization coverage during the original grant. The design team feels that sufficient national level training has been conducted but that there is a need for further expansion of cold chains. Using grant amendment funds, CAREC will provide 37 refrigerators to selected national EPI programs in those cases where such equipment is considered by CAREC to be both necessary and where it will make a significant impact on coverage levels. To maximize the likelihood that this equipment is properly used there will be on-going and end-of-project evaluations of the effectiveness of this equipment in improving immunization levels. The PAHO EPI advisor assigned to CAREC will provide continuing technical assistance to support this effort.

In addition to the EPI supplies to be provided under the amended project, funds will be provided for:

- Epidemic investigation supplies: a variety of phlebotomy equipment, vacutainer tubes, specimen containers, etc. must be kept available for immediate use in disasters, outbreaks, etc. Some of these will be stockpiled at CAREC and some in each member country.

- Laboratory course materials: both specimens for proficiency and practice testing and reading matter for laboratory training.

Supplies and equipment to be funded under this amendment total \$37,400.

4. Other Activities

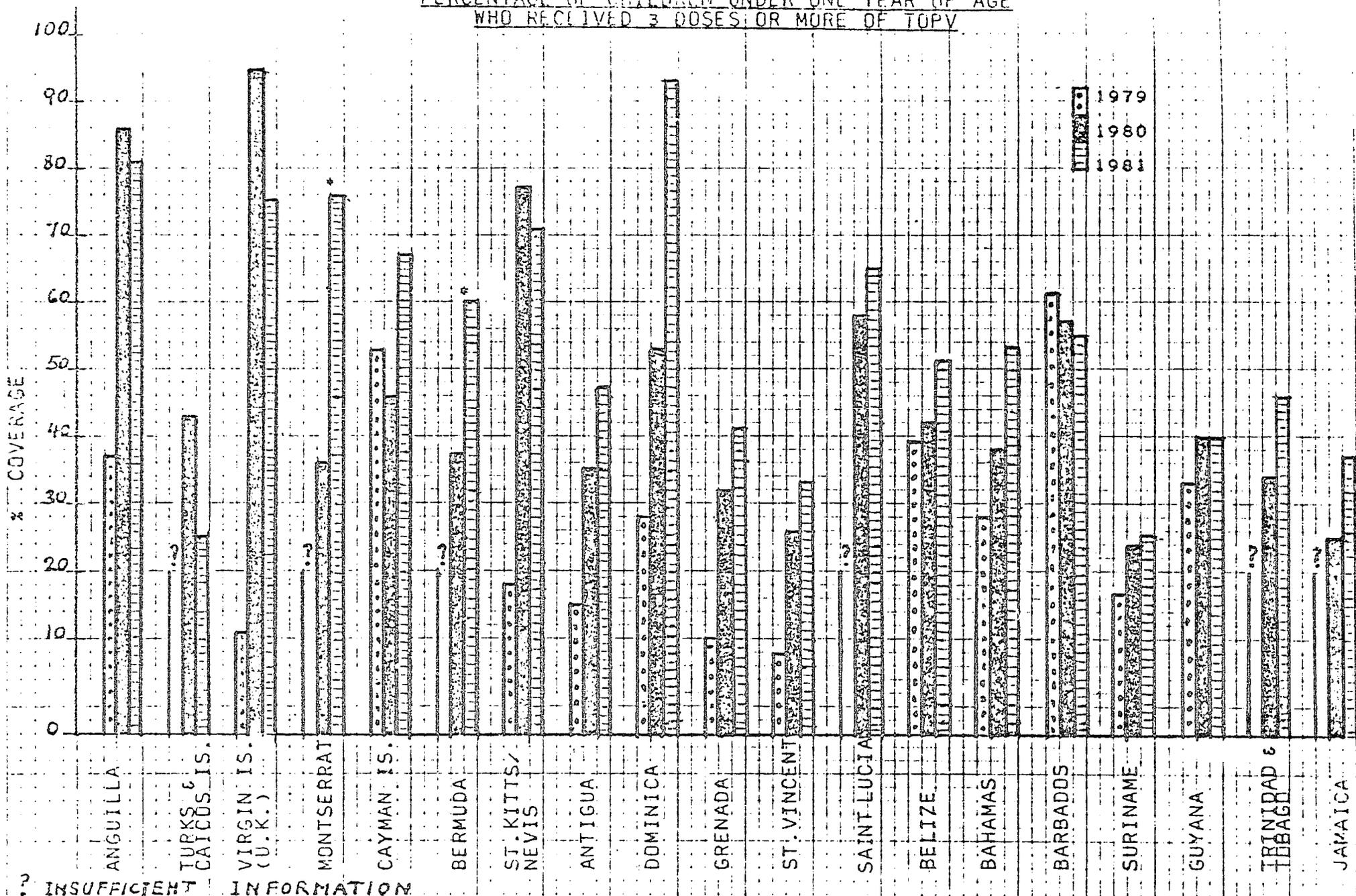
a. Training and A-V Material

Under the original grant, provision was made for A-V materials and supplies such as projectors, blackboards, specialized printing equipment, cameras, video duplicators, etc., to assist the training unit in carrying out its functions. Continued assistance in this area is provided for the development, printing, and distribution of training materials related to courses carried out by CAREC. Home-study materials, slide cassette productions and printed matter developed both at the U.S. Centers for Disease Control and at CAREC will be made available to students and appropriate institutions within the region (\$25,200).

Best Available Document

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IMMUNIZATION COVERAGE BY COUNTRY 1979 - 1981
 PERCENTAGE OF CHILDREN UNDER ONE YEAR OF AGE
 WHO RECEIVED 3 DOSES OR MORE OF TOPV



COVERAGE IS BASED ON REPORTS RECEIVED AT CAREC UP TO 3 MONTHS AFTER THE END OF THE REPORTING YEAR.
 *CHILDREN IN TWO COUNTRIES RECEIVED THIRD OPT AND TOPV JUST AFTER THEIR FIRST BIRTHDAY.

b. CAREC Staff Development Training

While substantial amounts of funds have been made available to CAREC for training of CMC personnel little continuing education has been made available for the trainers themselves who must maintain proficiency in their own technical skills in order to provide adequate training. Similarly, upgrading skills of several members of CAREC's staff, particularly in the areas of laboratory management and laboratory equipment maintenance and repair, is critical to the on-going efficiency of the CAREC facility. For this reason, \$10,000 is made available under this amendment for CAREC staff development which will enhance the capability of the regional institution to provide services to its member countries.

c. Sexually Transmitted Disease Program

A final new activity provided for under this amendment is training and follow-up assistance with the diagnosis, treatment and control of sexually transmitted diseases (STD). A detailed description of this activity forms Annex F of this project amendment. STD is a major public health problem in the Eastern Caribbean that has come to the forefront of public attention lately. While its actual prevalence is not fully known, treatment is known to be inconsistent among medical practitioners and is oftentimes ineffective. Further, public education and other control efforts are uncoordinated and on occasion inappropriately modeled after U.S. case-finding programs that cannot be implemented within the financial and personnel constraints facing Ministries of Health.

The STD program will be utilized by CAREC as a teaching exercise as well as a direct intervention in each CMC. It is an ideal subject for such a joint effort of the national surveillance team, the laboratories, the physicians, nurses, planners and administrators. It will begin with the development of an epidemiological profile and go on to the design, implementation, and evaluation of actual programs (\$50,000).

d. Evaluation

\$11,000 will be utilized for an end-of-project evaluation. The evaluation team composition and methodology is described in more detail in Section V, Project Administration.

JULY 1983 - JUNE 1985

538-0027

C. OUTPUTS/IMPLEMENTATION PLAN

PROJECT ELEMENT	JULY-DEC. 1983	BUDGET	1984	BUDGET	JAN-JUNE 1985	BUDGET	COMMENTS
I. POSTS/TECHNICAL ASSISTANCE							
A. TRAINING UNIT							
1. Training Officer	-	28,500	-	65,100	-	-	AID funding terminates 12/31/84
2. Audio-Visual Technician	-	5,400	-	12,000	-	-	AID funding terminates 12/31/84
3. Training Secretary	-	6,300	-	14,000	-	-	AID funding terminates 12/31/84
B. SURVEILLANCE UNIT							
1. Medical Epidemiologist	-	45,000	-	65,000	-	-	Medical Epidemiologist will primarily strengthen Centre's capacity for training both at the Centre and in-country tour of duty completed Sept., 1984
2. Non-Medical Epidemiologist Trainee	-	7,125	-	15,400	-	-	AID funding terminates 12/31/84
II. TRAINING							
A. SURVEILLANCE/DATA UTILIZATION							
1. 5-day Continuing Education Workshops for Deputy Epidemiologists	Sept. (10 participants)	8,000	Feb/March three workshops (total of 42 participants)	33,000	-	-	September, 1983 is to provide first Continuing Education Workshops for Deputy Epidemiologists who received basic training at the Sep. 1981 workshop. The 1984 workshops provide the opportunity for all epidemiologists to attend a second continuing education workshop.
2. Surveillance Statistical Officer 4-day workshop	-	-	April (17 participants)	13,500	-	-	Second continuing education workshop First held in April, 1982 under original grant.
3. Designated Epidemiologists workshops	Aug. (18 participants)	14,200	Sept. (18 participants)	15,620	-	-	Includes UWI participants
4. Workshop for Nurse Tutors (14 days) and Schools Public Health	Oct. (15 participants) Nov. (15 participants)	30,000	-	-	-	-	Train trainers so that epidemiology can be taught in all Schools of Nursing and Public Health.
5. In-country Workshops	Visit to 17 countries 5 workshops	24,000	Visit 17 countries 7 workshops	27,000	5 workshops	23,000	This activity will provide for small in-country training workshops at both the national and district levels to strengthen surveillance activities and data utilization in relation to Primary Health Care Services development.

PROJECT ELEMENT	JULY-DEC. 1983	BUDGET	1984	BUDGET	JAN-JUNE 1985	BUDGET	COMMENTS
B. LABORATORY							
1. 5-day Laboratory Technology Training Course	Oct. (2 courses 17 participants each)	23,000	Oct. (2 courses 17 participants each)	25,300	-	-	Upgrade skills provide training in areas of particular importance as determined by disease outbreaks, new laboratory techniques, and results of proficiency testing program.
2. Lab. Directors 5-day workshops	-	-	Sep. (17 participants)	15,000	-	-	Continuing education, stress on lab management and safety importance and role of proficiency testing.
3. On-the-bench lab. training	8 countries	6,000	16 countries	13,200	-	-	If possible twice a year visit.
C. ZOONOSES							
1. 5-day Basic course in Epidemiology for Animal Health Assistant and Veterinary Public Health Assistants	July (10 participants)	8,000	-	-	-	-	Follow-up recommendation of Zoonoses Surveillance Study
D. ATTACHMENTS							
1. Medical Officers for periods of up to 28 days attachment at CAREC	two	6,800	two	7,480	-	-	To expose Medical Officers from CHCs to epidemiological concepts and the activities of CAREC
2. Medical Student Electives for periods up to 56 days	One	4,800	One	5,280	-	-	To introduce promising medical students to the concepts and practice of epidemiology
3. OTHERS Public Health Inspectors, public Health nurses and Port Authority personnel	three	3,500	-	3,859	-	-	
E. CAREC STAFF DEVELOPMENT							
1. Training in lab. management equipment maintenance	-	4,000	To be determined	6,000	-	-	To upgrade middle management skills of permanent core budget funded CAREC staff members
III. SPECIAL ACTIVITIES							
Sexually transmitted diseases	-	15,000	-	25,000	-	10,000	-
VI. EQUIPMENT/SUPPLIES							
A. Immunization Program Equipment	-	11,000	-	12,100	-	-	-
B. Audiovisual printing paper and supplies	-	12,000	-	13,200	-	-	Will be used for preparing materials for distribution to countries
C. Epidemic investigation emergency supplies	-	2,500	-	5,500	-	-	For purchase supplies for distribution to countries
D. Proficiency testing and lab course materials	-	3,000	-	3,300	-	-	
V. EVALUATION							
-	-	-	-	-	March	11,000	Joint evaluation to be conducted by CAREC, AID, CDC.

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D. End of Project Status

End of project indicators for each of the project sub-purposes are as follows:

1. TO INCREASE CAREC CAPABILITY TO ASSIST CMCs IN LABORATORY AND SURVEILLANCE ACTIVITIES.

a. Training Unit

- 1) The Training Unit will have conducted 68 training exercises planned under the amendment, having trained over 650 participants and reduced its role and current staff to a level that can be supported under the 1985 core budget resources.
- 2) The Training Unit will have developed a variety of training materials appropriate for the Caribbean region for both regional and in-country use in surveillance and laboratory work, as well as for anticipated needs on these subjects.
- 3) The Surveillance and Laboratory Units will have taken on an appropriate training role using materials and techniques developed by the Training Unit.
- 4) There will have been developed a routine continuing education program for national designated and deputy epidemiologists as well as a program for surveillance statistical officers, EPI coordinators and laboratory directors.

b. Surveillance Unit

- 1) The Surveillance Unit will have at least one West Indian physician-epidemiologist and a non-physician epidemiologist in core staff positions. The staff epidemiologists trained under this project will have acquired skills and experience in public health, communicable and non-communicable disease epidemiology and prevention.
- 2) The Unit will be capable of using epidemiological data for planning, delivery and evaluation of primary health care, and be capable of training member countries to use data similarly.
- 3) The Unit will be producing monthly surveillance reports and will have the capability to do country specific analyses.

c. Laboratory Unit

- 1) The Laboratory will have maintained its current capabilities in diagnostic and proficiency testing areas.

- 2) The laboratory will maintain capability to assist member countries to improve the accuracy and efficiency of organism identification (75% accuracy) through proficiency testing, specific training courses, in-country visits and other forms of continuing education.

2. TO IMPROVE THE ACCURACY AND EFFICIENCY OF CMC LABORATORY IDENTIFICATION AND SURVEILLANCE OF COMMUNICABLE DISEASES.

a. Surveillance/Outbreak Investigation

- 1) Surveillance and outbreak capabilities will have been developed to the levels indicated in Table 3.
- 2) No CMC will be more than one month behind in reporting routine surveillance data to CAREC.

b. Laboratory

- 1) Laboratory capabilities will have been developed to levels indicated in Table 3.
- 2) 80% of CMCs will be participating in the proficiency testing program with at least 75% accuracy.

c. Data Utilization

- 1) Epidemiological data will have been used in planning, delivery, and evaluation of health services in 50% of CMCs.
- 2) Two CMCs will have reviewed and revised, as needed, existing national health plans in light of epidemiological data.

d. Training

- 1) CMCs will have capability for in-country training in basic epidemiology for nursing and environmental health officer programs and for in-service training. 50% of CMCs will have conducted in-service training using CAREC materials. All schools for nurses and environmental health inspectors will have epidemiology in basic curricula.

3. TO FURTHER DEVELOP WEST INDIAN MIDDLE MANAGEMENT AT CAREC.

- a. Two West Indian surveillance epidemiologists (one a non-physician) will have been trained and in core budget funded staff positions.
- b. Chief laboratory technician will be participating in laboratory management.

- c. Improved equipment maintenance program will have decreased "down" time on laboratory and other equipment by 50%.
- d. Other staff members will have received training as appropriate to CAREC management needs.

COUNTRY	SURVEILLANCE STAFF LEVELS				1979 CAPABILITY ANALYSIS			ORIGINAL GRANT EOPS CAPABILITY LEVEL			1982 CAPABILITY ANALYSIS			GRANT AMENDMENT EOPS CAPABILITY LEVELS		
	1979	ORIGIN AL GRANT EOPS	1982 ACTUAL	GRANT AMEND -MENT EOTS	SURVEI- LLANCE	OUT- BREAK	LABOR- ATORY	SURVEI- LLANCE	OUT- BREAK	LABOR- ATORY	SURVEI- LLANCE	OUT- BREAK	LABORA- TORY	SURVEI- LLANCE	OUT- BREAK	LABORA- TORY
Anguilla	-	-	1- DE 1- SSO	1- DE 1- SSO	-	-	-	-	-	-	1-2	2	2	2	2-3	2
Antigua	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	3	2	2	4	3	3	3	3	2-3	4	3	3
BAHAMAS	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	2	3	3	4	4	4	4	4	4	4	4	4
BARBADOS	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO 1-MOH	1- DE 3-DDE 1-SSO 1-MOH	1- DE 3-DDE 1-SSO 1-MOH	4	4	4	5	4	4	5	4	4	5	4	4
BELIZE	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	2	1	2	3	3	3	3	2	2-3	3	3	3
BERMUDA	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	4	3	3	4	4	3	4	4	3	4	4	3
BRITISH VIRGIN ISLANDS	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	4	3	2	4	4	3	4	3	2	4	4	3
CAYMAN ISLANDS	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	2	2	2	3	3	3	3	3	2-3	3	3	3
DOMINICA	1- DE 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	1- DE 2- DDE 1- SSO	1- DE 2- DDE 1- SSO	2	2	3	4	4	4	4	4	3	4	4	4
GRENADA	1- DE 2-DDE 1-SSO	1- DE 3-DDE 1-SSO	1- DE 3-DDE 1-SSO	1- DE 3-DDE 1-SSO	2	2	2	4	3	3	3	3	2-3	4	3	3
GUYANA	1- DE 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	1- DE 4-DDE 1-SSO	1- DE 4-DDE 1-SSO	4	4	3	5	4	4	4	4	3	5	4	4
JAMAICA	1- DE 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	1-DE(nat- ional) 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	4	4	4	5	4	4	4	4	4	5	4	4
MONTSER- RAT	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1	2	2	3	3	3	1	2	2	3	3	3
ST. KITTS/ NEVIS ANGUILLA	2- DE 1-DDE 2-SSO	2- DE 2-DDE 2-SSO	St/Kitts/Nevis only 1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1-2	2	1-2	3	3	2-3	3	3	2-3	3	3	2-3
ST. LUCIA	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 2-DDE 1-SSO	1- DE 2-DDE 1-SSO	3	3	2	4	4	3	4	4	2-3	4	4	3
SURINAME	1- DE	1- DE 1-DDE	1- DE 2-DDE	1- DE 2-DDE	2	3	3	4	4	4	4	4	4	4	4	4
ST. VINCENT	1-DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1	1	2	3	3	3	3	3	3	3	3	3
T'DAD & TGO	1-DE 5-DDE 1-SSO	1- DE 5-DDE 1-SSO	1- DE 8-DDE 1-SSO	1- DE 8-DDE 1-SSO	3	3	4	5	4	4	4	4	4	5	4	4
TURKS & CAICOS	1- DE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1- DE 1-DDE 1-SSO	1	1	1	3	2	2	2	2	1	3	2	2

*SEE KEY TO LEVELS OF CAPABILITY

SURVEILLANCE:

- Level I: Simple collection, collation and tabulation of communicable disease data
- Level II: Collection of above data with interpretation, but without additional investigational capacity.
- Level III: Capability for collecting and presenting all types of data (acute and chronic disease, morbidity and mortality data, water quality, etc.).
- Level IV: Collection of all types of data with interpretation and initiation of investigation.
- Level V: Recognition of need for surveys and capability of performing them.

OUTBREAK INVESTIGATIONS

- Level I: Outbreak not recognized by national staff, but recognized by CAREC.
- Level II: Outbreak recognized by national staff and CAREC informed.
- Level III: Outbreak recognized and investigated by national staff; CAREC provides on-site assistance.
- Level IV: Outbreak recognized, investigated and controlled by national staff, CAREC provides phone or cable communication liason.

LABORATORY CAPABILITY

- Level I: No culture work, able to do gram stains; unable to identify pathogens of public health importance (such as shigella salmonella, streptococcus, staphloccoccus).
- Level II: Limited culturing and identification of most common pathogens (can identify for example staphlococcus, streptococcus, shigella, salmonella)
- Level III: Moderate culturing capability and identification (can identify and group common pathogens such as salmonella, shigella) Limited TB culture capability and anaerobic capability.
- Level IV: Full culturing and identification capabilities; anaerobic capability TB culture capability; uses CAREC as virology reference (to identify dengue, hepatitis, yellow fever, anthropod borne, arboviruses, influenza, poliomyelitis; leptospirosis, rabies, etc.).

SURVEILLANCE STAFF

DE Designated Epidemiologist
 DDE Deputy Designated Epidemiologist
 SSS Surveillance Statistical Officer
 MOH Medical Officer for Health

IV. PROJECT ANALYSES

A. FINANCIAL ANALYSIS

1. AID Grant

The total life of project cost of this amended project is estimated to be \$2,569,677 of which AID will have financed \$1,960,000. The original project paper estimated project cost at \$1,578,577 of which \$1,160,000 was AID funding. This proposed amendment's cost is estimated at \$991,100, \$800,000 of which is to be provided by AID. Table 4 indicates the allocations of AID financing under the amendment.

AID will continue to provide funding for a substantial portion of the training function of CAREC. The following table represents an estimated percentage of the time and counterpart contribution calculation of core budget funded CAREC staff time spent on the conduct and administration of the grant amendment.

<u>Amount*</u>	<u>Position</u>	<u>% of Time</u>	<u>Amount</u>
\$80,000	Director	35	\$46,800
\$62,500	Epidemiologist	25	\$21,000
70,400	Chief of Labs	25	\$29,500
\$19,000x4	Lab staff	30	\$39,000
\$39,000	Statistician	35	\$22,800
\$62,500	Adm. Officer	20	\$21,000
\$13,500	Adm. Asst.	50	<u>\$11,000</u>
	TOTAL		<u>\$191,100</u>

Table 5 details past and projected financial contributions to CAREC by CMCs and other core budget contributors. As can be seen the major portion of funds come from the CMCs. The positions shown above are funded by PAHO and thus represent PAHO costs in administering the AID grant amendment. Although no member country contributions, are included in the calculation of this counterpart contribution; much of the core support for the operation of CAREC comes from this source.

2. CAREC Core Financing

The financial stability of CAREC is a major aspect of the ongoing negotiations regarding the future of the Center. A review of past funding sources (of which the CMC's are currently 100% paid up) gives the clear picture that the nations that utilize CAREC's services are willing and able to make significant financial contributions to the Center. Faced with the need to assure a stable transition period and to cover past funding deficits, CMC's have agreed to increase their contributions by approximately

* includes salary, benefits and other associated costs.

Table 4

EPIDEMIOLOGICAL SURVEILLANCE AND TRAINING
538-0027

AMENDMENT BUDGET

	JULY-DEC. 1983	(US\$) 1984	JAN-JUNE 1985	TOTAL
I. POSTS/TECHNICAL ASSISTANCE				
A. Training Unit				
1. Training Officers	28,500	65,100	-	93,600
2. A-V Technician	5,400	12,000	-	17,400
3. Secretary	6,300	14,000	-	20,300
B. Surveillance Unit				
1. Medical Epidemiologist	45,000	65,000	-	110,000
2. Non-medical Epidemiologist	7,125	15,400	-	22,525
II. Training				
A. Trainerships/Attachments				
1. Medical Officers (4)	6,800	7,480	-	14,280
2. Medical Students (2)	4,800	5,280	-	10,080
3. Others (6)	3,500	3,859	-	7,359
B. Surveillance Workshops (workshops/participants)				
1. Deputy Epidemiologist (4/52)	8,000	33,000	-	41,000
2. Surveillance Statistical Officers (1/17)	-	13,500	-	13,500
3. Designated Epidemiologist (2/36)	14,200	15,620	-	29,820
4. Nurse and EHO Tutors (2/30)	30,000	-	-	30,000
5. In-country workshops (17/400)	24,000	27,000	23,000	74,000
C. Laboratory Workshops				
1. Lab. Technicians (4/68)	23,000	25,300	-	48,300
2. Lab. Directors (1/17)	-	15,000	-	15,000
3. In-country, on-the-bench (24 visits)	6,000	13,200	-	19,200
D. Animal Health Inspectors Course (1/10)	8,000	-	-	8,000
III. Supplies/Equipment				
A. Immunization Equipment	11,000	12,100	-	23,100
B. Epidemic Investigation Supplies	2,500	5,500	-	8,000
C. Proficiency Testing Supplies	3,000	3,300	-	6,300
IV. Special Activities				
A. A-V Teaching Materials	12,000	13,200	-	25,200
B. Sexually Transmitted Disease Program	15,000	25,000	10,000	50,000
C. Evaluation	-	-	11,000	11,000
D. CAREC Staff Development	4,000	6,000	-	10,000
V. Program Support (13%)	<u>34,857</u>	<u>51,459</u>	<u>5,720</u>	<u>92,036</u>
Total	302,982	447,298	49,720	800,000

CAREC ESTIMATED BUDGET

PAST AND PROPOSED

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Anguilla	-	-	-	-	-	814	912	1,021	1,495	1,797	-6
Antigua & Barbuda	651	1,098	1,516	1,667	2,096	2,442	2,735	3,063	4,533	5,411	
Bahamas	4,352	7,341	10,130	11,143	14,005	16,307	18,264	20,456	30,275	36,338	
Barbados	6,819	11,502	15,873	17,460	21,943	25,563	28,631	32,067	47,459	56,953	
Belize	651	1,098	1,516	1,667	2,096	2,442	2,735	3,063	4,533	5,411	
Bermuda	768	1,294	1,787	1,966	2,470	2,883	3,229	3,616	5,352	6,439	
British Virgin Islands	138	233	320	353	443	522	584	654	968	1,148	
Cayman Islands	138	233	320	353	443	522	584	654	968	1,148	
Dominica	651	1,098	1,516	1,667	2,096	2,442	2,735	3,063	4,533	5,441	
Grenada	651	1,098	1,516	1,667	2,096	2,442	2,735	3,063	4,553	5,441	
Guyana	8,994	15,172	20,937	23,032	28,946	33,724	37,771	42,304	62,610	75,122	
Jamaica	26,840	45,275	62,480	68,730	86,379	100,617	112,691	126,214	186,797	224,169	
Montserrat	217	366	505	556	699	810	907	1,016	1,505	1,797	
St. Kitts/Nevis	651	1,098	1,516	1,667	2,096	1,628	1,823	2,042	3,038	3,644	
St. Lucia	651	1,098	1,516	1,667	2,096	2,442	2,735	3,063	4,533	5,441	
St. Vincent and the Grenadines	651	1,098	1,516	1,667	2,096	2,442	2,735	3,063	4,533	5,441	
Suriname	-	-	15,873	17,460	21,943	25,563	28,631	32,067	47,460	56,953	
Turks & Caicos	116	196	271	299	374	444	497	557	825	998	
Trinidad & Tobago	<u>102,764</u>	<u>173,345</u>	<u>239,220</u>	<u>263,142</u>	<u>330,698</u>	<u>385,240</u>	<u>431,469</u>	<u>483,245</u>	<u>715,202</u>	<u>858,242</u>	
Country Sub-Total	155,703	262,645	378,328	416,163	523,015	609,289	682,403	764,292	1,131,152	1,357,394	
PAHO	122,468	231,579	254,740	278,400	288,640	295,170	324,930	377,660	515,745 ³	425,310	468,190
ODM	<u>70,000</u>	<u>92,400</u>	<u>110,110</u>	<u>121,121</u>	<u>152,216</u>	<u>177,320⁻¹</u>	<u>195,052²</u>	<u>112,200²</u>	<u>112,200²</u>	<u>117,810⁻²</u>	-6
TOTAL CORE BUDGET	348,171	586,624	743,178	815,684	963,871	1,081,779	1,202,385	1,245,152	1,759,092	1,900,514	

EXTRA BUDGETARY FUNDING

USAID (1st Grant)	-	-	-	-	36,782	220,655	303,078	378,000 ⁻⁴	221,485 ⁻⁴	-	-
USAID (AMENDMENT)	-	-	-	-	-	-	-	-	302,982	447,298	49,720
CDC ⁻⁵	202,000	208,000	112,000	181,000	196,000	85,000	87,000	60,000	30,000	-	-
RESEARCH PROJECTS	N/A	386,700	116,825	N/A	N/A						

1. Represents amount requested, actual contribution differed, i.e. no contribution in 1980

2. Requested amounts, final amount to be negotiated

3. Includes \$100,000 supplemental funding in part to cover short fall in ODM funding.

4. Estimate.

5. Estimate, CDC has had at least one public health professional seconded to CAREC since 1975 and has provided training, equipment and research grants.

6. CMC and ODM contributions for 1985 have not been calculated yet. Preliminary figures will be available March 1983.

80% from 1982 to 1984. Such a commitment augurs well for the future financial viability of CAREC.

External funding sources will decrease after 1985 with the withdrawal of ODM core support and the AID grant. The willingness of the CMCs to increase their contributions to CAREC has already been demonstrated. The trend of increasing reliance on this source for core budget funding is shown below.

CAREC CORE BUDGET

<u>Year</u>	<u>% CMC</u>	<u>% PAHO/ODM</u>	<u>US\$ VALUE OF CORE BUDGET</u>
1975	44.8	55.2	348,171
1976	44.8	55.2	586,624
1977	50.9	49.1	743,178
1978	51.0	49.0	815,684
1979	54.3	45.7	963,871
1980	56.3	43.7	1,081,779
1981	56.8	43.2	1,202,385
1982	61.4	38.6	1,245,152
1983	64.3	35.7	1,759,092
1984	71.4	28.6	1,900,514

The high increases in CMC quota contributions in 1983 and 1984 are primarily to insure that there are no cash deficits when CAREC administration is turned over to the CMCs. By December 31, 1981 CAREC had a cash deficit of \$214,041. This was due to a missed contribution by ODM and shortfalls in CMC contributions. In addition, a deficit of \$110,948 was anticipated in the 1982 budget. To meet this problem CAREC utilized all funds remaining in its PAHO working capital fund, \$65,032. The increased income from CMC contributions in 1983 and 1984 will be used to eliminate remaining deficits (which are presently being covered by PAHO) and to re-establish the working capital fund. Consequently by 1985 CAREC should be back on a firm financial footing, with PAHO and CMC contributions at a level sufficient to meet core budget needs.

Besides the CMC's, the other major contributor to CAREC's core budget after 1985 will be PAHO. PAHO's financial contribution to CAREC is not expected to decrease in dollar terms even after PAHO's administrative role is over. Although the details are still being discussed it is anticipated that PAHO's contribution will be utilised for essential core staff positions. PAHO develops its budgets on a two year "biennium" basis. Firm budget figures have been developed through 1987. For CAREC the funding for 1984-85 has been set at \$893,500. For the biennium 1986-87 the level of support will increase by approximately 12% to \$1,000,700.

With the continued support of PAHO, plus the financial commitments that the CMCs have demonstrated their ability to meet, CAREC's financial future is secure.

3. CMC Financing of Surveillance Activities

The surveillance and laboratory activities being promoted under the original grant and this amendment are within the financial

capabilities of the CMCs. The surveillance teams are composed of individuals already employed by the Ministries of Health. Improvements of surveillance and outbreak control capabilities thus involve upgrading of the technical skills of these individuals and their ability to devote sufficient time to these tasks. Both of these have proven to be feasible under the original grant.

As noted in the technical analysis, the situation in the laboratories is somewhat different in that adequate equipment and supplies are necessary to carry out laboratory functions. Those items of laboratory equipment that were considered essential have been provided under the original grant. An AID/W funded project is focusing on the maintenance of laboratory equipment in the region and it is anticipated that adequate repair and maintenance programs will have been established within the next two years. Supplies are a continuing problem, although CAREC cannot directly resolve supply shortage problems CAREC staff will continue to impress upon appropriate senior officials the importance of maintaining adequate stocks of laboratory supplies. Finally, it must be noted that the projected capability levels for laboratories have taken into account the financial constraints of the Ministries of Health and are specifically designed to minimise recurring supply costs.

B. Technical Analysis

1. Disease in the Caribbean

Although the health status of the people of the Caribbean is good by developing world standards there are still many diseases that are endemic or pose an epidemic threat. Over the past year episodes of dengue fever, malaria, gastroenteritis, typhoid fever, measles and poliomyelitis have occurred in CMCs. Other communicable diseases such as yellow fever and whooping cough (pertussis) could spread rapidly if given the opportunity. These communicable diseases pose a serious threat to the people of the region and unnecessarily tax their health care systems. Besides the direct threat of illness to Caribbean residents, even the threat of these diseases can disrupt one of the primary industries of the region, tourism. For example, an article in the January 28, 1983 issue of the Journal of the American Medical Association specifically warns physicians about the possibility of the patients contracting dengue while in the Caribbean and also warns of the possibility of outbreaks of dengue in the U.S. if it is not controlled in the Caribbean. In addition to communicable diseases, recent analyses of regional data indicate that the incidence of non-communicable diseases such as hypertension, diabetes and cancer is rising and that programs for the prevention and treatment of these diseases are badly needed.

2. Need for Surveillance

Epidemiological surveillance and laboratory capability are two of the areas within any health service that are often the least apparent to an observer but are the most basic when it comes to maintaining the public health. The laboratory provides confirmation of the physician's diagnosis, the surveillance system identifies patterns in diagnosis.

The epidemiological information produced by the surveillance network provides the trigger for initiating control measures directed at communicable diseases or developing the longer term programs

needed to deal with non-communicable diseases. Over the past several years the Caribbean has been subjected to a number of natural disasters with the ensuing possibility of the rapid spread of communicable disease. In addition, there have been outbreaks of life threatening dengue fever and crippling poliomyelitis. To focus attention on epidemiological trends CAREC has widely distributed yearly status reports on communicable diseases plus a five year trend analysis of all causes of morbidity and mortality. These events have effectively sensitized health workers and politicians to the need to maintain and improve their capability to monitor disease patterns, develop and implement control programs.

3. Centralized vs Local Capabilities

The project amendment will continue what the design team has found to be an appropriate response to the nature and levels of communicable disease in the region. This involves the continuing maintenance and improvement of (1) a common epidemiological reporting and data analysis system, (2) a centralized repository of high level epidemiological expertise, and (3) a centralized virology, microbiology, parasitology/entomology laboratory confirmation function at CAREC. The use of a common service reporting and analysis system is a necessity in that communicable disease does not stop at national boundaries. Effective monitoring and response must be based on current and accurate international data. CAREC serves as the reporting center for CMCs and in turn links member countries with the larger reporting/analysis systems operated by the Pan American Health Organization, the World Health Organization, and the U.S. Centers for Disease Control. The centralized reporting to CAREC is complemented by highly skilled staff epidemiologists and laboratory facilities with a capability to respond to disease outbreaks before they become full scale epidemics.

In addition to continued support to this central capability, the project will continue to strengthen in-country CMC capability in surveillance and laboratory service. Strengthening of either the central or local epidemiological function without the other would be technically inconsistent. It is not technically or economically feasible for all CMCs to maintain high level surveillance expertise or complex laboratory capability. Neither would it be logistically, technically or economically feasible for CAREC to provide for all the surveillance and laboratory needs of the CMCs. Maintaining a complementary level of central and local services has proven highly effective over the eight years of CAREC's existence. This is a dynamic process of continually improving, updating and redirecting CAREC's basic capabilities while at the same time passing responsibility for these procedures that have become routine on to those nations that are sufficiently capable.

As a centralized service center, CAREC's function and relationships to its member countries have been patterned after the U.S. Centers for Disease Control and the State Health Departments. This is a functional model that has been proven in the U.S. and has been successfully transplanted in the Caribbean.

4. Communicable vs. Non-Communicable Disease

While prevalence of many communicable diseases is dropping, prevalence of non-communicable diseases is making an even sharper rise. CAREC's focus has been primarily on communicable disease. For the immediate

future this focus will continue and is appropriate. It is appropriate because health resources must be directed at those diseases that are (1) preventable or most easily controlled, (2) take the greatest toll in terms of morbidity and mortality, (3) have the greatest economic impact if not kept in check. At present communicable diseases most closely fit these criteria.

CAREC is building expertise in non-communicable disease epidemiology through grants from medical research institutions. Member countries are expected to become more self-sufficient in terms of communicable disease surveillance and outbreak control over the life of the AID grant. If this is accomplished CAREC will be in a position to devote a larger percentage of its resources to non-communicable disease in upcoming years.

5. Surveillance vs. Control

The CAREC Council and the Committee of the future of CAREC have both urged that CAREC become more involved with disease control. Basically, this means technical assistance to the CMCs in analysis of surveillance data so as to identify disease problems and the design and evaluation of appropriate interventions. This represents a logical extension of existing CAREC capabilities. The project amendment design team has recommended, and CAREC has agreed to begin in this area by (1) training a non-medical epidemiologist whose availability will significantly increase the technical assistance capability of CAREC and (2) conducting at least one workshop in each of the 17 eligible countries specifically addressing on the use of epidemiological data in the planning and implementation of primary care programs. The Sexually Transmitted Disease Program is another example of the application of surveillance data to disease control.

6. Strategy for Transfer of Capabilities to CMC's

a. Proposed CMC Capability Levels

Table 3 contains capability levels in surveillance, outbreak control, and laboratory services that were expected to have been achieved by CMCs by the end of the original grant. In five of the 17 CMCs that are eligible for AID funded assistance from CAREC, these levels were achieved by the end of 1982. Of the remaining countries, four need improvement in one of the three areas, seven need improvement in two the areas, and one needs improvement in all three areas.

The design team has reviewed these capability levels and finds that they are still appropriate, that they represent levels that can be achieved by the countries given their assessed technical and financial capabilities. Table 6 shows the levels of improvements expected under the amendment.

TABLE 6

INCREASES IN CMC CAPABILITY LEVELS
ACHIEVED UNDER ORIGINAL GRANT AND
ANTICIPATED UNDER AMENDMENT

	SURVEILLANCE		OUTBREAK INVESTIGATION		LABORATORY	
	ORIGINAL GRANT	AMENDMENT	ORIGINAL GRANT	AMENDMENT	ORIGINAL GRANT	AMENDMENT
Anguilla	n.a.	.5	n.a.	.5	n.a.	-
Antigua	-	1	1	-	.5	.5
Bahamas	2	-	1	-	1	-
Barbados	1	-	-	-	-	-
Belize	1	-	1	1	.5	.5
Bermuda	-	-	1	-	-	-
Br. Virgin Is.	-	-	-	1	-	1
Cayman Is.	1	-	1	-	.5	.5
Dominica	2	-	2	-	-	1
Grenada	1	1	1	-	.5	.5
Guyana	-	1	-	-	-	1
Jamaica	-	1	-	-	-	-
Montserrat	-	2	-	1	-	1
St. Kitts/ Nevis	1.5	-	1	-	1	-
St. Lucia	1	-	1	-	.5	.5
Suriname	2	-	1	-	1	-
St. Vincent	2	-	2	-	1	-
Trinidad	1	1	1	-	-	-
Turks & Caicos	1	1	1	-	-	1
TOTAL	16.5	8.5	15.0	3.5	6.5	7.5

Although these levels are not directly comparable they do provide a rough measure of change. It can thus be estimated that an increase of 38 levels was achieved during the original grant and that an additional 19.5 levels remain to be developed under this amendment.

Outbreak investigation capabilities have rapidly increased. This is primarily the responsibility of the country's Medical Officer for Health and Chief Medical Officer. Although the organizational aspects may be new to these individuals the technical/diagnostic aspects usually lie within the domain of their medical training. Outbreak investigation capabilities thus were easily improved and only need marginal improvements under this amendment. Surveillance capabilities have also increased significantly as a result of training and in-country follow-up. The fact that there are still significant surveillance capabilities yet to be developed relates to the fact that this is a team activity that requires the active involvement of individuals in both the central ministry, the districts and the clinics, which is organizationally quite complex. The accuracy of central ministry reporting to CAREC has, in most instances, improved under the original grant. Training

and technical assistance under this amendment will focus on more complete and accurate reporting by the districts to the central ministries. Less progress has been made in laboratory capability than in any other area. This is accounted for by the fact that:

- 1) The technical training of many lab technicians leaves much to be desired, yet their capabilities must be increased hand in hand with surveillance and outbreak investigation capabilities if the overall system is to function
- 2) More than the other technical areas of epidemiology, laboratory work is dependent on the availability of supplies and equipment.
- 3) Laboratory staff especially in the smaller countries is often composed of one or two people. Thus turnover in staff can cause significant setbacks.

The problems identified above will be dealt with as follows:

Training under the amendment will be designed to bring individual technicians' capabilities up to the required level. CAREC's in-country, on-the-bench training program will be the primary vehicle for this effort. Under the original grant limited laboratory equipment was provided to the CMC's. The items supplied were those that were necessary for each country to perform at its proposed level. Equipment maintenance has been a problem in some labs. The AID/W funded project Maintenance and Repair of Medical Equipment, currently operating in the Eastern Caribbean, will, over the next year, have a positive impact on repair and maintenance of laboratory equipment. The problem of availability of expendable supplies for the laboratories is inter-twined with the generic problem of availability of all supplies, including drugs within the government health systems. CAREC will approach this problem two ways. During the upcoming workshops for Laboratory Directors, major emphasis will be placed on supply management. Secondly, CAREC will emphasize to senior administrators in the Ministries of Health the importance of maintaining adequate supply levels. CAREC's laboratory proficiency testing program will be utilized in this context. To date, laboratory performance on these tests was reported no higher than the country Laboratory Director. Under this amendment, reports will also be made to Permanent Secretaries and Chief Medical Officers. These individuals have sufficient knowledge of the overall health care system to recognize the importance of an adequate laboratory and also have the authority to make administrative changes as necessary.

This approach of both training of laboratory personnel in supplies management and sensitization of senior administrators is considered to be the best way to approach the supply problem as well as raise the visibility and perceived importance of the laboratories. These, in turn, are expected to have a positive impact on the retention of personnel.

Under the original grant country capabilities made encouraging progress. This amendment will allow CAREC to provide the training sessions

and follow-up deemed necessary for CMCs to reach a capability level that is the maximum that can be expected given their manpower, managerial and financial constraints.

These capability levels are not static, i.e. once a level is achieved it does not mean the work is over. Turnover of national staff makes maintenance of basic capabilities a continuing effort. Capabilities must also be adjusted to changes in disease patterns and technology. For example, CAREC training for lab technicians over the past year has included instruction on new laboratory techniques (technology) and diagnosis of malaria due to increasing numbers of imported cases (changes in disease patterns in CMCs resulting from the rapid increase in malaria incidence in Guyana, Belize, Haiti and the Dominican Republic). Thus those countries that had achieved the desired capability levels in 1982 will still be included in the training program.

b. Methods for Increasing CMC Capabilities

CAREC has developed an interactive system of regional and in-country workshops plus in-country follow-up designed to identify problems and resolve them. The design team's review of progress under the original grant has confirmed that these training methodologies employed by CAREC are effective and that they can be expected to continue to increase country capabilities. In sum, the design team has concluded that the amendment design is technically sound, logical and feasible.

c. Economic Analysis

Following a review of the economic analysis contained in the initial project document, (pages 47-49) it has been determined that continuation of the project activities under the amended project will not significantly alter the findings of the initial analysis which indicated economic viability.

d. Social Analysis

The social analysis of the initial project remains valid. This analysis is contained on pages 49-54 of the project paper.

e. Institutional Analysis

1. CAREC Institutional Background, Composition and Functions

The Caribbean Epidemiology Centre is a Pan American Health Organization center which was established under a ten year multi-lateral agreement in 1975. Signatories to the agreement included PAHO, the Governments of the region, and the British Overseas Development Mission. Since its establishment, CAREC has become one of the primary public health institutions serving the region. It is a consultative, training and reference center which assists its 19 member countries in improving disease surveillance systems, outbreak investigations, data analysis, improving laboratory skills, training national staff in epidemiologic and laboratory work, development and maintenance of immunization programs, procurement of vaccines, virology laboratory services, and other services which are beyond the technical capabilities of the small nations of the region. CAREC has paid particular attention to communicable diseases, but with increasing evidence of the importance of non-communicable diseases in the region, CAREC expected to become more involved in this area also.

CAREC has been remarkably successful in its activities. It has been specifically commended by its member states who indicated that " CAREC has been an unqualified technical success and enjoys strong support from the 19 participating governments". (PAHO 28th Directory Council Meeting, September 1981).

AID's 1981 mid-project evaluation of the original \$1.16 million Grant (Annex C) found that "all ministries visited expressed a very strong appreciation of and need for CAREC services". This is best demonstrated by the fact that member countries have, to date, provided 100% of the assessed contributions shown in Table 5. In addition, many of the contributing governments have specifically commended CAREC for its service to their health programs.

CAREC has promoted and helped develop national disease surveillance and public health laboratory infrastructure and has provided a regional focal point for information and skill interchange. All CAREC member governments now have designated epidemiologists, deputy epidemiologists (except Anguilla), surveillance statistical officers, and designated laboratorians, who have been trained by CAREC under the original AID grant. CAREC has assisted rapidly and effectively when problems have occurred whose extent was greater than national capabilities and/or whose implications were regional such as volcanic eruptions and hurricanes, outbreaks of typhoid, dengue, yellow fever, occurrences of malaria and food-borne and water-borne illness.

The current organization chart of CAREC is presented below. In 1982, 101 individuals were employed at CAREC and there was a core operating budget of \$1,254,152. When this is compared with a staff of 38 and a budget of \$348,171 in 1975, the significant growth of CAREC that has been required to develop a regional surveillance and laboratory center capable of meeting regional demands can be clearly seen.

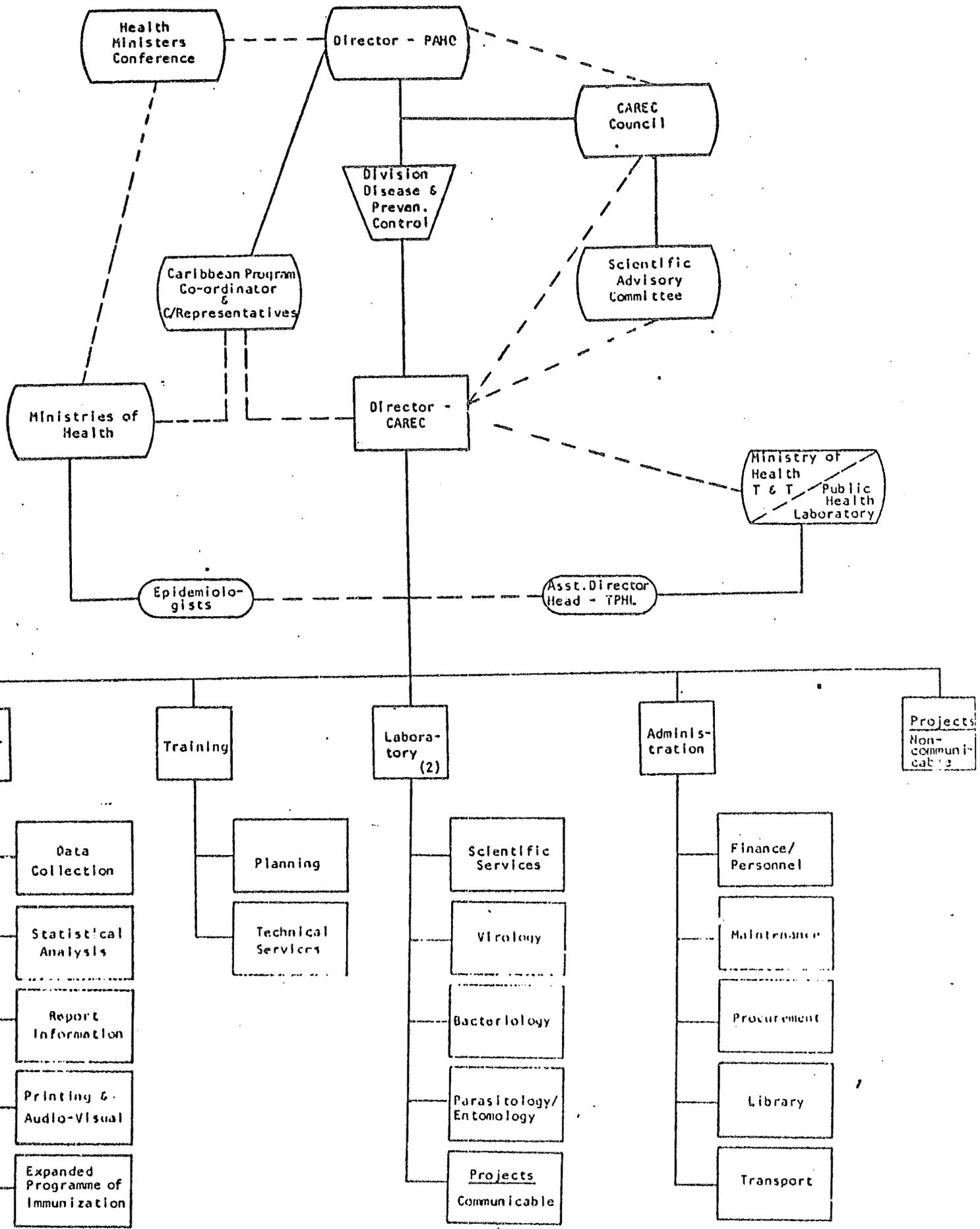
2. CAREC's Future: Functions and Administration

The CMCs expressed desire for the continuation of CAREC as a regional resource after its current charter expires on December 31, 1984 as expressed in the minutes of the 7th Meeting of CAREC's Scientific Advisory Committee on March 1981 (Annex A). This document reaffirms the need for a regional center of epidemiological expertise and outlines the role that CAREC can be expected to play in the future. This role centers around the concept of CAREC as a service organization focused on: disease surveillance and control, the utilization of surveillance data, the strengthening of laboratory services and training.

Early in 1982, the Director of PAHO formed a "Committee on the future of CAREC Beyond 1984". With representatives from CAREC, PAHO, CMCs, CARICOM, and UWI this committee set out to formulate a set of recommendations and prepare a detailed proposal to be reviewed at the March 1983 meeting of the CAREC Council. Although a final version of this report is not available, the following appear to be the major points that will be presented:

CARIBBEAN EPIDEMIOLOGY CENTRE (CAREC)
RELATIONSHIP ORGANIZATION CHART

3/0



BEST AVAILABLE

3/0

	Actual at 31st January								Projected	
	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984
1. International										
1.1 PAHO/CAREC	4 _a	8 _a	11 _a	12 _a	12 _a	11 _a	12 _b	11	12	12
1.2 MRC	3	3	3	3	3	4	3	2	-	-
1.3 Rockefeller	1	1	1	1	2	1	1	-	-	-
1.4 IDRC	-	-	-	-	-	-	-	-	1	-
1.5 Seconded by Trinidad Govt.	0	0	1	1	1	1	1	2	1	1
1.6 Emmaus-Suisse	-	-	-	-	-	-	-	1	1	1
Total International	8	12	16	17	18	17	17	16	15	14
2. Non-International										
C-VII Technicians V	-	-	-	-	-	-	2 _c	2	2	2
C-VI Technician IV/Admin. Asst.	2	2	3	4	5	5	3	4	4	4
C-V Technicians III/Snr. Secretary	2	4	4	6	12	13	12	12	12	12
C-IV Technician II/Secretary	6	6	8	7	9	8	8	10	10	10
C-III Tech. I/ Clerk	-	2	4	8	16	16	16	17	17	17
C-II Lab Asst./Drivers	4	5	6	9	11	8	9	10	10	10
C-I handymen) Maid/Cleaner)	7	7	8	10	9	8	8	9	9	9
	21	26	33	44	62	58	58	64	64	64
2.2 MRC	7	7	11	13	9	8	8	5	3	3
2.3 Rockefeller	2	2	2	2	2	2	2	-	-	-
2.4 IGPC Grant	0	0	0	4	4	0	5	5	-	-
2.5 Seconded by Trinidad Govt.	0	0	0	1	0	0	4	5	5	5
2.6 Trinidad & Tobago Govt.	-	-	-	-	-	-	-	6	4	4
	30	35	46	64	77	68	77	85	76	76
3. Trainee Posts	0	0	0	3	3	3	0	0	0	-
TOTAL STAFF	38	47	62	84	90	88	94	101	91	90

a - Include 2 staff seconded by CDC

b - Include 1 staff seconded by CDC

c - Grade created in 1981

- The basic objectives of CAREC, as defined by the 7th Scientific Advisory Committee are reaffirmed.
- The Committee consensus was that CAREC should become an autonomous regional center, affiliated with CARICOM and UWI but not an integral part of these organizations. The timing of this transfer of affiliations was not decided between two options: autonomy as of January 1985 versus an extension of PAHO management for 2-3 additional years with a slower transition/transfer of authority.
- The Committee felt that the current 19 CMCs should be the only "full members" of the Centre. "Associate Membership" was approved for other countries from the "Caribbean Region". Both of the latter two terms still need careful definition.
- Final financial recommendations were not possible to formulate but the committee feels that a "working capital fund" of \$200,000-300,000 should be established and that CMC assessments may have to be adjusted accordingly.
- PAHO cannot commit itself to a fixed percentage of the budget in the future but has committed itself to the funding needed to maintain its current level of technical contributions. Several aspects of PAHO's administration of CAREC, particularly technical PAHO staff positions are recognized as major issues that the committee must address.

The committee will issue its final report in 1983 and then PAHO, CAREC, and the CMC's will develop a more final and detailed timetable for administrative transfer. This timetable will be presented to CAREC's Scientific Advisory Committee (SAC) and the Advisory Council in March 1983 for review. There is some likelihood that the recommendations of the PAHO Committee on the future of CAREC will be for an extension of PAHO administration of CAREC for from 2-3 years beyond the original termination date of 1985. PAHO appears to be willing to go along with this recommendation, if it is the wish of the CMCs.

As the functions of CAREC are to remain basically unchanged, it is not expected that there will be any major changes in staffing or operating (core) budget requirements. Reductions in staff levels shown in the preceding table in 1983 and 1984 reflect the completion of extremely funded research projects rather than any functional changes. As outlined previously in the financial analysis section, CMC quota contributions are being increased now to eliminate funding deficits. These levels are expected to be maintained and possibly increased after 1984 in order to meet inflationary increases in the costs of maintaining CAREC's service capability.

CMC support of CAREC is strong and is not expected to lessen. PAHO's support to the Centre will continue even after PAHO's administrative role is over, and planning is underway to allow a smooth transition from PAHO to regional administration of CAREC. In short, a reasonable and responsible course is being followed by the involved parties in planning for the future of CAREC.

3. CAREC's Training Functions

Prior to the original AID Grant, CAREC was providing a training function within the region. The training was conducted on a somewhat ad hoc basis primarily by the staffs of the Laboratory and Surveillance Units when they had time and the funds were available. The original AID grant has allowed CAREC to greatly systematize their training program and was directly responsive to the need for a rapid increase in CMC capabilities in surveillance, outbreak investigation and laboratory analysis. The grant funded Training Unit also developed an evaluation program to allow CAREC to assess both training needs and the effectiveness of on-going training programs. In addition, the Training Unit has fostered the systematic production of training materials.

Desired CMC capability levels will be achieved through training and technical assistance provided under this amendment. When these levels have been achieved, training can be re-directed towards the maintenance of capabilities and a continuing education program. This will be a less intensive effort than was the initial building up of capabilities.

Financial constraints necessitate that CAREC continue to consolidate its functions in the future. Given that fact, plus the reduced training load that will need to be carried after the grant amendment, CAREC intends to transfer training responsibilities to the Laboratory and Surveillance Units. Back-up support with training materials will be provided by the audio-visual technician currently in the Training Unit. The Training Officer, during this amendment, will be responsible for transferring teaching methodologies to the Surveillance and Laboratory Units, designing the continuing education programs and coordinating the production and adaptation of the training materials needed for these programs.

Funds that would have been utilized in maintaining the full staff of the Training Unit (1985 costs were estimated at \$85,000) will then be utilized in support of the continuing education program.

V. PROJECT ADMINISTRATION

1. Time Frame

PAHO's role as administrative agent for CAREC expires on December 31, 1984. It is anticipated that this arrangement will be extended three years through December 1987. This amendment will extend the terminal date of AID's grant to June 30, 1985. Since PAHO will be making staff and financial inputs to CAREC in 1985, irregardless of their formal administrative role, PAHO will be able to administer the AID funds programmed for use in 1985.

2. Implementation Arrangements

Total amendment funding of \$800,000, will be obligated under a Project Agreement Amendment. A PIO/T sub-obligating \$124,300 will be signed at the same time. This PIO/T will authorize AID/W to enter into a PASA with the Department of Health and Human Services for the continued services of the CDC epidemiologist seconded to CAREC. When PAHO/CAREC have met the conditions precedent to disbursement of amendment funds (for other than technical assistance), the amount of the Federal Reserve Letter of Credit under which PAHO/CAREC receives payment for project activities will be increased by \$675,700.

Under the original grant, CAREC has submitted yearly workplans for AID review and approval. Any changes in these workplans that have proven necessary have been accomodated by an exchange of letters between CAREC and AID. This system has worked well and will be continued. The submission of the first 12 month workplan under the amendment is one of the conditions precedent to disbursement of amendment funds.

In carrying out this amendment CAREC will hire short-term advisors, place additional long-term personnel in special CAREC positions, arrange travel and accommodation for CAREC and CMC personnel, and procure equipment and supplies. All of these actions have been efficiently undertaken and completed by CAREC under the original grant. For the purposes of this amendment CAREC will continue to utilize the same administrative procedures that have been developed for the utilization of AID funds.

3. Evaluation Plan

An extensive evaluation of the implementation and effectiveness of the AID grant to CAREC will be undertaken near the end of the continuation grant, e.g. Spring 1985.

Certain principles will be followed in this evaluation.

A. CAREC staff, CMC professionals, AID Health staff and outside experts will jointly develop the evaluation instruments and then perform the evaluation.

B. The evaluation will involve both review of CAREC records, interviews with CAREC staff and visits to CMC's. The CMC's might include the countries visited in the mid-term evaluation (St. Vincent, Antigua, St. Kitts, Dominica, Barbados, etc.), but also the larger CMC's (Trinidad and Tobago and Jamaica) and possibly a few more of the smaller or more distant CMC's (Belize, Cayman or Turks & Caicos).

C. Process measures will be used. For example, data should be collected on types and numbers of courses and participants, numbers of attachments, in-country visits, etc.

D. Outcome or impact measures will also be used: for example, what are course participants and attachees, etc. now doing? Have their positions changed since their CAREC training? Do they use the material/techniques that they were taught? Has there been a change in other outcomes, such as: immunization levels, disease reporting (in completeness and timeliness), local publication of data, local utilization of data, etc?

E. CMC capabilities will be assessed as well as the institution building aspects of the project within CAREC and the quality and appropriateness of training that CAREC has conducted using grant funds.

F. AID, CAREC and/or PAHO will publish this evaluation as a monograph providing CMC's and other donors feedback on the yield of their investments.

The scale of the evaluation can vary depending on availability of personnel and resources. At least three external evaluators would be necessary to cover all the in-country visits proposed B above. In addition, assistance from AID health staff, CMC member, countries, and CAREC staff will be required.

PAHO/WHO
CARIBBEAN EPIDEMIOLOGY CENTRE

APPENDIX TO THE MINUTES OF THE
VII SCIENTIFIC ADVISORY COMMITTEE
MEETING

POLICIES AND GUIDELINES FOR THE FUTURE OF CAREC

1. INTRODUCTION:

1.1 In approaching the responsibilities outlined in PAHO Directing Council Resolution XXIX, specifically "the development of recommendations regarding the policies and guidelines for the future of CAREC beyond 1984", the CAREC Scientific Advisory Committee (SAC) reviewed the Multilateral Agreement for the operation of the Trinidad Regional Virus Laboratory and briefing document -- The Caribbean Epidemiology Centre "CAREC" (SAC 81/8). The SAC, in its discussions on the future aims and functions of CAREC, was conscious of the constraints in finances and personnel under which the Centre must operate. SAC agreed that the basic functions, as had been set out, were being handled by CAREC, and the minimum staff to do this had been established. Thus, to make new programme activities possible, consolidation will be continued and it may be necessary for some existing responsibilities to be handled on to appropriate national or regional bodies. There will be an increasing need to develop information to enable health planners to allocate scarce resources appropriately. In the future, the countries are committed to developing appropriate infrastructure and technologies for controlling morbidity and mortality through the primary health care system to attain the goal of Health for All by the Year 2000. As Member Countries develop this infrastructure and capacity to deal with selected diseases, CAREC may have to adjust its priorities and utilization of resources.

1.2 These guidelines have been developed by members of the SAC for CAREC Council; they have not been reviewed by Member Countries and may not adequately reflect their priorities. However, these guidelines may serve as a basic document for future discussions.

2. HEALTH NEEDS OF THE COUNTRIES:

2.1 CAREC is recognized as the most important resource of expertise in epidemiology in the Caribbean, with its success in the past due largely to intervention in communicable diseases with the development and some involvement in implementation of the strategies for controlling these diseases.

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- 2.2 Economic and social improvements will, with existing disease control programmes change the pattern of disease in Caribbean countries, thus changing the nature and quantum of the demands on the health care resources in the region.

The expected overall pattern will be a need to further consolidate the existing resources devoted to communicable diseases, with an increasing commitment being devoted to non-communicable diseases. To this end and as stated above, there are other resources available for the Caribbean region within PAHO and country levels. Also the incorporation of a programme directed towards non-communicable diseases within the general health services of the countries could lead to redistribution of existing resources especially at the primary care level. An indication of this change in the dedication of selected resources can be seen in the "Review of Mortality and Morbidity in the English Speaking Caribbean" (SAC81.9). It should be emphasized, however, that the need will continue to devote resources to communicable disease control and prevention activities.

3. CAREC'S ROLE:

- 3.1 CAREC should remain a service-oriented organization. As in the past, future programmes should be developed only in close collaboration with the Member Countries and should be built upon the strengths that the Centre has developed in surveillance, epidemiology, laboratory work and training.
- 3.2 CAREC will be expected to help the countries by producing the information needed for rational decision making in determining resource allocations among various activities in health. This may not be by serving a documenting function but by means of surveillance epidemiology and computer technology, and by making predictions of changing disease patterns, regionally and nationally.
- 3.3 Such a service can only be given on the basis of adequate current surveillance data. The preliminary "Review of Morbidity and Mortality in the English Speaking Caribbean" needs to be institutionalized with data obtained regularly from as many of the countries as possible.
- 3.4 In the development of the future programme for CAREC, the SAC recommends emphasis on the controllable and preventable diseases. It is expected that several important diseases may be added to these categories during the next few years and involvement in the identification and field testing of control and prevention methods against diseases of importance in the region would be a valid CAREC research activity. The SAC recommends that applied research activity should continue at CAREC, directed at areas relevant to the Caribbean and not

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impinging on CAREC's service functions. Close collaboration with the regional universities is recommended. Modification of the administrative support services must be adequate and follow any changes in program direction. CAREC must continue its commitment to train West Indians for positions at CAREC and in the Caribbean region.

3.5 Communicable Disease Surveillance:

- 3.5.1 The gains made in 1970's and 1980's in reducing infectious disease mortality need to be maintained. Now and beyond 1985, communicable diseases will remain a major concern and ongoing surveillance will be required to monitor the status of disease control in the Caribbean. CAREC must keep abreast of new developments in the field, e.g., rapid diagnostic methods and new vaccines. Better control of diseases causing childhood mortality will lead to a shift of interest towards disease causing significant morbidity and economic cost.
- 3.5.2 CAREC must continue to foster self-reliance in the individual Member Countries in the area of infectious disease surveillance and control, commensurate with their capacities, but must also continue the dissemination of surveillance information on diseases of international importance to the countries' health authorities. Additionally, CAREC must maintain an ability to respond to requests for assistance in respect of epidemics or disasters.
- 3.5.3 CAREC should develop, in consultation with other institutions, basic information on costs and benefits of selected infectious disease interventions, to enable health administrators to allocate resources appropriately: areas might include sexually transmitted diseases, hepatitis, enteric infections, rubella, water borne and insect transmitted diseases. Assistance from national and regional consultants should be sought.
- 3.5.4 Now and in the future, CAREC can play an important role extending the technical expertise developed by PAHO/WHO in selected disease programme areas. The current assignment of a technical officer in the Expanded Programme on Immunization is an example of this. If resources are made available to CAREC, other PAHO/WHO programme functions may be implemented through the Centre, e.g., diarrhoeal disease control, tuberculosis, leprosy, sexually transmitted diseases, nosocomial infections, and dengue.

3.6 Laboratories:

- 3.6.1 CAREC should stimulate the strengthening of laboratory services in the countries in support of infectious diseases surveillance

training in new techniques and continuing proficiency testing and the maintenance of quality control.

- 3.6.2 CAREC laboratories must be able to respond to the changing patterns among the communicable diseases. The extent to which they should, in the future, be enabled to support the envisaged surveillance activities in non-communicable diseases will need careful consideration, particularly in respect to the availability of alternative laboratory support of appropriate quality.
- 3.6.3 There will be a need for CAREC laboratory services to be maintained for the support of the surveillance system, adequate maintenance and replacement of equipment, and a logical depreciation policy.
- 3.6.4 Reference services and serological surveys will be required as indicated by the changing patterns of disease and the needs of the individual Member Countries. Changes in microbiology in the mid and later 1980's will include greater emphasis on serological methods of diagnosis and the use of immunological techniques for the detection of microbial antigens. CAREC should take the lead for the introduction of appropriate new technologies into the laboratories of the countries and undertake evaluation of commercial microbiological testing kits.

3.7 Training Activities:

- 3.7.1 The major part of the Centre's training activities has been directed towards the surveillance teams. All 19 Member Countries have benefitted in various ways. CAREC has also participated in training courses for medical students and other health personnel at the universities in the region and students have undertaken projects at CAREC for master degrees.
- 3.7.2 CAREC must retain the capacity to provide training in the epidemiology and surveillance of infectious diseases.
- 3.7.3 Training should continue after 1984, but methodology and techniques will necessarily change to make the best use of limited resources. More emphasis will need to be placed on the training of trainers to enable relevant modern epidemiological concepts to be imparted to an ever increasing body of health personnel. Similarly, appropriate new laboratory techniques can be disseminated by CAREC in conjunction with the laboratory trainers in the region. Continuing education programmes in these fields should also be supported. CAREC should prepare and use audio visual

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materials for the transfer of appropriate information to all sections of the health team.

- 3.7.4 Between now and the termination of the current multilateral agreement a number of new institutions for the training of a variety of health personnel will be established in Trinidad and Tobago and some other Member Countries. Of particular significance is the expected opening of the Mount Hope Medical Complex (in Trinidad) in 1984 where medical and veterinary students and nurses will receive their entire professional training. CAREC will have the unique opportunity to assist in the development of the relevant orientation of instruction in epidemiology at the complex. These relationships should be formalized by joint staff appointments and the expertise at CAREC should be utilized in developing both undergraduate and postgraduate programmes in epidemiology, medical microbiology, and entomology. CAREC's virology programme in particular will be of interest to both the medical and veterinary schools.
- 3.7.5 The morbidity and mortality report will be further developed to give greater prominence to non-communicable diseases and with regular data from most of the Caribbean countries, will provide a valuable feedback of information for health personnel to assist in their continuing education. Additionally, the non-communicable disease data should be useful in the development of training programmes directed at the control and prevention of non-communicable diseases.
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CARIBBEAN COMMUNITY SECRETARIAT

FINAL REPORT

EIGHTH MEETING

OF THE

CONFERENCE OF MINISTERS

RESPONSIBLE FOR HEALTH

BARBADOS

JULY 7--9, 1982

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RESOLUTION NO. 8

CARIBBEAN EPIDEMIOLOGY CENTRE (CAREC)

THE CONFERENCE,

Having studied -

- (a) the Report of the Eighth CAREC Council and Summary of the work of CAREC in 1981 - CMH 82/8/35;
- (b) the Centre's Programme of Work and Budget for 1982/1983;

Recalling Resolution 8 of the Seventh Conference,

1. REAFFIRMS its continuing commitment to the aims and objectives of CAREC and its strong support for the continuation of the Centre as a Regional Institution up to and beyond 1984;
2. THANKS -
 - (a) the Director of PAHO and the CAREC Council for the Report; and
 - (b) the Director of PAHO for the special contribution of \$100 000 to CAREC for 1983;
3. APPROVES the Centre's programme of work and budget for 1982/83 and the projections for 1984;
4. URGES all Governments to collaborate in improving the collection and analysis of morbidity and mortality data;

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REP. 82/8/43 CMH

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5. THANKS USAID for its assistance in surveillance and training and notes with appreciation that the grant has been extended to December 1982 and that a new grant for consolidation and utilisation of surveillance data will be funded by USAID in 1983-1984;
6. THANKS the Government of Canada for its support for maintenance and safety at CAREC;
7. ENDORSES the proposal for a study of acute respiratory tract infections to be supported by the Governments of Trinidad and Tobago, Barbados and the International Development Research Council (IDRC);
8. RECOMMENDS that in compliance with Resolution 20 of the Sixth Meeting the Countries continue to take increasing responsibility for operating the centre.
9. RECOMMENDS that the country contributions for 1983 and 1984 should be as proposed in the Report of the Eighth CAREC Council, subject to review of the 1984 budget in 1983 by the Ninth CAREC Council, which will also make tentative proposals for 1985 for consideration by the Ninth Meeting of the Conference in the light of decisions on the future of CAREC after 1984;
10. COMMENDS the Director of PAHO and Secretary-General of CARICOM, in pursuance of Resolution 8 of 1981, for appointing the ad hoc committee under Sir Carlisle Burton on the future of CAREC and requests that the work of this committee should be completed by December 31, 1982 and circulated for consideration by the Governments, SAC and Council of CAREC, and the governing bodies of PAHO during 1983;
11. NOMINATES Mr. R. A. Ramcharan, Acting Permanent Secretary, Ministry of Health, Jamaica, to serve on the CAREC Council for 2 years.

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EXTRACT FROM MID TERM EVALUATION EPIDEMIOLOGICAL
SURVEILLANCE AND TRAINING
JANUARY 26 - FEBRUARY 5, 1981

Future Directions

A. CAREC as a Regional Institution

All ministries visited expressed a very strong appreciation of and need for CAREC services. Their confidence in and use of CAREC is further confirmed by the greater than 95% level of national contributions.

Although need for and use of CAREC services vary with individual country capability, all countries have a need for CAREC in one or more of the following areas: disease investigation and control, training (epidemiology, statistics, laboratory), laboratory reference-(bacteriology), laboratory services-(virology), proficiency testing technical assistance-(epidemiology), EPI, and laboratory.

Although the future of CAREC is beyond the scope of this evaluation, the center evaluation team believes that maintaining CAREC as a regional resource is essential.

B. Increasing West Indian Professional Personnel at CAREC

During the last year, significant progress has been made in recruiting highly qualified West Indians for senior level positions within CAREC. Further progress in this area requires a commitment to the Center and its activities beyond 1985. CAREC has a defined program to increase the number of West Indian nationals on its professional staff.

C. Importance of CAREC to Industry and Development

The economic impact of disease in general and epidemics, in particular, is a major concern of all Caribbean countries. Diseases such as yellow fever, dengue, malaria, and food poisoning can cause considerable morbidity, mortality, and suffering to the region's population. In addition, industry can be disrupted, tourism can suffer long term damage and all regional countries incur increased costs due to surveillance, quarantine and post health activities, (e.g. yellow fever in Trinidad and Tobago, dengue in Jamaica and typhoid in Dominica). The effect of a disease outbreak on economies based to a large extent on attracting tourism is potentially devastating.

The importance of CAREC as a training and resource center to develop national capabilities to detect, (surveillance) confirm (laboratory) and respond appropriately to these disease outbreaks cannot be underestimated.

D. AID Surveillance/Laboratory Training Assistance

1. Progress to Date

- a) Project activities (21 of 24 activities) identified in the implementation plan are on track.
- b) Initial training activities have been carried out in epidemiology and laboratory.
- c) The evaluation identified both significant progress as well as areas of deficiency.
- d) Although some deficiencies were generalized and can be corrected through regionwide approaches, future improvement will in large part require specific country approaches to identify and correct deficiencies in organization, skills, and knowledge. This is especially true for the disease surveillance, epidemiologic services, and EPI.

2. Current Project Activities

Many CAREC activities, some AID funded, some with other funding have significantly contributed to achievement of Project Objectives and should be continued including:

Surveillance

- Epidemiology Training
- Assistance in Epidemic Investigation (decreasing as national competence develops)
- Phone consultation as Epidemic Investigation (increasing)
- CAREC Epidemiology Bulletin
- Special Epidemiology Studies

Laboratory

- Laboratory Training
- Laboratory Proficiency Testing
- Reference Services for Bacteriology and Parasitology
- Laboratory Services for Virology
- On site consultation/training

Expanded Program on Immunization

- Training
- Equipment Supply
- Supervision/Evaluation

3. Areas for Program Intensification

In two areas, surveillance and EPI, problems are country specific and require on-site evaluation, problem identification and solution. For each country, current activities need assessment and specific objectives and plans of action need to be developed to further strengthen national capability.

- a) Frequency and duration of on-site visits;
- b) Training needs - at each level: central ministry, physicians, nurses, public health inspectors;
- c) Development of monitoring and supervisory systems to measure progress toward predetermined objectives.

E. Areas for Program Re-direction during months 19-36

- 1) Now that most initial training has been completed, future training will need to be more specific to meet country needs with their capability in terms of interest, implementation, and support.
- 2) Current training is being largely measured in terms of inputs. Although course objectives are in general well recognized, no formal written course objectives or plan of evaluation were available with the training officer. Using the talents of the new training officer, and outside consultation if necessary, specific objectives and evaluation plans need to be developed for each training course.

Training evaluation needs to measure the impact of performance at the country level.

- 3) The major cause of morbidity and mortality in urban and rural children is gastroenteritis. Approaches to treatment are archaic and ineffective. New approaches in terms of nutritional counseling and oral rehydration not being used in any of the countries visited need to be developed.

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- 4) To maintain deputy epidemiologist in their current position, a career structure needs to be developed.
- 5) Recognition of training through certification of participation should be instituted immediately and retroactively.

F. Areas for New Program Development

1) Now that a basic core staff in epidemiology, statistics and laboratory have received training, future needs must include:

- a) Continuing Education
Advance Training Courses
Workshops
On-Site Visits

The interchange of information, experience, and future opportunities is essential to maintain morale and motivation for Deputy Epidemiologists and Laboratory Directors.

- b) Training of Replacement Personnel

2) In that the basic goal of this project is the reduction of morbidity and mortality, particularly in children under five, new initiatives are needed to confirm and further define major causes of morbidity and mortality in this population group.

3) With the further definition of major causes of morbidity and mortality, it is important to find effective means of disease prevention and control of major priority problems through operational research. In terms of current knowledge of disease epidemiology in Caribbean countries the determination of the effectiveness of oral rehydration in treatment of gastroenteritis and the feasibility of its use at the local level is of high priority.

4) The future of health in many areas of the Caribbean will be dependent on the interaction of nurses with the community. Currently impact on project activities of these very important implementors is limited. Extension of CAREC activities in terms of disease surveillance, disease prevention and disease control for this group is probably the single most important challenge of the 80's.

5) Patterns of disease in the Caribbean are changing. Non-infectious diseases (accidents, diabetes, hypertension, and mental illness) are currently the major adult causes of mortality and morbidity. If CAREC is to meet the needs of its constituents, it will have to increasingly allocate resources to noncommunicable diseases.

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LOGICAL FRAMEWORK
538-0027
EPIDEMIOLOGICAL SURVEILLANCE AND TRAINING

AMENDMENT

NARRATIVE SUMMARY	OBJECTIVELY VERIFIABLE INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p><u>Goal:</u> To improve health status of the Commonwealth Caribbean population through reduction of communicable disease incidence/prevalence.</p>	<ul style="list-style-type: none"> - Decrease in infant mortality - Increase in life expectancy - Reduction in communicable disease 	<ul style="list-style-type: none"> - Annual demographic reports by MOHs - CAREC statistical reports 	<p>Increased knowledge of disease incidence and location will result in more effective prevention.</p>
<p><u>PROJECT PURPOSE:</u></p> <p>A. To increase CAREC capability to assist CMCs in laboratory and surveillance activities</p> <p>B. To improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable diseases.</p>	<p><u>END OF PROJECT STATUS</u></p> <p>A. 1) <u>Training Unit (TU)</u></p> <ul style="list-style-type: none"> a) TU has conducted training anticipated and reduced functions/staff to level sustainable under core budget; b) Appropriate training materials for regional and in-country uses developed; c) Surveillance and Laboratory will have taken on an appropriate training role using materials and techniques developed by the TU; d) Continuing education program for national and designated epidemiologists, surveillance statistical officers, EPI coordinators, and lab. directors. <p>2) <u>Surveillance Unit (SU)</u></p> <ul style="list-style-type: none"> a) West Indian medical and non-medical epidemiologists in staff positions with appropriate experience and skills b) SU producing monthly surveillance reports and with capability to do country specific analyses. c) SU using data for planning, delivery and evaluation of health services and capable of training CMCs to use data similarly. <p>3. <u>Laboratory Unit (LU)</u></p> <ul style="list-style-type: none"> a) Maintain current capabilities in diagnostic and proficiency testing. b) Maintain capability to assist CMCs improve accuracy and efficiency of organism testing. <p>B. 1.) <u>Surveillance & Outbreak</u></p> <ul style="list-style-type: none"> a.) Surveillance & outbreak capabilities per Table 3. b.) No CMC will be more than one month behind in reporting routine surveillance data. <p>2.) <u>Laboratory</u></p> <ul style="list-style-type: none"> a.) Lab capabilities per Table 3. b.) 80% of CMCs participating in proficiency testing program with 75% accuracy. <p>3.) <u>Data Utilization</u></p> <ul style="list-style-type: none"> a.) Epidemiological data being routinely used in planning and evaluation of health services in 50% of CMCs. 	<p>A. 1)a) CAREC personnel and training records.</p> <p>b) On-site review.</p> <p>c) On-site review, CAREC programming reports.</p> <p>d) CAREC training plan for 1985.</p> <p>2.a) CAREC personnel records, on-site review of work performance.</p> <p>b) CAREC surveillance reports and on-site review of capabilities.</p> <p>c) CAREC reports and on-site review</p> <p>3.a) CAREC and CDC reports</p> <p>b) CAREC training, t.a., and proficiency testing reports.</p> <p>B.1.a.) On-site visits during end of project evaluation.</p> <p>b.) CAREC records.</p> <p>2.a.) On-site visits and CAREC proficiency testing reports.</p> <p>b.) Proficiency testing records.</p> <p>3.a.) On-site evaluations.</p>	<ul style="list-style-type: none"> - Individuals trained retain and use knowledge - Continued support of CAREC by member governments PAHO, etc. - LDC countries will be receptive and commit resources to CAREC sponsored initiatives. - Trained individuals will continue to work in public health in the West Indies. - Continued interest by West Indian governments in public health and epidemiology. - Improved levels of participation can be achieved by CAREC in next year.

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C. To further develop West Indian middle management at CAREC.

- b.) Two countries have reviewed/ revised existing national health plans in light of epidemiological data.
- 4.) 50% of CMCs have conducted in-service training using CAREC materials. All schools for nurses and EMOs using CAREC materials.
- C. 1.) Two West Indian surveillance epidemiologists (one a non-MD) trained and in core funded staff position).
- 2.) Chief lab technician participating in lab management.
- 3.) Other staff members have received training as appropriate to CAREC management needs.
- 4.) Improved equipment maintenance program reduced "down time" for lab and other equipment by 50%.

- b.) On-site evaluation and review of health plans.
- 4.) On-site evaluation, trainers designated, training materials available in sufficient quantities.
- C.1.) CAREC personnel records
- 2.) Training records, on-site evaluation.
- 3.) Training records and on-site evaluation,
- 4.) On-site evaluation.

- that qualified West Indian professionals will find CAREC appointments professionally and fiscally attractive.

OUTPUTS

- 1. Training
 - A. Attachments/Traineeships
 - 1. Medical Officers
 - 2. Medical Students
 - 3. Others
 - B. Surveillance/data use
 - 1. Deputy Epidemiologists
 - 2. Surveillance Statistieal
 - 3. Designated Epidemiologists
 - 4. In-country workshops
 - 5. Nurse & EHO Tutors
 - C. Laboratory
 - 1. Lab Technicians
 - 2. Lab Directors
 - 3. On-site, on-the-bench
 - D. Animal Health Assistants
- 2. Supplies/Equipment
 - A. Immunization Equipment
 - B. Epidemic Supplies
 - C. Proficiency Testing Supplies
- 3. Special Activities
 - A. Training Materials
 - 1. Surveillance Materials
 - 2. Laboratory Materials
- B. STD Program
 - 1. In-country workshops
 - 2. Standardized Treatment Policy
 - 3. Improved surveillance/follow-up programs
 - 4. Baseline for STD prevalence established

	July-Dec. 1983	1984	Jan.-June 1985
workshops/parts			
1. Deputy Epidemiologists	1/10	3/42	-
2. Surveillance Statistieal	-	1/17	-
3. Designated Epidemiologists	1/18	1/18	-
4. In-country workshops	5/118	7/164	5/118
5. Nurse & EHO Tutors	2/30	-	-
1. Lab Technicians	2/34	2/34	-
2. Lab Directors	-	1/17	-
3. On-site, on-the-bench	8 visits	16 visits	-
D. Animal Health Assistants	1/10	-	-

- A. 37 refrégerators installed in cold chains, effectiveness evaluated.
- A.1.a. 5 disease specific investigation guides
 - b. Basic EPI Manual updated
 - c. Materials for Nurse and EHO training
 - d. Reporting guides for statistical officers
 - e. EPI Review
 - f. Guide on planning and evaluation uses of data
- 2.a. Lab procedures guide
 - b. Lab management guide
- B.1. 17 countries
 - 2. 17 countries
 - 3. 17 countries
 - 4. Reports distributed

1. CAREC Training Records, in-country evaluation of impact.

CAREC procurement records, in-country checks.

A. Review of materials at CAREC, in-country checks on availability.

- B.1. CAREC records
 - 2. CAREC records, site visits
 - 3. CAREC records, site visits
 - 4. CAREC records

- That CAREC trained individuals will be used in CMC's where their skills can be most effective.

- That training manuals will be used by appropriate public health personnel and be of assistance in surveillance, prevention and outbreak control.

INPUTS

- 1. Technical Assistance
- 2. Training
- 3. Special Activities
- 4. Supplies/Equipment
- 5. Evaluation
- 6. Program Support Costs

	AID	PAHO/CAREC
1. Technical Assistance	263,825	-
2. Training	320,539	191,100
3. Special Activities	50,000	-
4. Supplies/Equipment	62,660	-
5. Evaluation	11,000	-
6. Program Support Costs	92,036	-
	<u>800,000</u>	<u>191,100</u>
	*****	*****

REVIEW OF CAREC ACTIVITIES SUPPORTED UNDER AID GRANT 538-0027

I. Country Specific Training and Technical Assistance

Beginning in the last quarter of 1979 and continuing throughout 1982, project funds from USAID have supported the training program of the Caribbean Epidemiology Center in all of the CAREC Member Countries except Trinidad and Tobago and Bermuda.

The majority of training and technical assistance has taken place in the territories but each year major workshops and formal training courses involving at least one participant from each country have been held at CAREC. These include the Annual Designated Epidemiologists Workshop and the Annual Laboratory Directors Workshop.

Laboratory training involving participants from each territory has covered general bacteriology and more specific topics such as genital tract, urinary tract, and enteric infections; diarrheal diseases; serology and the identification of parasites of public health importance including malaria.

Other workshops attracting participants from the region are the Statistical Surveillance Officers Workshop and the Continuing Education Workshop for Deputy Epidemiologists. While not held annually, they represent efforts to keep all trained members of the surveillance team involved with the epidemiologic process.

The following listing provides highlights of country specific training activities and technical assistance provided to the CMC's during the Grant.

Attendance at regional meetings held at CAREC or elsewhere is not included.

1. ANTIGUA

1980-- in-country epidemiology workshop for public health inspectors and nurses; technical assistance directly provided to the surveillance unit.

1981--Statistical Surveillance Officer attached to CAREC Surveillance Unit for one week. 1982--zoonoses surveillance training for veterinary public health assistants.

2. BAHAMAS

1980--on-the-bench laboratory training provided on two occasions; technical assistance directly provided to the national surveillance unit. 1981--in-service course on investigation of foodborne illness provided to health workers and food service personnel; 3 day workshops on epidemiological aspect of dengue, diarrheal diseases; and certification of cause of death; basic surveillance of malaria workshop; direct technical assistance to surveillance unit. 1982--microscopic diagnosis of malaria workshop; in-service workshop on surveillance and primary health care; surveillance workshop for the Family Islands; technical assistance to the national surveillance unit.

3. BARBADOS

1979--Medical Officer attachment to CAREC Surveillance Unit for one week; technical instruction in low cost methods of hepatitis screening. 1980--Deputy Epidemiologist attachment to CAREC Surveillance Unit for one week; epidemiology workshop for Barbados Community College allied health sciences students. 1981--epidemiology training for Community Health Nursing Program students, epidemiology workshop for allied health sciences students; epidemiology of toxic shock syndrome for nurses attending Post Basic Program; lectures in virology and basic epidemiology for UWI medical students, technical assistance to national surveillance Unit. 1982--Medical Officer attachment to CAREC Surveillance Unit.

4. BELIZE

1979--Deputy Epidemiologist trained at CAREC. 1980--expanded program on immunization workshop. 1982--refresher course on laboratory diagnosis of malaria; provision of materials for in-service training requested and provided.

5. BRITISH VIRGIN ISLANDS

1980--Deputy Epidemiologists trained at CAREC. 1982--On-the-bench laboratory training.

6. CAYMAN ISLANDS

1979--Deputy Epidemiologist trained at CAREC. 1980--expanded program of immunization workshop. 1981--technical assistance provided to national surveillance unit; on-the-bench training provided to the laboratory. 1982--On-the-bench training provided to the laboratory.

7. DOMINICA

1980--Medical Officer attachment to CAREC Surveillance Unit.

1981--technical assistance provided to national surveillance unit (dengue outbreak). 1982--training materials requested and provided for in service workshop; District Medical Officer workshop held; technical assistance provided to national surveillance unit

8. GRENADA

1979--technical instruction on low cost hepatitis screening methods. 1980--Deputy Epidemiologist trained at CAREC. 1981--workshop on surveillance and diagnosis of malaria. 1982--Medical Officer attachment to CAREC; on-the-bench laboratory training; food safety training course; public health nurse and public health inspector attachments at CAREC Surveillance Unit.

9. GUYANA

1979--technical instruction on low cost hepatitis screening methods. 1980--Deputy Epidemiologists (2) trained at CAREC; expanded program of immunization workshop. 1981--technical assistance to national surveillance unit provided; Medical officer attachment to CAREC. 1981--technical assistance to national surveillance unit provided; Medical Officer attachment to CAREC. 1982--in-country workshop for epidemiologists, training materials for in-service workshops requested and provided.

10. JAMAICA

1979--surveillance workshop at Parish level (5) on food inspection and hygiene. 1980--laboratory training on the diagnosis of malaria, public health inspectors attached to CAREC, expanded program of immunization workshop; epidemiology seminar for UWI medical students; technical assistance provided to national surveillance unit. 1981--epidemiology and surveillance workshops at Parish levels (6); technical assistance to national surveillance unit; workshops on national surveillance system for District Medical Officers; laboratory on-the-bench training. 1982--refresher course on laboratory diagnosis of malaria; two medical officers attached to CAREC; surveillance workshops at the Parish level; training materials for in-service training requested and provided.

11. MONTSERRAT

1980--two in-service workshops on food safety and hygiene; technical assistance provided to national surveillance unit. 1981--in-service on-the-bench laboratory training (two sessions); expanded program of immunization workshop. 1982--Medical Officer attachment at CAREC.

12. ST. KITTS/NEVIS

1980--Workshop on epidemiology; technical assistance to national surveillance unit. 1981--in-country on-the-bench laboratory training provided. 1982--expanded program of immunization workshop, technical assistance to national surveillance unit.

13. ST. LUCIA

1979--training in low cost methods of hepatitis screening. 1980--Deputy Epidemiologist trained at CAREC; training materials for in-service training requested and provided. 1981--expanded program of immunization surveillance workshop; on-the-bench laboratory training; on site technical assistance to the national surveillance unit covering the application of epidemiology to primary health care. 1982--on-the-bench laboratory training; a national surveillance workshop; technical assistance to the national surveillance unit; training materials requested and provided.

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14. ST. VINCENT

1979--training in low cost methods of hepatitis screening; 1980--a surveillance workshop for nurse practitioner trainees. 1981--expanded program of immunization workshop for Public Health Nurses; epidemiology and statistics for National Family Planning workers; on-the-bench training for laboratory staff. 1982--training materials requested and provided for in-service training.

15. SURINAME

1980--epidemiology workshop for health workers; technical assistance to the national surveillance unit. 1981--short course on virology provided to medical students; workshop on surveillance and epidemiology; laboratory training in the diagnosis of malaria, course on food sanitation for Public Health Inspectors; review of the national surveillance system conducted. 1982--technical assistance provided to the Statistical Surveillance Officer.

16. TURKS AND CAICOS

1980--Deputy Epidemiologist trained at CAREC. 1981--On-the-bench training in the laboratory was provided. 1982--workshop on the expanded program of immunization was held; technical assistance to the surveillance unit.

II. Review of Activities at CAREC

The following section is based on the logical framework and outputs sections of the original AID project design. CAREC has successfully met almost all of its goals in terms of the outputs stated at the start of the project.

Outputs and End of Project Status Indicators

(1) Establish Training Unit: In the very first quarter of the grant (September - December, 1979) a training unit was established in converted quarters at CAREC with a well designed and outfitted darkroom, A-V equipment, etc. A West Indian training officer was employed along with a secretary. A number of individuals have held the A-V technician position, but recently a stable staff member has been employed and videotape reproduction capability has been acquired. This unit has been extremely productive since its inception, playing an active role in dozens of workshops, seminars, courses, attachments plus creating the necessary training materials. A Surveillance Manual and a manual on the Epidemiology of the Caribbean have been created, which are the first of their type and are currently being evaluated and used by CMC staff in the field. Four disease specific outbreak investigation manuals have been developed. The training unit has also been effective in applying evaluation techniques to the various activities of the center.

2. Training

a) Over the 3 years of the grant, the following traineeships were to be given:

<u>Traineeships</u>	<u>Expected No.</u> (Persons)	<u>Actual No.</u> (Persons)
Medical Officers of Health	9	12
Deputy Epidemiologist	18	50
Bio-Statisticians (SSOs)	3	2
Lab. Technicians	21	6
Student clerkships	6	2

b) The following surveillance courses were held:

<u>Training Courses for:</u>	<u>Expected No.</u>	<u>Actual No.</u>	
		<u>Courses</u>	<u>Participants</u>
Designated Epidemiologist	3 workshops	3	60
Statistical Officer (SSOs)	3 workshops	4	47
On-site Surveillance, follow-up	variable		*

In addition, 4 courses/workshops were held for deputy epidemiologists from all CMC's including a continuing education workshop,

c) The following laboratory training was conducted:

<u>Training Courses for:</u>	<u>Expected No.</u>	<u>Actual No.</u>
Lab. Directors	3 workshops	3 courses
Formal Lab. Course	3 courses	8 courses
On-site training	21 persons	21 persons
On-site Lab. (follow-up)*	variable	*

*Extensive work was done; see in-country section of this evaluation.

d) On-site strengthening of laboratory management and laboratory technical skills were actively pursued (see in-country section II 3.a.).

e) Procedural and training manuals - 5 were to have been produced and 5 disease guides were actually completed, in addition field manuals on "Epidemiology in the Caribbean" and "Food Inspection Procedures" were produced.

3. Laboratory Upgrading

a) Central CAREC Lab - the central microbiologic capability was increased through the provision of a storage freezer, a student microscope and an instruction microscope. The autoclave was not purchased. Freeze drying equipment permitting the preparation of proficiency testing samples was purchased.

b) CMC Labs - CMC self sufficiency was increased through the provision of autoclaves and safety hoods.

4. Quality Controls of Immunization Supplies in CMC's: cold chain materials (5 freezers, 23 refrigerators and 96 vaccine carriers) were placed in rural health centers and CMC central supplies. These are functioning and appreciated by the CMC's.

5. Data Handling Capability

CAREC purchased a computer after much discussion with AID/Washington and PAHO as to the correct equipment. Unfortunately, the equipment procured has not functioned in an optimal or efficient manner. It has frequently been inoperable and there is a paucity of relevant software for statistical and epidemiological analysis. Attempts are still being made to make this equipment more useful but further efforts may not be cost-effective.

6. Zoonoses Surveillance

A survey of zoonoses surveillance was conducted by CAREC for CMC's. In addition a zoonoses surveillance training course was held in Antigua. A strategy for future work in this area has been developed. However, financial constraints may not permit much more activity in this area.

7. "Each CMC will have CAREC Trained Core Staff": All CMC's have had at least one designated epidemiologist, deputy epidemiologist and SSO trained by CAREC. Due to staff turnover, some CMC's do not have a full complement of this core staff currently in place, CAREC will continue to train to meet attrition plus provide continuing education.

8. "CAREC Trained SSO's will be Filing Comprehensive Weekly Disease Surveillance Report": There continues to be incomplete and delayed reporting on disease surveillance from some CMC's. However, each country has an SSO who can be identified as being responsible for creating and filing reports and thus this problem can be more readily improved.

9. "Each CMC will have at least One Technician Trained in Micro-biology": This has been accomplished.

10) "All CMC labs will Demonstrate 90% Accuracy in CAREC Proficiency Testing Programs"

As yet not all labs are regularly participating in PT programs. Of those that are participating, the level of accuracy is often less than 90%. However, in the USA, CDC requires only a 70% level of accuracy from the state and local labs that participate in its program. Thus our standards may be unrealistically high.

11) "CMC Demonstrate Increased Capability in Surveillance, Outbreak Investigations and Laboratories". The mid point project evaluation found that there was some evidence that surveillance capability had been increased and considerable evidence that lab capability had been increased but that there was little documented evidence of improvement in outbreak investigations. The final end of project evaluation should study all three of these aspects of CMC capability. Table II provides an analysis of current capabilities.

12) "To Further Developed West Indian Middle Management at CAREC--Trainees in Medical Epidemiology and Bio-Statistics will have Assumed Positions at CAREC."

A West Indian statistician trainee has been employed and active at CAREC. She should become a permanent staff officer at the end of the first grant. The employment of a West Indian medical epidemiologist has been difficult despite aggressive attempts at attracting applicants by CAREC. However, the assignment of a West Indian epidemiologist to Trinidad by PAHO appears imminent.

In Summary

Assessment of the effectiveness of the AID grant in strengthening CAREC as a regional resource and assisting the CMC's to be more self-sufficient in public health is highly favorable. CAREC has developed an extraordinary training capability and has provided regular training with a West Indian focus to hundreds of West Indian health workers in a wide variety of relevant and practical areas. There has been a well-balanced mix of "at CAREC" and in-country training, and an admirable level of follow-up and routine technical support of all CMC's. Equipment needed by CMC's for their EPI programs was rapidly provided and is in place and functioning. A major accomplishment has been the creation of a whole new class of public health workers--the deputy epidemiologist. The deputy epidemiologists are non-physicians, public health trained and with greater regional permanency than physicians. The deputy epidemiologists have been trained, provided with continuing education and their role fostered by CAREC with the resources of the AID grant.

Improvement In Control Efforts of Sexually Transmitted Disease (STD's)

Available information concerning the incidence of sexually transmitted diseases varies considerably from country to country within the region. STDs are not universally reportable within the public health laws of some territories. Even where they are reportable there is generally a great variation between the numbers reported and what health authorities feel may be an accurate estimate.

PAHO and more directly CAREC have assessed the issues over the last few years in specific territories at the request of local health officials and attempted to identify areas for improvement within individual programs. Common problems have been lack of proper laboratory diagnosis; inconsistent treatment schedules, and under reporting of cases where a mandatory report law exists. To this can now be added a changing clinical picture with herpes and acquired immune deficiency syndrome joining syphilis, gonorrhoea, and the minor STD's as issues of concern for public health officials and clinicians.

Under the grant CAREC will develop an approach for providing medical practitioners and health planners with information and assistance concerning STD's. Initially CAREC will utilize already planned workshops for national epidemiologists and laboratory directors to get a better picture of known prevalence, laboratory diagnosis capabilities, treatment practices and control programs. Simultaneously CAREC will work with regional experts; including the individuals who will be conducting training in family planning practices for physicians and nurses under AID's Population and Development Project (538-0039), to design a series of in-country workshops. These workshops will be conducted by experts from within the region and will be coordinated with training taking place under project 538-0039. The purpose of the workshops will be to develop a national strategy for the control of STDs. The target audience will be government planners and medical officers, the nursing profession and private physicians will be included as they are also involved with diagnosis, treatment, and control, those responsible for laboratory diagnosis will also have to be included.

CAREC will provide follow-up assistance in the implementation of plans through regularly scheduled workshops and in-country visits. CAREC will also provide the necessary training and supplies for laboratory technicians so that laboratory diagnosis can be maintained at a constant level for approximately one year in all the CMCs for the purpose of establishing an accurate baseline of prevalence.

In at least eight of the CMCs the control of STD will be utilized as a teaching exercise in the national workshops on primary health care that have been described previously. It is an ideal subject as control will require the coordinated efforts of the national surveillance team, the laboratories, physicians, nurses, planners, administrators and the public. STD is squarely in the forefront of primary health care in the Caribbean and CAREC will use STD to demonstrate the use of epidemiological concepts in the provision of primary health care.

ESTIMATED BUDGET

Initial Workshop Design

Consultant \$ 700

Miscellaneous \$ 300

\$ 1,000

Workshops (15 LDCs)

Travel \$ 250

Per diem & consultant fees \$1,000

Materials \$ 250

Miscellaneous \$ 100

\$1,600 per country

\$24,000

Workshop (2 MDC's)

Travel \$ 500

Per diem & consultant fees \$2,000

Materials \$ 800

Miscellaneous \$ 200

\$3,500 per country

\$ 7,000

Laboratory Supplies

\$ 8,000

In-country follow-up

\$10,000

Total

\$50,000

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ABF-8175-82

3 December 1982

Mr. Irwin Levy
Deputy Director
Bureau for Latin America
and the Caribbean
Agency for International Development
Washington, D.C. 20523

Dear Mr. Levy:

I refer to your letter of November 29, 1982 and previous correspondence between our Organizations in respect to the establishment of a mutually acceptable program support cost rate within grant agreements and contracts between PAHO and A.I.D.

Your most recent letter indicates that the Latin American and Caribbean Bureau now has reassessed its position on PAHO's program support costs and is willing to fund up to thirteen percent of our indirect costs as applied to all new grants and contracts including amendments to on-going activities, financed by the Bureau between now and December 31, 1983. We are pleased to see this step forward in our financial negotiations with A.I.D., but we would be remiss in our responsibilities to PAHO's member governments in not restating our official position with respect to program support costs.

The Directing Council of PAHO at the XXVIII meeting in September of 1981 authorized our Director to set a standard minimum thirteen percent program support cost rate, but endorsed and emphasized PAHO's general policy of full cost recovery for support expenses through negotiations for higher rates. We know that you are aware that PAHO continues to have a negotiated indirect cost rate with United States Government Agencies that is in excess of thirty percent and that we seek to have this rate applied in all of our agreements and contracts with U.S. agencies.

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ABF-8175-82

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3-XII-1982

Last year our negotiations with A.I.D. on this issue reached a virtual stalemate and the continuation of an A.I.D. grant for the CFNI Regional Nutrition Project was in jeopardy. Fortunately, both parties modified their initial positions and the grant amendment was consummated. Given the importance of the Epidemiological Surveillance and Training activities being carried out under PAHO auspices at the CAREC and the level of assistance being offered by A.I.D. to this endeavor, we do not wish to create similar implementation delays by initiating what could be prolonged negotiations on this program support cost issue. We therefore concur with reluctance to your proposal to establish a fixed rate of thirteen percent for program support costs for grants, contracts and amendatory agreements executed between PAHO and the LAC Bureau of A.I.D. from now to December 31, 1983. This position recognizes that the regular funds of the Organization will be utilized to cover the additional program support costs required to implement such grants, contracts, and agreements.

We would hope that the above action will expedite conclusion of the new agreement with A.I.D. as well as foster new opportunities for joint collaboration in the future.

Sincerely,

S. Paul Ehrlich, M.D.
Deputy Director

WGM:bj

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NOV 29 1982

Dr. S. Paul Ehrlich, Jr.
Deputy Director
Pan American Health Organization
525 Twenty-Third Street, N.W.
Washington, D.C. 20037

Dear Dr. Ehrlich:

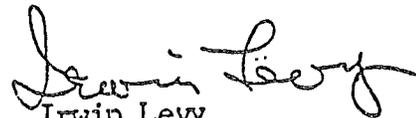
At the present time our Regional Development Office/Caribbean in Barbados is finalizing with the Caribbean Epidemiology Centre (CAREC) the implementation plan and budget for the proposed amendment to AID's Epidemiological Surveillance and Training Project 538-0027.

We wish to inform our Mission as soon as possible as to what level of program support costs should be applied to this grant amendment.

The Latin American and Caribbean (LAC) Bureau has reassessed its position on the program support costs per our letter of January 15, 1982. The Bureau is willing to fund up to thirteen (13) percent program support costs (indirect costs), the PAHO minimum rate, to be applied to all new grants and contracts, including amendments to ongoing activities, which are financed by the LAC Bureau between now and December 31, 1983. Our approval of the 13 percent rate for the grant amendment for CAREC is contingent upon PAHO's acceptance of this rate.

We therefore seek your concurrence so that the grant amendment for CAREC may proceed in a timely fashion. Thank you for your prompt attention to this matter.

Sincerely,



Irwin Levy
Deputy Director
Bureau for Latin America
and the Caribbean

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PROJECT AUTHORIZATION AND REQUEST FOR ALLOTMENT OF FUNDS
AMENDMENT NUMBER ONE

NAME OF ENTITY: Pan American Health Organization

NAME OF PROJECT: Epidemiological Surveillance and Training

PROJECT NUMBER: 538-0027

Pursuant to Section 104 of the Foreign Assistance Act of 1961, as amended, the Epidemiological Surveillance and Training Project was authorized on May 4, 1979. That authorization is hereby amended as follows:

1. The total amount of A.I.D. appropriated funding is increased from One Million One Hundred and Sixty Thousand Dollars (\$1,160,000) to a new total of not to exceed One Million Nine Hundred and Sixty Thousand Dollars (\$1,960,000) to be grant funded from the date of this authorization to June 30, 1985.
2. The project will: 1) increase the Caribbean Epidemiology Centre's (CAREC) capability to assist CAREC member countries (CMCs) in laboratory and surveillance activities, 2) improve the accuracy and efficiency of CMC laboratory identification and surveillance of communicable disease, 3) and further develop West Indian middle management at CAREC.
3. Funds available under this agreement shall be utilized for laboratory and surveillance training of nationals from only the countries of; Anguilla, Antigua and Barbuda, Bahamas, Barbados, Belize, British Virgin Islands, Cayman Islands, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts/Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Turks and Caicos.
4. Conditions Precedent to Disbursement of funds for this Amendment to the Project Agreement are as follows:

Prior to any disbursement, or the issuance of any commitment documents under this Project Agreement Amendment, other than for technical assistance, PAHO/CAREC, unless A.I.D. agrees otherwise in writing, shall furnish to A.I.D., in form and substance satisfactory to A.I.D:

- a) Evidence of the nature and extent of PAHO's continued support to CAREC through at least 1987.
- b) A workplan for the first year of the Project Agreement Amendment which shall indicate the costs to be financed with A.I.D. grant resources under this amendment.

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5. Special Covenants for the Project Agreement Amendment are as follows:

PAHO/CAREC covenant that they will:

- a) Exert their best efforts over the life of the amendment to increase the proportion of the core budget financed by CMC contributions.
- b) Fill the Statistical Officer position in the CAREC Surveillance Unit by July 1, 1983.
- c) Fund the Audio-Visual Technician position in the CAREC Training Unit from the CAREC core budget by January 1, 1985.
- d) Establish a Deputy Epidemiologist position within the CAREC Surveillance Unit, to be funded from CAREC's core budget, by January 1, 1985.
- e) Conduct with A.I.D. a final evaluation of the grant prior to the termination of the Grant Amendment.

The authorization cited above remains in full force and effect except as hereby specifically amended.

William B. Wheeler
Director, RDO/C

Date

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5C(1) - COUNTRY CHECKLIST

Listed below are statutory criteria applicable generally to FAA funds, and criteria applicable to individual fund sources: Development Assistance and Economic Support Fund.

A. GENERAL CRITERIA FOR COUNTRY ELIGIBILITY

Not Applicable

1. FAA Sec. 481. Has it been determined that the government of the recipient country has failed to take adequate steps to prevent narcotic 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?

2. FAA Sec. 620(c). If assistance is to a 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) the debt is not denied or contested by such government?

N/A

N/A

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3. 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? N/A
4. FAA Sec. 532(c), 620(a), 620(f), 620D; FY 1982 Appropriation Act Secs. 512 and 513. Is recipient country a Communist country? Will assistance be provided to Angola, Cambodia, Cuba, Laos, Vietnam, Syria, Libya, Iraq, or South Yemen? Will assistance be provided to Afghanistan or Mozambique without a waiver? N/A
5. ISDCA of 1981 Secs. 724, 727 and 730. For specific restrictions on assistance to Nicaragua, see Sec. 724 of the ISDCA of 1981. For specific restrictions on assistance to El Salvador, see Secs. 727 and 730 of the ISDCA of 1981. N/A
6. 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

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7. FAA Sec. 620(l). Has the country failed to enter into an agreement with OPIC? N/A
8. FAA Sec. 620(o); Fishermen's Protective Act of 1967, as amended, Sec. 5. (a) Has the country seized, or imposed any penalty or sanction against, any U.S. fishing activities in international waters?
- (b) If so, has any deduction required by the Fishermen's Protective Act been made? N/A
9. FAA Sec. 620(c); FY 1982 Appropriation Act Sec. 517. (a) Has the government of the recipient country been in default for more than six months on interest or principal of any AID loan to the country? (b) Has the country been in default for more than one year on interest or principal on any U.S. loan under a program for which the appropriation bill appropriates funds? N/A
10. FAA Sec. 620(s). If contemplated assistance is development loan or from Economic Support Fund, has the Administrator taken into account the amount of foreign exchange or other resources which the country has spent on military equipment? (Reference may be made to the annual "Taking into N/A

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Consideration* memo:

Yes, taken into account by the Administrator at time of approval of Agency OYB. This approval by the Administrator of the Operational Year Budget can be the basis for an affirmative answer during the fiscal year unless significant changes in circumstances occur.)

11. 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?

N/A

12. 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? (Reference may be made to the Taking into Consideration memo.)

N/A

13. FAA Sec. 620A; FY 1982 Appropriation Act Sec. 520. Has the country aided or abetted, by granting sanctuary from prosecution to, any individual or group which has committed an act of international terrorism? Has the country aided or

N/A

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abetted, by granting sanctuary from prosecution to, any individual or group which has committed a war crime?

14. FAA Sec. 666. Does the country object, on the basis of race, religion, national origin or sex, to the presence of any officer or employee of the U.S. who is present in such country to carry out economic development programs under the FAA? N/A
15. FAA Sec. 669, 670. Has the country, after August 3, 1977, delivered or received nuclear enrichment or reprocessing equipment, materials, or technology, without specified arrangements or safeguards? Has it transferred a nuclear explosive device to a non-nuclear weapon state, or if such a state, either received or detonated a nuclear explosive device, after August 3, 1977? (FAA Sec. 620E permits a special waiver of Sec. 669 for Pakistan.) N/A
16. ISDCA of 1981 Sec. 720. Was the country represented at the Meeting of Ministers of Foreign Affairs and Heads of Delegations of the Non-Aligned Countries to the 36th General Session of the General Assembly of the U.N. of Sept. 25 and 28, 1981, and failed N/A

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to disassociate itself from the communique issued? If so, has the President taken it into account? (Reference may be made to the Taking into Consideration memo.)

17. ISDCA of 1981 Sec. 721.
See special requirements for assistance to Haiti.

N/A

B. FUNDING SOURCE CRITERIA FOR COUNTRY ELIGIBILITY

1. Development Assistance Country Criteria.

a. FAA Sec. 116. Has the Department of State determined that this government has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, can it be demonstrated that contemplated assistance will directly benefit the needy?

N/A

2. Economic Support Fund Country Criteria

a. FAA Sec. 502B. Has it been determined that the country has engaged in a consistent pattern of gross violations of internationally recognized human rights? If so, has the country made such significant improvements in its human rights record that furnishing such assistance is in the national interest?

N/A

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b. ISDCA of 1981, Sec. 725(b). If ESF is to be furnished to Argentina, has the President certified that (1) the Govt. of Argentina has made significant progress in human rights; and (2) that the provision of such assistance is in the national interests of the U.S.?

N/A

c. ISDCA of 1981, Sec. 726(b). If ESF assistance is to be furnished to Chile, has the President certified that (1) the Govt. of Chile has made significant progress in human rights; (2) it is in the national interest of the U.S.; and (3) the Govt. of Chile is not aiding international terrorism and has taken steps to bring to justice those indicted in connection with the murder of Orlando Letelier?

N/A

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5C(2) PROJECT CHECKLIST

Listed below are statutory criteria applicable to projects. This section is divided into two parts. Part A. includes criteria applicable to all projects. Part B. applies to projects funded from specific sources only: B.1. applies to all projects funded with Development Assistance Funds, B.2. applies to projects funded with Development Assistance loans, and B.3. applies to projects funded from ESP.

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

N/A

Yes

A. GENERAL CRITERIA FOR PROJECT

1. FY 1982 Appropriation Act Sec. 523; FAA Sec. 634A; Sec. 653(b).

(a) Describe how authorizing and appropriations committees 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 amount)?

A Congressional Notification for this amendment will be forwarded

Yes

2. FAA Sec. 611(a)(1). Prior to obligation in excess of \$100,00, will there be

N/A

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(a) engineering, financial or other plans necessary to carry out the assistance and (b) a reasonably firm estimate of the cost to the U.S. of the assistance?

3. PAA 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?

N/A

4. FAA Sec. 611(b); FY 1982 Appropriation Act Sec. 501. If for water or water-related land resource construction, has project met the standards and criteria as set forth in the Principles and Standards for Planning Water and Related Land Resources, dated October 25, 1973? (See AID Handbook 3 for new guidelines.)

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 and Regional Assistant Administrator taken into consideration the country's capability effectively to maintain and utilize the project?

N/A

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6. FAA Sec. 209. Is project susceptible to execution as part of regional or multilateral project? If so, why is project not so executed? Information and conclusion whether assistance will encourage regional development programs.

Yes. Project is regional in nature and will be executed as a regional project.

7. FAA Sec. 601(a). 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; and (c) encourage development and use of cooperatives, and 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.

N/A

8. FAA Sec. 601(b). Information and conclusions 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).

N/A

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9. FAA Sec. 612(b), 636(h);
FY 1982 Appropriation
Act Sec. 507. 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
in lieu of dollars.

CAREC Member Countries contribute
local currencies to support the
operations of CAREC.

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

No

11. FAA Sec. 601(e). Will
the project utilize
competitive selection
procedures for the
awarding of contracts,
except where applicable
procurement rules allow
otherwise?

Yes

12. FY 1982 Appropriation Act
Sec. 521. Is assistance
is for the production of
any commodity for export,
is the commodity likely
to be in surplus on world
markets at the time the
resulting productive
capacity becomes
operative, and is such
assistance likely to
cause substantial injury
to U.S. producers of the
same, similar or
competing commodity?

N/A

13. FAA 118(c) and (d).
Does the project comply
with the environmental
procedures set forth in
AID Regulation 16? Does

Yes

the project or program take into consideration the problem of the destruction of tropical forests?

14. FAA 121(d). If a Sahel project, has a determination been made that the host government has an adequate system for accounting for and controlling receipt and expenditure of project funds (dollars or local currency generated therefrom)?

N/A

B. FUNDING CRITERIA FOR PROJECT

1. Development Assistance Project Criteria

a. FAA Sec. 102(b), 111, 113, 281(a). Extent to which activity will (a) effectively involve the poor in development, by extending access to economy at local level, increasing labor-intensive production and the use of appropriate technology, spreading investment out from cities to small towns and rural areas, and insuring wide participation of the poor in the benefits of development on a sustained basis, using the appropriate U.S. institutions; (b) help develop cooperatives, especially by technical assistance, to assist rural and urban poor to help themselves toward better life, and

(a) The project will contribute to the control of communicable disease in the region, which is of benefit to all. In addition communicable diseases are generally more prevalent and severe among members of the lower socio-economic classes.

(b) The project will strengthen the regional organization which is the implementing agency.

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otherwise encourage democratic private and local governmental institutions; (c) support the self-help efforts of developing countries; (d) promote the participation of women in the national economies of developing countries and the improvement of women's status; and (e) utilize and encourage regional cooperation by developing countries?

b. FAA Sec. 103, 103A, 104, 105, 106. Does the project fit the criteria for the type of funds (functional account) being used?

c. FAA Sec. 107. Is emphasis on use of appropriate technology (relatively smaller, cost-saving, labor-using technologies that are generally most appropriate for the small farms, small businesses, and small incomes of the poor)?

d. FAA Sec. 110(a). Will the recipient country provide at least 25% of the costs of the program, project, or activity with respect to which the assistance is to be furnished (or is the latter cost-sharing requirement being waived for a "relatively least developed" country)?

(c) The project complements the contributions already being made by the governments of the region.
(d) Women will benefit equally with men from the reduction of communicable disease prevalence.

(e) The organization that will be supported under this project is one of the best examples of regional cooperation in the Eastern Caribbean

Yes

Yes

Yes

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e. 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, or is the recipient country "relatively least developed"? (M.O. 1232.1 defined a capital project as "the construction, expansion, equipping or alteration of a physical facility or facilities financed by AID dollar assistance of not less than \$100,000, including related advisory, managerial and training services, and not undertaken as part of a project of a predominantly technical assistance character.

N/A

f. FAA Sec. 122(b). 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?

N/A

g. 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

The project will utilize local manpower resources and was developed jointly with participating countries so as to reflect their needs.

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institutional development;
and supports civil
education and training in
skills required for
effective participation in
governmental processes
essential to self-government.

2. Development Assistance Project
Criteria (Loans Only)

This is a grant project.

- a. FAA Sec. 122(b).
Information and conclusion
on capacity of the country
to repay the loan, at a
reasonable rate of interest. N/A
- b. FAA Sec. 620(d). If
assistance is for any
productive enterprise which
will compete with U.S.
enterprises, 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
- c. ISDCA of 1981, Sec. 724
(c) and (d). If for
Nicaragua, does the loan
agreement require that the
funds be used to the
maximum extent possible for
the private sector? Does
the project provide for
monitoring under FAA Sec.
624(g)? N/A

3. Economic Support Fund
Project Criteria

This is a development assistance
project.

- a. FAA Sec. 531(a). Will
this assistance promote
economic or political N/A

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stability? To the extent possible, does it reflect the policy directions of FAA Section 102?

b. FAA Sec. 531(c). Will assistance under this chapter be used for military, or paramilitary activities?

N/A

c. FAA Sec. 534. Will ESP funds be used to finance the construction of the operation or maintenance of, or the supplying of fuel for, a nuclear facility? If so, has the President certified that such use of funds is indispensable to nonproliferation objectives?

N/A

d. 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?

N/A

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5C(3) - STANDARD ITEM CHECKLIST

Listed below are the 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 imposing limits on certain uses of funds.

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 commodities and services financed? Yes

2. FAA Sec. 604(a). Will all procurement 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 marine insurance companies authorized to do business in the U.S., will commodities be insured in the United States against marine risk with such a company? Yes

4. FAA Sec. 604(e); ISDCA of 1980 Sec. 705(a). If offshore procurement of agricultural commodity or product is to be N/A

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financed, is there provision against such procurement when the domestic price of such commodity is less than parity? (Exception where commodity financed could not reasonably be procured in U.S.)

5. FAA Sec. 604(a). Will construction or engineering services be procured from firms of countries otherwise eligible under Code 941, but which have attained a competitive capability in international markets in one or these areas?

N/A

6. FAA Sec. 603. Is the shipping excluded from compliance with requirement in section 901(b) of the Merchant Marine Act of 1936, as amended, 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?

Appropriate waivers of this requirement have been obtained. Generally, U.S. Flag shipping is not available to all of the small islands in the region.

7. FAA Sec. 621. If technical assistance is financed, will such assistance be furnished by private enterprise on a contract basis to the fullest extent practicable? If the facilities of other

Technical assistance will be provided by the U.S. Centers for Disease Control which is particularly suitable for this undertaking and is not competitive with private enterprise.

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Federal agencies will be utilized, 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 U.S. carriers be used to the extent such service is available?
9. FY 1982 Appropriation Act Sec. 504. If the U.S. Government is a party to a contract for procurement, does the contract contain a provision authorizing termination of such contract for the convenience of the United States?

Yes

Yes

B. Construction

1. FAA Sec. 601(d). If capital (e.g., construction) project, will U.S. engineering and professional services to be used?
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?

N/A, this is not a capital project.

N/A

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- 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 (except for productive enterprises in Egypt that were described in the CP)? N/A

C. Other Restrictions

- 1. FAA Sec. 122(b). If development loan, is interest rate at least 2% per annum during grace period and at least 3% per annum thereafter? N/A, not a loan.

- 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? Yes

- 3. FAA Sec. 620(h). Do arrangements exist to insure that United States foreign aid is not used in a manner which, contrary to the best interests of the United States, promotes or assists the foreign aid projects or activities of the Communist-bloc countries? Yes

- 4. Will arrangements preclude use of financing:

- a. FAA Sec. 104(f); FY 1982 Appropriation Act Sec. 525: (1) To pay for performance of abortions as a method of family Yes

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planning or to motivate or coerce persons to practice abortions; (2) to pay for performance of involuntary sterilization as method of family planning, or to coerce or provide financial incentive to any person to undergo sterilization; (3) to pay for any biomedical research which relates, in whole or part, to methods or the performance of abortions or involuntary sterilizations as a means of family planning; (4) to lobby for abortion?

b. FAA Sec. 620(g). To compensate owners for expropriated nationalized property? Yes

c. FAA Sec. 660. To provide training or advice or provide any financial support for police, prisons, or other law enforcement forces, except for narcotics programs? Yes

d. FAA Sec. 662. For CIA activities? Yes

e. FAA Sec. 636(i). For purchase, sale, long-term lease, exchange or guaranty of the sale of motor vehicles manufactured outside U.S., unless a waiver is obtained? Yes

f. FY 1982 Appropriation Act, Sec. 503. To pay pensions, annuities, retirement pay, or

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adjusted service
compensation for military
personnel?

g. FY 1982 Appropriation
Act, Sec. 505. To pay
U.N. assessments,
arrearages or dues? Yes

h. FY 1982 Appropriation
Act, Sec. 505. To carry
out provisions of FAA
section 209(d) (Transfer
of FAA funds to
multilateral
organizations for
lending)? Yes

i. FY 1982 Appropriation
Act, Sec. 510. To
finance the export of
nuclear equipment, fuel,
or technology or to train
foreign nationals in
nuclear fields? Yes

j. FY 1982 Appropriation
Act, Sec. 511. Will
assistance be provided
for the purpose of aiding
the efforts of the
government of such
country to repress the
legitimate rights of the
population of such
country contrary to the
Universal Declaration of
Human Rights? Yes

k. FY 1982 Appropriation
Act, Sec. 515. To be
used for publicity or
propaganda purposes
within U.S. not
authorized by Congress? Yes

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ACTION AID INFO AMB BCM XRON RFAnnex J
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TOR: 1858
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CHRG: AID

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E.O. 12065: N/A

TAGS:

SUBJECT: CARIBBEAN DISEASE SURVEILLANCE AND TRAINING
(538-2074)

REFERENCE: BRIDGETOWN 01915

1. THE DAEC REVIEWED AND APPROVED THE SUBJECT PID ON APRIL 28, 1982. SUBJECT TO THE GUIDANCE PROVIDED BELOW, THE RDO/C IS AUTHORIZED TO PROCEED WITH PP DEVELOPMENT AND EVENTUAL PROJECT AUTORIZATION.

(A) FUTURE OF CAREC: CONCERN RAISED AT DAEC THAT ONCE PAHO ADMINISTRATION TERMINATE IN 1984, CAREC MIGHT CEASE TO FUNCTION AS A TRULY REGIONAL ENTITY. PP SHOULD DISCUSS THE FUTURE ROLE OF CAREC IN THE CARIBBEAN REGION. DURING INTENSIVE REVIEW, MISSION SHOULD DISCUSS THIS ISSUE WITH UWI, PROPOSED MOUNT ROSE MEDICAL COMPLEX IN TRINIDAD, AND WITH OTHER BONCES, ESPECIALLY PAHO, AND ATTEMPT TO OBTAIN ASSURANCES FROM THEM ON FUTURE SUPPORT TO CAREC. DURING PROCESS OF DISCUSSIONS, RDO/C SHOULD

INDICATE THAT AID SUPPORT TO CAREC FOR TRAINING PROGRAM IS LIKELY TO TERMINATE AT THE END OF THE PROJECT. THE RESULTS OF THESE DISCUSSIONS SHOULD BE REPORTED IN THE PP.

(B) NON COMMUNICABLE DISEASE: ALTHOUGH CAREC IS DEVOTING INCREASED ATTENTION TO NON COMMUNICABLE DISEASES, AID FUNDS SHOULD NOT BE USED TO SUPPORT THIS ELEMENT OF THE PROJECT.

(C) OVERHEAD: BUREAU DOES NOT BELIEVE THAT AN ADEQUATE JUSTIFICATION EXISTS FOR PROVIDING OVERHEAD TO PAHO. THE PROPOSED PROJECT IS A GRANT FOR AN ONGOING ACTIVITY SUPPORTED AND ADMINISTERED BY PAHO, AND NOT A CONTRACT WITH PAHO FOR SERVICES. ANY "OVERHEAD" EXPENSES SHOULD BE A PAHO CONTRIBUTION TO THE PROJECT. THUS, PP SHOULD NOT INCLUDE AID FUNDS FOR PAHO OVERHEAD.

(D) OTHER ACTIVITIES: AT DAEC MEETING, RDO/C REPRESENTATIVE WAS ASKED WHETHER THERE WAS NEED FOR

ACTION	INFO
HLTH	
DIR	✓
A/DIR	✓
PROG	
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INCLUDING FUNDING FOR SPECIAL ACTIVITIES. ONE SUGGESTION WAS ESTABLISHMENT OF A SMALL FUND TO PROMOTE TECHNICAL COOPERATION AND TRAINING FOR AREA PHYSICIANS, UNIVERSITY LEADERS AND OTHERS FROM THE REGION INVOLVED IN FIELDS SUCH AS SEXUALLY TRANSMITTED DISEASES, TUBERCULOSIS, OCCUPATIONAL HEALTH, AND NOSOCOMIAL INFECTIONS. U.S., PARTICULARLY THE CDC IN ATLANTA, HAS DONE A GREAT DEAL OF RESEARCH IN THESE AREAS AND HAS DEVELOPED "STATE OF ART" PROGRAMS. POSSIBILITY EXISTS FOR TRANSFER OF U.S. TECHNOLOGY IN THESE AREAS. ANOTHER IDEA PROPOSED WAS A FOLLOW-UP ON THE ZOONOTIC DISEASE SURVEILLANCE STUDY CONDUCTED IN JULY-SEPTEMBER, 1981 IN 16 CAREC MEMBER COUNTRIES BY LOUISIANA STATE UNIVERSITY. RECOMMENDATIONS FOR PROJECT ACTIVITIES AROSE FROM THESE STUDIES. IF, AFTER FURTHER CONSIDERATION RDO/C WISHES TO INCLUDE FINANCING FOR EITHER OF THESE ADDITIONAL ACTIVITIES, RDO/C SHOULD PROVIDE BUREAU WITH SUPPLEMENTARY INFORMATION INCLUDING RATIONALE, DESCRIPTION OF ELEMENT, AND BUDGETARY INFORMATION, WHICH WOULD CONSTITUTE SUPPLEMENT TO THE PID.

(E) LOGFRAME: THE PID DID NOT CONTAIN A LOGFRAME. PP SHOULD INCLUDE LOGFRAME WHICH INDICATES A CLEARLY ARTICULATED PURPOSE FOR THE PROJECT AS WELL AS EOPS. UNDERSTAND THAT A LOGFRAME EXISTS BUT WAS

INADVERTENTLY OMITTED FROM PID. PLEASE FORWARD TO BUREAU FOR REVIEW. (FYI: PURPOSE AND EOPS STATED IN PID WERE VAGUE. PP SHOULD REFLECT THE OUTPUTS UNIQUE TO THE PRESENT PROJECT AND CLARIFY PROJECT PURPOSE.

(F) IEE: BUREAU ENVIRONMENTAL OFFICER ADVISES THAT SINCE NO AID FUNDS WILL BE USED FOR PURPOSE OF VECTOR CONTROL (I.E., PESTICIDE PROCUREMENT), THE IEE AND BODY OF PP SHOULD SO STATE. PLEASE CONFIRM ASAP SO IEE CAN BE MODIFIED IN AID/W AND APPROVED BY ENVIRONMENTAL OFFICER.

2. WHILE MISSION HAS PRESENTED PID FOR A NEW PROJECT, MISSION HAS THE OPTION OF PROCEEDING ON THE BASIS OF AN AMENDMENT TO THE EXISTING PROJECT (538-0027), ASSUMING PROJECT PURPOSE REMAINS THE SAME.

3. PARTICIPATION OF GRENADA IN THE PROJECT TO THE LIMITED DEGREE OUTLINED REPTEL IS CONSISTENT WITH PRESENT U.S. FOREIGN ASSISTANCE POLICY.

4. FYI: ALL LAC MISSION PID APPROVALS ARE SUBJECT TO REVALIDATION IF POST-PID PROJECT DEVELOPMENT EXTENDS BEYOND ONE YEAR. HAIG

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CHRG: AID 06/14/92
APPRV: A/DIR:RSM/IGHAN
DRFTD: PFA:ARANDLOV:ML
CLEAR: 1.RPEA:MLAS:IM
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E.O. 12065: N/A
SUBJECT: CARIBBEAN DISEASE SURVEILLANCE AND TRAINING
(538-0074)

REF: STATE 139406

1. APPRECIATE GUIDANCE PROVIDED REFTTEL. BASED ON GUIDANCE AND MISSION DISCUSSION IT IS PLANNED TO HANDLE CONTINUING FUNDING FOR CAREC AS AN AMENDMENT TO EXISTING PROJECT (538-0027) RATHER THAN AS A NEW PROJECT.

2. RE PARA 1.E. REFTTEL, LOGFRAME FOR PROJECT AMENDMENT BEING REVISED AND WILL BE POUCHED TO LAC/DR/HN SHORTLY.

3. RE PARA. 1.F. REFTTEL, NO AID FUNDS WILL BE USED FOR PROCUREMENT OF PESTICIDES. REQUEST AID/W AMEND IEE ACCORDINGLY AND POUCH APPROVED COPY.

4. FOLLOWING DISCUSSION WITH CAREC DIRECTOR RDO/C REQUESTS AID/W INFORM PAHO/W OF PROPOSED AID POSITION RE OVERHEAD (REFTTEL PARA. 1.C.). MISSION IS HESITANT TO PROCEED WITH COMMITMENT OF SUBSTANTIAL HUMAN AND FISCAL RESOURCES REQUIRED FOR PROJECT DEVELOPMENT WITHOUT AGREEMENT FROM PAHO ON OVERHEAD ISSUE. ADVISE.

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Project Issues Identified in the PID

A. The Future of CAREC

When CAREC was established in 1975, it was under a ten year multi-lateral agreement. This agreement expires at the end of 1985 at which time PAHO's role as administering body is formally over. There has been some concern at CAREC and among the CMCs regarding the future of CAREC both in terms of the role it plays within the region and its financing after 1984. A preliminary definition of the role of CAREC in 1985 and beyond was developed by the Scientific Advisory Committee and endorsed by the CAREC Council in March 1981. At the March 1982 meeting of the CAREC council the scope of work of a PAHO sponsored "Committee on the future of CAREC" was discussed. Shortly afterwards PAHO convened this Committee and charged it with developing detailed recommendations by the end of 1982. The work of this Committee is on schedule. Their final report is expected to be available early in 1983 and will be reviewed at the March 1983 CAREC Council meeting.

Although the report is not in final it is clear that the recommendations will feature the continuation of CAREC as a regional center. As it appears doubtful that all the necessary administrative and managerial actions that must precede the turn over of CAREC from PAHO to a regional body could be completed in a satisfactory manner before December 1984 the Committee is expected to request that PAHO continue its stewardship through 1986 so that a regional managing body can be on a firm footing before the responsibilities are transferred. PAHO has indicated its preliminary agreement to go along with such a proposal if it is the wish of the CMCs.

As CAREC has matured as an institution its core budget has grown from US\$348,171 in 1975 to \$1,245,152 in 1982, and a projected \$1,900,514 in 1984. Over this period the percentage of this amount that has been provided by the CMCs has grown from 44.8% to 71.4%. Over the years 1983 and 1984 the CMCs have agreed to increase their contribution from \$764,292 to \$1,357,394 or approximately 77.6%. This pledged level of support is in part to begin to cover the planned decrease in external funding.

In summary the external donors to the core budget, PAHO and the U.K. and the CMCs are taking a responsible and realistic approach to assuring the continuation of CAREC as a regional resource. Appropriate administrative, political and financial arrangements are underway. This grant amendment is specifically designed to assist CAREC and the CMCs make the transition.

B. The Training Unit

The original grant funded CAREC's Training Unit. It was assumed that at the end of the grant the Training Unit would be incorporated into the core budget. In March 1982 the Scientific Advisory Committee recommended that the 1984 core budget make provision for continued training. However, because of the upcoming transition period (which of necessity includes a consolidation of CAREC activities) the availability of funds to continue training activities at the level that has been possible under the grant is questionable, although not impossible.

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Given this situation the amendment proposes to continue support of the Training Unit through 1984 with the purposes of (1) insuring that critical training is conducted in 1983/84, (2) systematically transferring the teaching methodologies developed by the Training Unit to the Surveillance and Laboratory Units so they can continue training after 1984, maintaining only the A-V technician in the Training Unit, (3) developing training and A-V materials that will be needed by the Surveillance and Lab Units after 1984, (4) insuring that, to the extent possible, CMCs have the capability to do in-country training.

C. PAHO Support Costs

The question of the amount of program support costs furnished by AID to PAHO was ^{an} issue during the design of the original grant. After considerable negotiation a rate of 20% was agreed upon. For the purposes of this amendment, AID/Washington has negotiated a 13% rate with PAHO and this rate has been used in developing the budget.

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