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PDABJ 105
008276

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0-1	FCRA ICA 12-130 (5-59)	DATE PREPARED	<input type="checkbox"/> ORIGINAL	AMENDMENT NO.]	SECURITY CLASSIFICATION UNCLASSIFIED	ICA/W APPROVAL NO. 60-19 002766	COUNTRY OR OFFICE Malaria Eradication Program	1959
	Requested by <input type="checkbox"/> USOM <input type="checkbox"/> Regional Director, ICA/W		OPERATIONAL PROGRAM APPROVAL REQUEST			SUMMARY OF DOLLAR PROGRAM		

FUNCTION (All figures in dollars)	Comparand Presentation	Proposed Planning Level	Implementation Level		
			Current Approval	Change	Total
	(A)	(B)	(C)	(D)	(E)
A. TECHNICAL COOPERATION					
B. EXPENSE-SUPPORT AND SPECIAL ASSISTANCE					
1. Project					
2. Non-Project					
C. General			32,000,000	Increase 50,000	32,050,000
D. Section 402					
Direct					
Triangular					
E. Cash Transaction					
TOTAL			32,000,000	50,000	32,050,000
C. OTHER (specify)					
D. GRAND TOTAL					

2. Remarks

The amount of 50,000 is transferred from O/P/R 60-27 covering Community Water Supply Program, in order to meet urgent requirements in the Indian malaria eradication program.

Clearance: Eugene P. Campbell, Lt. D.
Director, O/P/R

3. Concurrence Date

John R. Y. [Signature] Controller, ICA

[Signature] Director, ICA

Director, ICA

0-1	FORM ICA 10-130 (6-57)	DATE PREPARED 10/12/59	<input checked="" type="checkbox"/> ORIGINAL	AMENDMENT NO.	SECURITY CLASSIFICATION UNCLASSIFIED	ICA/W APPROVAL NO. 60-19	COUNTRY OR OFFICE Malaria Eradication Program	0-1
	Requested by Acting Director, O/PH, ICA/W <input type="checkbox"/> USOM <input type="checkbox"/> Regional Director, ICA/W				OPERATIONAL PROGRAM APPROVAL REQUEST		SUMMARY OF DOLLAR PROGRAM	
FUNCTION (All figures in dollars)				Congressional Presentation	Proposed Planning Level	Implementation Level		
				(A)	(B)	Current Approval (C)	Change (D)	Total (E)
TECHNICAL COOPERATION								
1. Project								
2. Non-Project								
a. General								
b. Section 402								
Direct								
Triangular								
c. Cash Transaction								
TOTAL				\$35,000,000	\$32,000,000	-----	\$32,000,000	\$32,000,000
OTHER (specify)								
GRAND TOTAL				\$35,000,000	\$32,000,000	-----	\$32,000,000	\$32,000,000
<p>Remarks: Proposed program plan shown in amount of \$33.046 million. Reductions to \$32 million will be made within the following programs: Pakistan, Haiti, Peru, Iran and/or Indonesia</p> <p style="text-align: center;">BEST AVAILABLE DOCUMENT</p>					3. Consent/Date		4. Approval/Date	
					<p><i>[Signature]</i> Controller, ICA</p>		<p><i>[Signature]</i> 10/13/59 Deputy Director for Operations, ICA</p>	
					<p>W/MSC, Stone</p>		<p><i>[Signature]</i> 10/13/59 Director, ICA</p>	

MEMORANDUM

TO : Mr. Leonard J. Saccio, Acting Director, ICA
THRU : Dr. D. A. FitzGerald, Deputy Director for Operations
FROM : Eugene P. Campbell, M. D., Director, O/PH
SUBJECT: Program Approval Request for FY 1960 Malaria Eradication Program

Program Approval No. 60-19

I. Objectives of this Document

To obtain your approval of the comprehensive plan for the third year of operations of the world-wide Malaria Eradication program. It is proposed that the \$33.046 million of Special Assistance funds requested for Malaria Eradication be utilized in the following manner:

1. To implement bilateral programs in 26 nations
\$27,616,000
2. To support the special Malaria Eradication activities of the World Health Organization and the Pan American Health Organization in more than 70 nations.
\$5,000,000
3. To provide necessary backstopping to bilateral and multilateral malaria programs through administrative support, technical consultation, regional malaria advisors, training of U. S. technicians and host country malaria eradication personnel, and special investigations of field problems.
\$430,000

II. Proposed Program Plan for FY 1960

1. Bilateral Program

A current estimate of malaria eradication activities indicates that more than the \$29.8 million (Tab. A, Columns A and B) requested in the Congressional Presentation is necessary to fully implement bilateral programs. Although some programs have not progressed as rapidly as expected, savings are more than offset by increased costs in some programs due to mosquito resistance and other technical and administrative problems. Pakistan, which was not included in the Congressional Presentation, has now indicated an intent to undertake eradication of the disease.

The proposed allocations for bilateral malaria eradication programs in 27 nations shown in table (Tab A) have been determined after consultation of the Master Program Books from USOM's (E-1) and consideration of supplemental information submitted by USOM's or otherwise available for consideration by the Staff of the Malaria Eradication Branch, O/PH. Because of limitations of funds, the full financial needs cannot be fully met for India, Brazil and Pakistan. The effect of this shortfall will extend the period for these eradication programs and may increase the total cost for achieving the final goal. An attempt will again be made to encourage these countries to seek DIF or other loan capital in order to meet their total needs for FY 1960 and future years.

2. Multilateral Program

It is proposed to contribute \$3.0 million to the Malaria Eradication Special Account (MESA) of the World Health Organization and \$2 million to the Special Malaria Fund of the Pan American Health Organization as justified in the FY 1960 Congressional Presentation. These amounts are urgently needed by these organizations to proceed with the activities of coordination, training and investigations which they are so ably constituted to carry out, and which are essential for the world-wide eradication of malaria. Because of funds limitations, it will not be possible to contribute an additional \$2 million to the WHO MESA fund as urgently requested by Dr. Candau, Director-General of that Organization.

3. Technical Backstopping

(a) The need for additional technical backstopping personnel in ICA/W and in the field (Regional Malaria Advisers, justified in Program Approval 59-43) has become acute during the past fiscal year. Attempts to establish these positions during FY 1959 were not successful but it appears that necessary ceilings and job classifications will soon be cleared so that recruitment can begin. Additional consultants with broad experience in malaria control and eradication have now become available through retirement from other positions. Maximum effective utilization will be made of these consultants on special problems.

(b) There is sufficient need for training new workers or reorienting workers without recent experience in malaria eradication to require the continuation of the Malaria Eradication Training program in Jamaica through FY 1961. Four training courses will be presented for Senior Malaria officials during FY 1960.

(c) The Communicable Disease Center, PHS service agreement for providing investigations of field problems of equipment and materials will be continued and augmented. The increasing problem of mosquito resistance makes it imperative that work on alternate tools for malaria eradication be accelerated. Promising results have been secured in the use of malathion in the field and DDVP in the laboratory. Critical problems of formulation and of methods of most effective use of these insecticides must be surmounted before they can be utilized in this program. Details of this agreement are given in TAB B.

(d) The National Institute of Allergy and Infectious Diseases, Public Health Service, have been working for a number of years in the development of anti-malarial drugs. Satisfactory drugs have been developed for the suppression, cure of acute attacks, and radical cure of malaria under favorable conditions. However, the insurmountable difficulties of treating large populations at frequent intervals have prevented the effective use of these drugs in malaria eradication except as adjuncts to spray operations. The NIAID, through laboratory experiments and some prisoner volunteer trials, have devised means of greatly extending the effective period of some of these drugs. Additional field trials are necessary before these drugs will be ready for use in malaria eradication programs. It is proposed that ICA finance such trials during FY 60 (See Tab C.)

III. Implementation of the Program

1. Your approval of the Malaria Eradication program as herein presented, financed from Special Assistance Funds, will allow the program to move forward immediately.*

2. Implementation will be accomplished by advising USOMs immediately by cable concerning the allotment of funds so that Program Agreements can be negotiated with host governments.

3. If, during development of this program in FY 1960, it becomes evident that significant deviations from the plan presented herein are necessary, a revised program plan will be submitted for your approval.

*Considering that only \$32 million is available for allocation at this time, reductions will be made within the following programs: Pakistan, Haiti, Peru, Iran, and/or Indonesia.

Approved, at the \$32 million level, subject to conditions and understandings outline above.

Concurrences:

GC _____

DD/P _____

O/FE Program _____

O/NESA _____

O/AFE _____

O/LA _____

Tab A
PROPOSED FY 1960 MALARIA ERADICATION PROGRAM
(In Thousands of Dollars)

Country	A Congressional Presentation	B Current Estimate of Needs	C Reference	D Proposed Allocation
Far East	(Total) \$ 9,842	\$ 6,810		\$ 6,810
Cambodia	150	150	Pers. Obs.	150
Indonesia	8,166	5,103	TOICA 218	5,103
Laos	202	213	TOICA A-138	213
Philippines	373	373	TOICA 249	373
Taiwan	20	40	TOICA A-292	40
Thailand	315	315	E-1	315
Vietnam	616	616	TOICA 270	616
Near East & South Asia	(Total) \$13,663	\$17,998		\$14,334
Ceylon	300	300	E-1	300
India	12,646	15,500	TOICA 164	12,646
Iran	15	100	Pers. Obs.	100
Iraq	31	0		0
Jordan	183	183	E-1	183
Nepal	488	355	TOICA 161	355
Pakistan	0	1,560	TOICA A-1723	750
Africa	(Total) \$ 689	\$ 454		\$ 454
Ethiopia	350	265	TOICA 88	265
Liberia	250	100	TOICA A-78	100
Libya	89	89	E-1	89
Latin America	(Total) \$ 5,578	\$ 6,178		\$ 6,018
Bolivia	150	150	Pers. Obs.	150
Brazil	4,000	4,000	TOICA A-256	4,000
Colombia	460	460	E-1	460
Ecuador	0	100	TOICA 47	100
Guatemala	493	493	E-1	493
Haiti	50	450	TOICA 38	450
Honduras	160	160	E-1	0 ^{a/}
Jamaica	15	15	TOICA 61	15
Nicaragua	200	200	TOICA A-4	200
Paraguay	50	50	E-1	50
Peru	0	100 ^{b/}	Pers. Obs.	100
Total Bilateral	\$29,772	\$31,440		\$27,616

a/ FY 1960 needs met through advance contribution from FY 1959 funds.

b/ Government of Peru has requested ICA assistance in the amount of \$100,000 but USOM/P has not yet indicated a willingness to assist that program.

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Tab A (continued)

PROPOSED FY 1960 MALARIA ERADICATION PROGRAM
(In Thousands of Dollars)

Country	A Congressional Presentation	B Current Estimate of needs	C Reference	D Proposed Allocation
Technical Backstopping	\$ 228	\$ 430		\$ 430
ICA/W Headquarters	88	90		90
Regional Malaria Advisers- Travel etc.	0	100		100
Consultants	0	10		10
CDC Service Agreement	90	140		140
NIH Service Agreement	0	35		35
Training Center Support	50	55		55
Multilateral Agencies (Total)	\$ 5,000	\$ 7,000		\$ 5,000
World Health Organization	\$ 3,000	\$ 5,000 ^{2/}		\$ 3,000
Pan-American Health Organization	2,000	2,000		2,000
GRAND TOTAL	\$ 35,000	\$38,870		\$33,046

^{2/} Dr. Candau has officially requested an additional contribution of \$2 million in order to meet the needs of WHO in carrying out its role of coordination and technical backstopping of the world-wide malaria eradication campaign.

J.

PARTICIPATING AGENCY SERVICE AGREEMENT
BETWEEN
INTERNATIONAL COOPERATION ADMINISTRATION
AND
U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
PUBLIC HEALTH SERVICE

I. General Description of the Project

The Communicable Disease Center (CDC) of the Public Health Service is to (1) continue development of safe and effective insecticidal formulations for use in malaria programs in countries where vectors are developing resistance to DDT, dieldrin and other chlorinated hydrocarbon insecticides, (2) continue the testing of DDT and dieldrin formulations in order to improve the quality or formulations of these materials, (3) investigate possible utilization of the residual fumigants for malaria eradication programs, (4) continue research to provide improvement of application equipment with particular emphasis on nozzle tips and constant pressure regulator valves. Sprayer performance will be improved if more satisfactory valves can be developed and field tested, (5) develop tracer compounds or indicators which can be used to determine whether a surface has been sprayed with insecticides, (6) develop rapid methods for inspection analyses of water-wettable powders to relieve delays caused by the relatively long time presently required for inspection analyses to be completed, (7) conduct laboratory and simulated field tests on the biological effectiveness of selected residues on different surfaces against anopheline mosquitoes. This will include a comparative evaluation of the residual effectiveness of DDT and dieldrin at currently recommended dosage rates, (8) test effectiveness of various packages for insecticides in order to reduce packaging and shipping costs.

Research of this type requires specialized personnel and apparatus such as is available at CDC. Because of the U. S. investment in the malaria program, it is essential that the U. S. Government protect this expenditure by continuing to improve materials and application equipment.

II. Specific Activity Targets or End Results of the Project

Technical Development Services to be Performed by the PHS

A. Insecticide Formulation and Packaging Investigations

1. Development of Performance Specifications for DDT and Dieldrin Water-Wettable Powders

Extensive studies of the quality and storage stability of 75% DDT water-wettable powders purchased by ICA in FY-1959 indicated that revision of the specification to a higher suspensibility standard is needed and that further work on a rapid laboratory method for determining stability during storage is needed. Such work will be carried out and the close check on the quality of material supplied ICA will again be maintained during FY-1960.

2. Development of Specifications and Storage Studies on Malathion Formulations

Work was initiated in FY-1959, in cooperation with the basic supplier, on malathion wettable powders with the ultimate objective of developing suitable specifications.

Although malathion has shown up favorably in laboratory and preliminary field tests, critical formulation problems must be solved before this material will be a practical insecticide for malaria eradication. In view of appearance of dual DDT-diieldrin resistance among anophelines in some areas, this work must be accelerated during FY 1960.

3. Studies on Improved Methods for Inspection Analyses of DDT and Malathion Formulations

In addition to needed improvements in performance specifications, improved methods for inspection analyses are needed to relieve delays caused by the relatively long time required for inspection analyses to be completed. Improved and more rapid methods are essential in view of the urgency of maintaining delivery time schedules for the malaria eradication program. Work in this area initiated for DDT wettable powders in FY-1959 will be continued in FY-1960 and expanded to include work on malathion formulations.

4. Development of More Economical Packaging for Insecticides

Present packaging of insecticides is adequate insofar as safe delivery of the materials is concerned but trials have indicated a cheaper package could be used. Savings of \$10 to \$20 per ton would result from use of a rectangular package as opposed to the present cylindrical drums. Such savings would amount to \$300,000 to \$600,000 annually at the present rate of insecticide purchases.

5. Development of Tracer Compounds or Indicators Which Can Be Used to Determine Whether a Surface Has Been Sprayed with Insecticides

Field comments on the tracer kit developed by the Public Health Service and sent out for field evaluation indicate that while the technique has some value in field operations, it is not fully adequate for their needs. A new approach to this problem was initiated in FY-1959 and will be explored further in FY-1960.

6. Testing of DDT and Diieldrin Water-Wettable Concentrates for Specification Compliance as Requested by ICA

"Third party" testing will be done on DDT and diieldrin water-wettable concentrates samples obtained from lots tested both by the manufacturer and by contract testing laboratories. Samples of material deteriorating in storage under adverse climatic condition will be tested and

possible solutions sought for their reconditioning to a usable status. New formulations submitted by manufacturers to ICA for evaluation will be tested by ICA and TDL at the time of the request.

7. Studies of Residual Vapor Method of Adult Mosquito Control

The use of a compound such as DDVP to produce vapor concentrations sufficient to kill mosquitoes and low enough to be harmless to humans and other higher animals shows great promise in malaria control and eradication. Extensive chemical work will be necessary to develop and evaluate this method of control. The most important problems needing immediate attention are as follows:

- (a) Development and evaluation of preparations which will produce constant and known amounts of DDVP vapors.
- (b) Determine the minimum air concentration required to give effective control - a primary requirement for this work will be to develop a procedure for determining very low concentration (of the order of 0.01 micrograms per liter) of DDVP vapor in the air.
- (c) Higher animal toxicological evaluation of vapor method.
- (d) Examination of other potential useful compounds for vapor properties.

This work must be undertaken during FY-1960 because of the DDT-dieldrin resistance problem.

B. Insect Resistance Studies

1. Methods for Use by ICA Field Personnel of Effectively Detecting Anopheles Resistance to Insecticides

The present ICA method of detecting anopheline resistance to insecticides permits only the detection of dieldrin and DDT resistance. Expanded studies of the kit's use to include pertinent organophosphorus compounds, such as malathion, will be conducted. Susceptibility levels of field strains of mosquitoes will be determined as indicated.

2. Development of Safe and Efficient Insecticides for Use in Control of Chlorinated Hydrocarbon Insecticide Resistant Anopheles Mosquitoes

- a. Continued laboratory and simulated field evaluation of promising new insecticides and of synergistic formulations of insecticides.

b. Field tests of insecticides selected previously from (2 a.), will be conducted in suitable areas such as El Salvador; Mexico; Puerto Rico; Cleveland, Mississippi, etc., using unoccupied and occupied houses.

c. Tests of certain insecticides for counter selection of existing resistant strains of mosquitoes.

d. Laboratory and simulated field evaluations of chemical methods of adult control other than residual spray applications. Preliminary tests indicate promising potentialities for residual fumigant applications of certain compounds. Accelerated and expanded studies will be conducted using DDVP, malathion, and other selected compounds and combinations of compounds. Studies in progress will attempt to define the proper vaporizer, necessary vapor concentrations, and length of residual effectiveness.

e. Laboratory and simulated field tests on the biological effectiveness of selected residues on different surfaces against anopheline mosquitoes. This will include a continuation of the comparative evaluation of the residual effectiveness of DDT and dieldrin at currently recommended dosage rates.

f. Development and maintenance of DDT and/or dieldrin resistant strains of anopheline mosquitoes for use in insect resistance studies.

C. Development of Application Equipment

1. Study of Application Efficiency

The many millions of dollars worth of insecticides procured by ICA funds all pass through relatively inexpensive nozzles. The efficiency of these nozzles has been studied in the past but must be improved to prevent waste of insecticides. Further steps will be taken to establish more definite criteria for efficient nozzles, means developed for rapid screening of unsatisfactory nozzles and attempts will be made to obtain more exacting production in order to conserve amounts of insecticides used.

2. Field Evaluation of Delivery Control Devices

Commercially available delivery control devices have been expensive, low in efficiency and too complex for use and maintenance by most laborers. However, the use of such a device can accomplish a considerable economy in insecticides. A simple, cheap, nearly foolproof device has been developed by CDC through the ICA/PHS agreement of previous fiscal years and has been field tested with promising results. CDC is now working with industry to have the device commercially produced. As soon

as the commercial models are available in small quantity they will be tested in the laboratory and, if the results are favorable, will be given additional field trials in one or more national malaria eradication programs which are suitable for this work.

3. Consultation on, and Technical Development of, Specifications for Equipment for the Application of Insecticides

This will include giving technical assistance to ICA, GSA and manufacturers on matters bearing on ICA spraying equipment problems.

4. Testing of Insecticide Sprayer Equipment for Compliance with Specifications as Requested by ICA

Prototype Sprayers will be tested as requested by ICA against the current ICA specification. This will be for the purpose of qualification for the Qualified Bidder list established by GSA.

5. The Investigation, Testing and Development of any New Devices or Techniques Which Appear to have Value

D. Progress Toward Achievement of Activity Targets

Progress made under this project during FY 1959 is summarized in a separate report prepared by the Communicable Disease Center. Notable accomplishments have been:

- a. Development of a simple, inexpensive discharge regulating device which will not only save on insecticides but will assure a more even application of spray.
- b. Revision of specifications for water-wettable DDT which will give greater assurance that adequate suspensibility will be retained by the formulation after being subjected to adverse conditions during delivery.
- c. Development of use of Malathion to the point where it has been put out on preliminary field trials.
- d. Better inspection analysis of insecticide formulations.
- e. Excellent technical backstopping concerning field problems related to spray equipment, insecticides, and other materials.

III. Special Services to be Furnished by PHS

This is an inter-agency service project, in which the Public Health Service of the Department of Health, Education and Welfare agrees

to provide necessary technical and investigational backstopping for the ICA Malaria Eradication program on a reimbursable basis. It will be necessary to continue this project as long as the U. S. is deeply involved in the worldwide malaria eradication program, although the level of activities may vary from year to year.

A. All personal services estimated to include the full time services of one professional entomologist, four professional chemists, one sanitary engineer, five biological aides, and one electric equipment operations helper, and the part time services of two professional entomologists, five professional chemists, one sanitary engineer, six biological aides and other part-time supporting and supervisory personnel as required.

B. Biological, toxicological, chemical and engineering laboratory facilities, wood and metal-working shops, and necessary equipment for field tests such as animals, vehicles, traps, etc.

C. Stenographic services for preparation of necessary reports and correspondence.

D. Special reports on individual cases of special interest and annual reports.

E. Consultative service to ICA as required.

F. At the request of ICA, PHS will provide, when available, personnel to conduct surveys and studies at ICA Missions of special operational problems relating to the control and eradication of malaria. ICA will reimburse PHS for the travel and per diem costs incurred under this provision, as well as for salaries of any personnel performing such surveys and studies who are not normally employed for work covered by this agreement. However, funds provided under this agreement may be used by PHS to pay salaries, per diem and travel costs of PHS employees to carry out field experiments at ICA Missions or other suitable locations when such field experiments are a normal outgrowth of the research provided for in this agreement and are initiated by PHS.

IV. Administrative Arrangements, Services, Supplies, Materials, or Equipment to be Furnished by ICA

A. ICA will provide PHS with assistance in obtaining samples of defective insecticides from tropical areas, insecticides in storage in tropical areas over varying periods of time, samples of defective equipment, and copies of reports from overseas assigned personnel relative to specific problems involving insecticides, spraying equipment and insect resistance to insecticides.

V. Duration of this Agreement

Beginning July 1, 1959, and ending June 30, 1960, except that this agreement may be extended or amended upon the mutual consent of PHS and ICA.

VI. Cost

\$140,000

VII. Payment to be Made to:

The Public Health Service, Washington 25, D. C., by the use of Standard Form 1080.

Reimbursements will be made on a quarterly basis.

VIII. PHS may publish any data or information developed under this project but will give appropriate credit to ICA in such publication that contains data developed wholly or in part through this project.

PARTICIPATING AGENCY AGREEMENT

BETWEEN

INTERNATIONAL COOPERATION ADMINISTRATION

AND

U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
PUBLIC HEALTH SERVICE

I. General Statement

Although excellent anti-malarial drugs have been developed for the suppression, treatment of acute attacks, and for the radical cure of malaria, it has not yet been feasible to utilize their full potential in the world-wide malaria eradication program because of problems of administering drugs at frequent intervals in large populations. By laboratory and some volunteer trials, personnel of the National Institute of Allergy and Infectious Diseases, PHS, have demonstrated that the period of effective action of some of these drugs can be extended considerably. In view of increased appearance of resistance to insecticides among the anophelines, it is essential that all possible effort be made to develop anti-malarial drugs into a feasible tool for malaria eradication.

II. Technical Development Services to be Performed by the PHS

The National Institute of Allergy and Infectious Diseases will carry out studies of anti-malarial drugs among prisoner volunteers and in such areas in the field as deemed necessary to evaluate the efficacy of methods of extending the period of their action. It is hoped that a method of "depotting" anti-malarial drugs for periods upwards of six months will be developed.

III. Personal Services, Supplies, Materials, or Equipment to be Furnished by PHS

A. All personal services estimated to include the full-time services of

1 physician
2 technicians (1 entomology and 1 clinical)
4 male nurses

and the part-time services of

1 Chief, Laboratory Parasite Chemotherapy

B. Parasitologic and chemical laboratories and scientific equipment of the NIAID.

C. Stenographic services for preparation of necessary reports and correspondence.

D. Any consultative services to ICA or field investigations which are an outgrowth of this investigation may be charged to this project, however, any special field consultation furnished to and at the request of ICA will be financed apart from this agreement.

IV. Duration of this Agreement

Beginning October 1, 1959, and ending June 30, 1959, except that this agreement may be extended or amended upon the mutual consent of PHS and ICA.

V. Cost

\$35,000

VI. Payment to be made to PHS by:

Reimbursement made quarterly to the Public Health Service, Washington 25, D. C., by the use of Standard Form-1080.

VII. Publication of Results

PHS may publish any data or information under this agreement but will give appropriate credit to ICA in such publications that contain data or information developed wholly or in part through this agreement.

DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
PUBLIC HEALTH SERVICE

Date _____

(Signature and Title)

(Signature and Title)

INTERNATIONAL COOPERATION ADMINISTRATION

Date _____

Dr. Eugene P. Campbell, Director
Office of Public Health