

Informal Minutes of the Research and Development Committee
Meeting of December 16, 1975

- Projects: 1. Development of Vitamin A Delivery Systems, GTS, KPA #9
2. Combatting Iron Deficiency Anemia, GTS, KPA #9

Project Manager: Dr. Samuel Kahn, TA/N

1. Vitamin A Delivery Systems, GTS, KPA #9

Dr. Irwin Hornstein, TA/N, gave a summary of the PROP revision pointing out that the project focuses on five major areas: (1) determining the prevalence of vitamin A deficiency; (2) developing intervention programs; (3) developing cost-effectiveness of the programs; (4) evaluating ongoing programs; and (5) developing indicators for predicting when vitamin A may become a public health problem. He stated that the request for the expansion of the project reflects the recommendations made by the Secretary of State at the World Food Conference in May 1975.

2. Combatting Iron Deficiency Anemia, GTS, KPA #9

Anemia is reported to be one of the more prevalent nutritional deficiency diseases in the world. Survey reports indicate that the more prevalent cause of anemia is an inadequacy of iron. Iron deficiency anemia occurs most frequently in infants, growing children, adolescents and pregnant women. In the latter group, a combined deficiency of iron and folic acid is often observed in certain LDCs.

In October 1974 in Geneva, AID, in cooperation with WHO and IAEA, sponsored a conference on Nutritional Anemia. The experts gathered represented both LDCs and developed countries. They concluded that nutritional anemias are very prevalent in many countries, and that there is sufficient knowledge concerning the causes, implications, and public health significance of nutritional anemias to justify action for control and eradication of this nutritional disease problem. Recommendations were: (a) continued research to improve laboratory methodologies that will more accurately define types of anemias, (b) continued studies which will more precisely define the adverse effects of mild anemia, (c) studies that will enable reasonable cost-benefit analysis of action programs, (d) collection of more information regarding bio-availability of iron from different diets, (e) continued and expanded prevalence surveys, (f) initiation of iron and folate supplementation and fortification studies that would lead to national programs for those segments of the population most at risk, (g) education and training programs to combat nutritional anemias in those countries with insufficient specialized personnel to carry out these programs.

Dr. Hornstein stated that the PROP for this activity outlines those areas of activity for which AID/W will mount an effort. In principal, A.I.D. is interested

in participating in all areas recommended for action to the extent that they contribute to the development of iron supplementation and/or fortification programs for those groups in need. This position is supported by Dr. Kissinger's statement before the World Food Conference.

Discussion Highlights for Iron Deficiency & Vitamin A Projects

AID has been cooperating with other donor agencies in Vitamin A programs. Both WHO and AID funded a conference in Djakarta to examine the widespread effect of vitamin A, the ways for detecting vitamin A deficiency, areas of research and to determine what should be done. The result of this conference was the creation of the International Vitamin A Consultative Group (IVACG).

The Vitamin A program is not a unilateral activity. Other donor agencies are involved in some aspect of Vitamin A delivery system. Mr. William Feldman, LA/DP, stated that a major concern should be the contribution of LDCs to the activities and the institutions available to continue the activities once AID support has phased out. He suggested that this be addressed in the PROP.

Ms. Sue Gibson, NE/DP, added that the PROP revision needs to define how the LDCs will be involved, the criteria for selecting them and their commitment.

Mr. Feldman moved that NE/DP's comments be addressed in the PROP revision, and that there be some type of a formal commitment defining joint support of AID and the LDC. The formal commitment could conceivably be a Project Agreement.

Mr. John Welty, PPC/DPRE, raised some concern about the education component and suggested inclusion of this in both project papers.

Ms. Gibson suggested the development of more research activities and specificity on alternatives for what is to be tested.

Mr. Von Yoder, ASIA/TD, stated that the justification for increased funding at a specific level was insufficient. Mr. John Gunning, TA/PPU commented that the Secretary of State had made some quantitative commitments at the World Food Conference. When pledging U.S. support for major programs in this area, Mr. Fritz informed the group that significant reductions in the TA Bureau's FY 77 funding level undoubtedly would result in significant cuts for those projects.

Action Required

The R&DC recommended that the following comments be addressed in the PROPs

for both the Vitamin A Delivery System and the Combatting Iron Deficiency Anemia projects:

1. LDC involvement and commitment and criteria for selecting LDC.
2. Education component.
3. LDC institution for continuation of surveillance of the problem.
4. Increase level of funding for field research.
5. More specificity on alternatives for what is to be tested.
6. Cost effectiveness.

UNITED STATES GOVERNMENT

Memorandum

TO : PPC/PDA, Mr. James Hoath
PPC/DPRE, Mr. John Welty ✓

FROM : PPC/PDA/DA, Norman Holly *NH*

DATE: December 15, 1975

SUBJECT: R&DC Nutrition PP Reviews, Decembe

John Welty will represent PPC in the review of TA/H project papers on (1) Development of Vitamin A Delivery Systems, and (2) Combatting Iron Deficiency Anemia. I discussed these PPs with John on December 15, saying in general that I felt they were consistent with TA/N policy and obviously important; but that I regarded the educational component in both to be weak.

Carotene is available in many vitamin A deficient areas, but the plants that carry it are not adequately utilized in the local diet. Iron is available in many common foods, but sometimes bound in such a way as to be unutilizable as iron. If victims remain uninformed about the dietary changes necessary to obviate these problems, they will remain dependent on the nutritional supplement proposed in these PPs and phase-out will be difficult.

In the case of vitamin A, it is possible for children with borderline intake levels to become acutely vitamin A deficient by an increase in growth stimulated by improved protein intake -- which is an objective of our agriculture and other nutrition programs. Beneficiaries should be made aware of this risk and of ways to obviate it.

I feel the educational component should be built into the design of any demonstration in these areas. It should be designed not only to instruct and inform, but also to test and improve receptivity to the information and to the kinds of dietary changes that may be indicated.

*see
brant
1/27/77*



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12/501

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

1. Cooperating Country
Worldwide 31-8073 Page 1 of 7 Pages

2. P.I.O. T No.
931-11-560-045-73

3. Original or
Amendment No. _____

4. Project/Activity No. and Title 045 - KPA #9 11p
Vitamin A Delivery System: Evaluation of
Sugar Fortification with Vitamin A

PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-099-00-20-51

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Suballigation

8. Funding Period (Mo., Day, Yr.)
From 6/1/75 to 12/1/75.

9.A. Service to Start (Mo., Day, Yr.)
Between 5/31/75 and 6/1/75

9.B. Completion date of Services
(Mo., Day, Yr.)
12/1/75

10.A. Type of Action
 A.I.D. Contract Country Contract Participating Agency Service Agreement Other:

10.B. Authorized Agent
AID/Washington

Estimated Financing		(1)	(2)	(3)	(4)
\$1.00 =		Previous Total	Increase	Decrease	Total to Date
11. Maximum A.I.D. Financing	A. Dollars		65,450		65,450
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

FUNDS RESERVED BY
FOCUSED 6/03/75
SER/PM/OSD

mission References
Ref. cable Guatemala 1820

14. Instructions to Authorized Agent
The Office of Contract Management is requested to execute an agreement with the Pan American Health Organization and its Institute of Nutrition for Central America and Panama (INCAP) to conduct activities described under the scope of work and according to the protocol given herein for a period of six months. Funding for this six month period will be at \$65,450. The total project will run 26 months at an estimated cost of \$412,000.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
TA/N, I. Hornstein *I. Hornstein*

B. Funds for the services requested are available
TA/PM, *Evelyn C. McLeod* 5/16/75

C. The scope of work lies within the purview of the initiating office and approved Agency Programs
TA/N, Martin Forman, Director *M. Forman* (S)

D. TA/PM, *Mary Modynski* 5/24/75

E. TA/N, Amy Pound *Amy Pound*

F. LA/CEN, *J. Lockard*

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to
Signature and date: _____

17. For the Agency for International Development
Signature: *John Cunning*
Title: Chief, TA/PM

18. Date of Issuance
5/30/75

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used To evaluate the biological effectiveness of Vitamin A fortification of sugar, and to collect cost information regarding fortification and quality assurance control.

B. Description

Although vitamin A fortification of sugar has a demonstrated effectiveness in the laboratory and in small population groups, its effectiveness and cost need to be assessed in larger population groups.

The contractor will collect data regarding the vitamin A status of populations in Costa Rica and Guatemala. This will include information of the present adequacy of vitamin intake from natural foods, the corresponding levels of circulating vitamin A in the body, and the liver reserves of this vitamin. The parameters are:

1. intake of sugar and major sources of vitamin A through dietary surveys and composite food analysis;

(See Continuation Sheet)

C. Technicians

1) (a) Number	(b) Specialized Field	(c) Grade and/or Salary	(d) Duration of Assignment (Man-Months)
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(Personnel are employed by INCAP, Guatemala City, Guatemala.)

(See Attachment II)

2) Duty Post and Duration of Technicians' Service

INCAP, Guatemala City, Guatemala (for the life of the project), and Costa

N. A.

(4) Access to Classified Information

V. A.

(5) Dependents Will Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - \$ 65,450.

(2) By Cooperating Country -

PIO/T	Cooperating Country Worldwide	PIO/T No. 931-11-560-045-73	Page 3 of 7 Pages
	Project, Activity No. and Title Vitamin A Delivery Systems: Evaluation of Sugar Fortification With Vitamin A		

20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity (2) Description (3) Estimated Cost (4) Special Instructions

(See budget Attachment I)

B. Financing of Equipment and Supplies
 (1) By AID (2) By Cooperating Country .

- A. This PIO/T is subject to AID (contracting) ~~XXXXXXXXXXXX~~ regulations.
- B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources. Services will be with INCAP and consultant services they employ will be at their discretion.
- C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000. N.A.
- D. Other (specify): Dollars obligated under this contract may be used to finance local costs.

PIO/T.	Cooperating Country Worldwide	PIO/T No. 931-11-560-45-73	Page 4 of 7 Pages
	Project/Activity No. and Title Vitamin A Delivery Systems: Evaluation of Sugar Fortification With Vitamin A		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

- a. Thirty-five copies of a semi-annual report, describing the implementation of the project in terms of objectives, activities described in this PIO/T and expenditures made under this contract, will be submitted to AID/W within 30 days after the completion of this activity.
- b. AID will receive 6 copies of all published articles, papers, reports, etc. that include data or information developed by or related to the project.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(A) above.)

Attachment I - Budget

Attachment II - Project Proposal

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

B. Cooperating Country Liaison Official

Dr. Ivan D. Beghin
Division of Applied Nutrition
INGAP/PAHO
Guatemala City, Guatemala

C. AID Liaison Officials

Dr. S. G. Kahn/Dr. I. Hornstein
AID/TA/N
Washington, D.C. 20523
Telephone: (202) 632-3942
(202) 632-9870

LOGISTIC SUPPORT

25. Provisions for Logistic Support	In Kind Supplied By		From Local Currency Supplied By	
	AID	Cooperating Country	AID	Cooperating Country
A. Specific Items (Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments")				
N.A.				
(1) Office Space				
(2) Office Equipment				
(3) Housing and Utilities				
(4) Furniture				
(5) Household Equipment (Stoves, Refrig., etc.)				
(6) Transportation in Cooperating Country				
(7) Interpreter Services				
Other: (Specify)				
(8)				
(9)				
(10)				
(11)				
(12)				
(13)				
(14)				
(15)				

B. Additional Facilities Available From Other Sources

Additional facilities will be available in Costa Rica during the carrying-out of the project in this country.

C. Comments

CONTINUATION SHEET

FORM SYMBOL

TITLE OF FORM

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

Issuance

PAGE 6 OF 7 PAGES

1. Cooperating Country
Worldwide

2.a. Code No.

2.b. Effective Date

2.c. Amendment
 Original OR No.

3. Project/Activity No. and Title

Vitamin A Delivery Systems: Evaluation of
Sugar Fortification With Vitamin A

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PAA form.

19 B

2. plasma retinal level in children below 5 years of age
3. retinal level in human milk;
4. eye examination of preschool age children;
5. skin examination on all persons in the study;
6. retinal content of liver samples collected from coroner's autopsies;
7. registration and careful examination of cases of blindness and other eye lesions attributed to hypovitaminosis A;
8. monitoring for and reporting of suspected cases of hypervitaminosis A;
9. both technical and cost assessment of quality assurance control processes of fortification procedures; and
10. assessment and evaluation of total cost of fortification program in each country.

The above data will permit the assessment of the effectiveness of the fortification process at national scale of the adequacy of fortification levels proposed; and will provide the basis for possible adjustments of the program if proved necessary.

Most biochemical and clinical data will be collected during five collection periods. Information regarding liver biochemistry, and clinical monitoring for hypervitaminosis A will be collected continuously, as will the registration of cases of blindness. The initial collection period is to begin within 1-2 months. Funds from this PIO/T will support this first collection period which will serve as baseline for subsequent data collections. The four subsequent collection periods will be conducted at intervals of 6 months. Technical and cost assessments of the fortification procedure will be done at 12 and 24 months.

(See Continuation Sheet)

CONTINUATION SHEET

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

Continuation

FORM SYMBOL

TITLE OF FORM

1. Cooperating Country
Worldwide

2.a. Code No.

2.b. Effective Date

2.c. Original OR Amendment No. _____

3. Project/Activity No. and Title

Vitamin A Delivery Systems: Evaluation of
Sugar Fortification With Vitamin A

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

19 B
Continuation

Both studies in the project (Guatemala and Costa Rica) will be conducted using representative samples of each of the major ecological areas in each countries. Sampling of populations will be sufficient to conduct proper statistical analyses with the collected data.

EVALUATION OF SUGAR FORTIFICATION WITH VITAMIN A
 THRAP/PAHO
 PRELIMINARY BUDGET (June 1, 1975 to Dec. 1, 1975)

1.	<u>Personnel Services</u>		
	a) Survey team (one survey)		2,650
	b) Field director, 6 months		12,500
	c) Technical assistant, 6 months		1,500
2.	<u>Travel and Transportation</u>		
	a) Mileage, one survey		1,200
	b) Per diem, professional one su		600
	c) Per diem, non professional, or		1,650
3.	<u>Supplies and Equipment</u>		4,850
4.	<u>Biochemistry</u>		13,600
5.	<u>Composite Analysis</u>		
6.	<u>Cost of other Surveys</u>		2,500
7.	<u>Advisory Services</u>		
	Travel	1,750	
	Per diem	7,350	
	Short Term Consultants	2,200	
	Review meeting		11,300
8.	<u>Data Processing</u>		--
9.	<u>Publication Costs</u>		--
10.	<u>Apportioned Research Expenses</u>		<u>13,100</u>
			<u>65,450</u>

CGSI REIMBURSEMENT TYPE CONTRACT

AGENCY FOR INTERNATIONAL DEVELOPMENT
NEGOTIATED CONTRACT NO. AID/ta-C-1225

CONTRACT TYPE
Cost Reimbursement

NEGOTIATED PURSUANT TO THE FOREIGN ASSISTANCE
ACT OF 1961, AS AMENDED, AND EXECUTIVE ORDER 11223

AMOUNT
\$65,450

CONTRACT FOR: Vitamin A Delivery Project No. 931-11-560-045-73
System: Evaluation of Sugar Fortification with Vitamin A.

ISSUING OFFICE (Name and Address)
Agency for International Development
Office of Contract Management
Central Operations Division
Washington, D. C. 20523

CONTRACTOR (Name and Address)
Pan American Health Organization
NAME
525 - 23rd St. N. W.
STREET ADDRESS
Washington, D. C. 20037
CITY, STATE AND ZIP CODE

ADMINISTRATION BY

Same as Issuing Office

COGNIZANT SCIENTIFIC/TECHNICAL OFFICE
Technical Assistance - Nutrition
TA/N, Dr. Kahn

MAIL VOUCHERS (Original & 3 copies)

IO: Agency for International Development
Office of Financial Management
Washington, D. C. 20523

ACCOUNTING AND APPROPRIATION DATA
PIO/T NO. 931-11-560-045-73-3158073
APPROPRIATION NO. 72-11X1023
ALLOTMENT NO. 402-31-099-22-51

EFFECTIVE DATE 6-30-75

ESTIMATED COMPLETION DATE 12-31-75

TYPES OF BUSINESS (CHECK APPROPRIATE BOX(ES)) Non-Profit International Organization

<input type="checkbox"/>	SOLE PROPRIETORSHIP	<input type="checkbox"/>	SMALL BUSINESS
<input type="checkbox"/>	PARTNERSHIP	<input type="checkbox"/>	LABOR SURPLUS AREA
<input type="checkbox"/>	JOINT VENTURE		
<input type="checkbox"/>	CORPORATION, INCORPORATED IN THE STATE OF		

The United States of America, hereinafter called the Government, represented by the Contracting Officer executing this contract, and the Contractor agree that the Contractor shall perform all the services set forth in the attached Schedule, for the consideration stated therein. The rights and obligations of the parties to this contract shall be subject to and governed by the Schedule and the General Provisions. To the extent of any inconsistency between the Schedule or the General Provisions and any specifications or other provisions which are made a part of this contract, by reference or otherwise, the Schedule and the General Provisions shall control. To the extent of any inconsistency between the Schedule and the General Provisions, the Schedule shall control.

This Contract consists of this Cover Page, the Schedule of 11 Pages, including the Table of Contents and the General Provisions (form AID 1420-41C, dated 9-74).

NAME OF CONTRACTOR Pan American Health Organization

UNITED STATES OF AMERICA
AGENCY FOR INTERNATIONAL
DEVELOPMENT

BY (Signature of authorized individual)

BY (Signature of Contracting Officer)

TYPED OR PRINTED NAME

TYPED OR PRINTED NAME

William H. Childress, Jr.

V. C. Perelli

TITLE

CONTRACTING OFFICER

Chief, Dept. of Budget & Finance

DATE

24 June 1975.

DATE

JUN 26 1975

DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON D.C. 20523

JAN 26 1976

~~13455~~
(9)045-8

Mr. William E. Muldoon
Pan American Health Organization
525 - 23rd Street, N. W.
Washington, D. C. 20037

Subject: Letter Amendment No.
To Contract AID/ta-C

Dear Mr. Muldoon:

Pursuant to the authority of the Foreign Assistance Act of 1961, as amended, and Executive Order No. 11223, the subject contract is amended as follows:

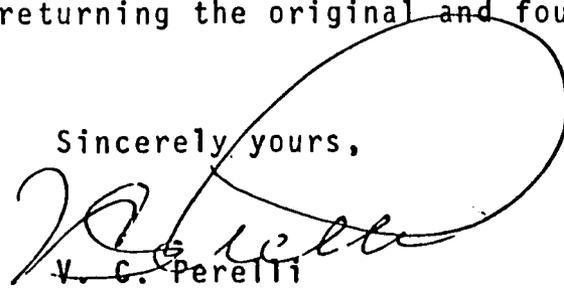
Delete the completion date on January 31, 1975 wherever and whenever it appears, and substitute the date of February 29, 1976 in lieu thereof.

All other terms and conditions of the Contract remain unchanged.

If you are in agreement with this Letter Amendment, please so acknowledge by signing and returning the original and four copies.

CERTIFIED A TRUE COPY THIS
3rd DAY OF March 76
BY R.O. Murndstad

Sincerely yours,


V. C. Perelli
Contracting Officer
Technical Assistance Branch
Central Operations Division
Office of Contract Management

ACKNOWLEDGED:

PAN AMERICAN HEALTH ORGANIZATION:

BY: William E. Muldoon
William E. Muldoon

TITLE: Chief, Division of Administration

DATE: 2 February 1976

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

DEC 30 1975

Mr. William E. Muldoon
Pan American Health Organization
525 - 23rd Street, N.W.
Washington, D.C. 20037

Subject: Letter Amendment No. 1 to
Contract AID/ta-C-1225

Dear Mr. Muldoon:

Pursuant to the authority of the Foreign Assistance Act of 1961, as amended, and Executive Order No. 11223, the subject contract is amended as follows:

Delete the completion date of December 31, 1975 wherever and whenever it appears, and substitute the date of January 31 1976 in lieu thereof.

All other terms and conditions of the Contract remain unchanged.

If you are in agreement with this Letter Amendment, please so acknowledge by signing and returning the original and four copies.

Sincerely yours,


V. C. Porelli
Contracting Officer
Technical Assistance Branch
Central Operations Division
Office of Contract Management

ACKNOWLEDGED:

PAN AMERICAN HEALTH ORGANIZATION

BY: William E. Muldoon
William E. Muldoon, Chief

TITLE: Division of Administration

DATE: 7 January 1976

CERTIFIED A TRUE COPY THIS
20th DAY OF Jan 1976
BY R. D. M. [Signature]

PD-AAC-

9310045-17

AID 1350-1X PIO/T	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT		1. Cooperating Country TAB 158081	Page 1 of 9 Pages	
	PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES		2. PIO/T No. 931-11-560-045-73	3. <input checked="" type="checkbox"/> Original or Amendment No. 9	
DISTRIBUTION	5. Appropriation Symbol 72-11X1023		6.A. Allotment Symbol and Charge 402-31-099-00-20-51		
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document		6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission		
	9.A. Services to Start (Mo., Day, Yr.) Between 6/25/75 and 6/30/75		8. Funding Period (Mo., Day, Yr.) From 6/25/75 to 6/25/77		
	10.A. Type of Action <input checked="" type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input type="checkbox"/> Participating Agency Service Agreement <input type="checkbox"/> Other		9.B. Completion date of Services (Mo., Day, Yr.) 6/25/77		
	10.B. Authorized Agent AID/Washington				
	Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease
	\$1.00=				(4) Total to Date
	11. Maximum A.I.D. Financing	A. Dollars		\$51,457	\$51,457
		B. U.S.-Owned Local Currency	Cancelled		FUNDS RESERVED BY
	12. Cooperating Country Contributions	A. Counterpart			FOUNDED 6/13/75
B. Other				SER/FM/USD	
13. Mission References	14. Instructions to Authorized Agent CM/COD/TAB is requested to negotiate a contract with the Massachusetts Institute of Technology, Cambridge, Massachusetts for the purpose of providing technical services described herein. This contractor is for two years with total funding of \$51,457.				
15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.					
A. The specifications in the scope of work are technically adequate TA/N, S.G. Kahn TA/N, I. Hornstein		B. Funds for the services requested are available, Mary Mozyński 6/13/75 TA/PM, Mary Mozyński			
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/N, M.J. Forman, Director		D. E. McLeod 6/11/75 TA/PM, E. McLeod			
E. TA/N, Amy Pound		F.			
16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to		17. For the Agency for International Development Signature: John Gunning Title: Chief, TA/PU		18. Date of Signature 7/13/75	

PIO/T	Cooperating Country	PIO/T No.	Page 2 of 9 Pages
	Worldwide	931-11-560-045	
Project/Activity No. and Title			
Vitamin A Delivery Systems (Development of a Diagnostic Test for Early States of Vitamin A Depletion)			

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used To develop a reliable bio-chemical method for the determining Vitamin A deficiency.

B. Description The contractor will performs the following services:

1. (a) (first priority) Attempt to correlate the urinary excretion of a metabolite(s) of Vitamin A to Vitamin A status; first in the experimental animal and then in humans. Urine samples will be collected at different stages of Vitamin A deficiency and the excretion level of the urinary metabolite(s) correlated with other clinical and biochemical manifestation of the deficiency.

I. (b) Investigate the character of the Vitamin A metabolite(s), so that a precise and accurate means of measurement can be developed, one that can be relatively rapid, easy and reliable.

(Continued on Continuation Sheet)

C. Technicians

(1) (a) <u>Number</u>	(b) <u>Specialized Field</u>	(c) <u>Grade and/or Salary</u>	(d) <u>Duration of Assignment (Man-Months)</u>
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(See Attached Budget)

(2) Duty Post and Duration of Technicians' Services N.A.

(3) Language requirements N.A.

(4) Access to Classified Information N.A.

(5) Dependents Will Will Not Be Permitted to Accompany Technician N.A.

D. Financing of Technical Services

(1) By AID - \$51,457

(2) By Cooperating Country -

0/T

Cooperating Country: Worldwide	PIO/T No. 931-11-560-045	Page 4 of 9 Pages
Project/Activity No. and Title Vitamin A Delivery Systems (Development of a Diagnostic Test for Early Stages of Vitamin A Depletion)		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

- Thirty-five copies of a semi-annual report, describing the implementation of the project in terms of objectives, activities described in this PIO/T and expenditures made under this contract, will be submitted to AID/W within 30 days after the completion of each six month period.
 - A final report using the same format of the annual report, except that the data submitted will cover the life of the project, is to be submitted within 60 days of completion of the contract.
 - AID will receive six copies of all published articles, papers, reports, etc. that include data or information developed by or related to the research project.
- Semi-annual fiscal reports will be submitted to TA/N.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

Attachment I / Project Proposal and Budget

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

Principal Investigator: Dr. George Wolf, Professor
Dept. of Nutrition & Food Sciences
M.I.T.

B. Cooperating Country Liaison Official

Phone: (617) 253-6781

C. AID Liaison Officials

Dr. Samuel G. Kahn
Office of Nutrition
AID/TAB
Washington, D. C. 20523
Phone: (202) 632-3942

CONTINUATION SHEET FORM SYMBOL PIO/T	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	PAGE 6 OF 9 PAGES	
	TITLE OF FORM PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	1. Cooperating Country Worldwide	2.a. Code No.
		2.b. Effective Date	2.c. <input type="checkbox"/> Original OR <input type="checkbox"/> Amendment No.
		3. Project/Activity No. and Title Vitamin A Delivery Systems (Development of a Diagnostic Test for Early Stages of Vitamin A Depletion)	

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

19.B.

assurance, the institution must also certify to AID for each proposal involving human subjects that its committee has reviewed and approved the proposed research before any work may be initiated.

Since the welfare of the subject is a matter of concern to AID as well as to the institution, AID advisory groups, consultants, and staff will independently review all research involving human subjects, and prohibit research which presents unacceptable hazards.

All of the above provisions apply to any research involving human subjects conducted outside of the United States and in addition such overseas research will conform to legal and other requirements governing human research in the country where they are conducted.

Studies with unmarketed drugs will be carried out in accordance with provisions applicable in the country where the study is conducted. In the United States, the regulations of the Food and Drug Administration will be followed and evidence of such compliance provided to AID.

Guidance on procedures to safeguard human subjects involved in research is found in the document "Protection of the Individual as a Research Subject" U. S. Department of Health, Education, and Welfare, Public Health Service, May 1969. Compliance with these procedures except as modified above is required.

PROPOSED BUDGET

June 25, 1976 - June 25, 1977

<u>PERSONNEL</u>	<u>% OF TIME</u>	<u>AMOUNT</u>
George Wolf, D.Phil., Professor of Physiological Chemistry, Principal Investigator	5%	\$1,171.
1 Research Assistant, Ph.D. Candidate	100%	9,540.
Laboratory Support Personnel		536.
Employee Benefits (18.4% of Personnel excluding Research Assistant)		<u>314.</u>
Total Personnel		11,561.
 <u>INDIRECT COSTS</u>		
65.5% of Personnel excluding employee benefits		7,366.
 <u>SUPPLIES</u>		
Animals and chemicals		5,324.
Collection of samples from the field		<u>2,000.</u>
Total Supplies		7,324.
 <u>OTHER DIRECT COSTS</u>		
Publications, reprints, etc.		<u>206.</u>
 TOTAL PROPOSED BUDGET		 \$26,457.

PROPOSED BUDGET

June 25, 1975 June 25, 1976

<u>PERSONNEL</u>	<u>% OF TIME</u>	<u>AMOUNT</u>
George Wolf, D. Phil., Professor of Physiological Chemistry, Prin. Invest.	5	\$1,094.
1 Research Assistant, Ph.D. Candidate	100	8,916.
Laboratory Support Personnel		501.
Employee Benefits (18.4% of Personnel, excluding Research Assistant)		293.
Total Personnel		<u>10,804.</u>
<u>INDIRECT COSTS</u>		
65.5% of Personnel excluding Employee Benefits		6,885.
<u>SUPPLIES</u>		
Animals and chemicals		5,111.
Collection of samples from the field		<u>2,000.</u>
Total Supplies		<u>7,111.</u>
<u>OTHER DIRECT COSTS</u>		
Publications, reprints and etc.		200.
TOTAL PROPOSED BUDGET		<u><u>\$25,000.</u></u>

PROPOSED BUDGET

	<u>6/25/75 - 6/25/76</u>	<u>6/25/76 - 6/25/77</u>	<u>TOTAL</u>
PERSONNEL	\$10,804.	\$11,561.	\$22,365.
INDIRECT COSTS	6,885.	7,366.	14,251.
SUPPLIES	7,111.	7,324.	14,435.
OTHER DIRECT COSTS	<u>200.</u>	<u>206.</u>	<u>406.</u>
TOTAL PROPOSED BUDGET	<u>\$25,000.</u>	<u>\$26,457.</u>	<u>\$51,457.</u>

9-045

10

D 1350-1X (7-71) PIO/T	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	1. Cooperating Country INCAP 3147636	Page 1 of 6 Pages
	PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	2. PIO/T No. 931-17-560-590-73	3. <input checked="" type="checkbox"/> Original or Amendment No.
		4. Project/Activity No. and Title Analysis of INCAP Nutritional Data	

DISTRIBUTION	5. Appropriation Symbol 72-11X1026	6.A. Allotment Symbol and Charge 426-31-099-00-2241	6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document	8. Funding Period (Mo., Day, Yr.) From 6/74 To 3/76	
	9.A. Services to Start (Mo., Day, Yr.) Between June 1974 and July 1974	9.B. Completion date of Services (Mo., Day, Yr.) March 1976	
	10.A. Type of Action: <input checked="" type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input type="checkbox"/> Participating Agency Service Agreement <input type="checkbox"/> Other	10.B. Authorized Agent	

11. Estimated Financing	12. (1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
11. Maximum A.I.D. Financing	A. Dollars	25,000		25,000
	B. U.S.-Owned Local Currency		FUNDS RESERVED BY	
12. Cooperating Country Contributions	A. Counterpart		POSTED	
	B. Other		SER/SM/CSD	

13. Mission References
ROCAP

14. Instructions to Authorized Agent
This PIO/T authorizes funding of a contract to edit a data set, construct conceptual models and analyze a pre-existing base of information to quantify the social, economic and environmental determinants of malnutrition in Central America and Panama.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate H Joe H. Davis	B. Funds for the services requested are available
C. The scope of work lies within the purview of the initiating and approved Agency Programs A/H A.D. Worthington 5/1/74	D. 6/6/74 TA/RIG, M. Rechigl
E. Lee M. Howard 5/1/74	F.

16. The cooperating country: The terms and conditions set forth herein are hereby agreed to

17. For the Agency for International Development
Signature: J. K. McDermott
Title: TA/RIG, J. K. McDermott

18. Date of Signature

PM

PA # 9

AID 1350-1X (7-71)	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	1. Cooperating Country Worldwide <i>3168010</i>	Page 1 of 6 Pages
		2. PIO/T No. 931-11-560-045-72-	3. <input checked="" type="checkbox"/> Original or Amendment No. _____
		4. Project/Activity No. and Title Development of Vitamin A Delivery Systems (Sri Lanka)	
		5. Appropriation Symbol 72-11X1023	

DISTRIBUTION	6.A. Allotment Symbol and Charge 402-31-099-00-20-61	6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document	8. Funding Period (Mo., Day, Yr.) From <u>9/17/75</u> To <u>6/30/76</u>
	9.A. Services to Start (Mo., Day, Yr.) Between <u>9/17/75</u> and <u>9/19/75</u>	9.B. Completion date of Services (Mo., Day, Yr.) <u>6/30/76</u>
	10.A. Type of Action <input type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input type="checkbox"/> Participating Agency Service Agreement <input type="checkbox"/> Other RSSA	

10.B. Authorized Agent AID/Washington				
Estimated Financing	(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
\$1.00=				
11. Maximum A.I.D. Financing	A. Dollars		66,060	66,060
	B. U.S.-Owned Local Currency			FUNDS RESERVED BY
12. Cooperating Country Contributions	A. Counterpart			POSTED <i>10-10-75</i>
	B. Other			SER/REV/CED

13. Mission References

14. Instructions to Authorized Agent
The Office of CM/PAS is requested to prepare a Resource Support Service Agreement with the Center for Disease Control (CDC), Public Health Service, HEW in order to: (1) develop and deliver a field training program on the clinical identification of vitamin A deficiency, (2) train field workers for the Sri Lanka Nutrition Status Survey in the clinical identification of vitamin A deficiency, (3) evaluate the proficiency of these field workers with regard to reliability and reproducibility of their observations, (4) conduct a program of serum vitamin A assay on 1500 Sri Lanka pre-school children.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate TA/N: IHornstein <i>[Signature]</i> TA/N: SGKahn <i>[Signature]</i>	B. Funds for the services requested are available TA/PPU, <i>Evelyn C. McLeod</i>
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/N: MJForman <i>[Signature]</i>	D. TA/PPU, <i>Mary Mozynski</i>
E. NESA/SA: <i>[Signature]</i> JCotten (phone)	F.

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to	17. For the Agency for International Development <i>[Signature]</i> Signature: John Gunning Title: Chief, Program Planning and	18. Date of Signature <i>10/8/75</i>
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PIO/T	Cooperating Country Worldwide	PIO/T No. 931-11-550-045	Page 2 of 6 Pages
	Project Activity No. and Title Development of Vitamin A Delivery Systems (Sri Lanka)		

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used To conduct both clinical and biochemical (serum vitamin A) vitamin A surveys in pre-school children in Sri Lanka in order to determine the prevalence of vitamin A deficiency in that country.

B. Description

The services that will be provided will include the following:
 (1) Professional services of a consultant (clinical) to develop and deliver a program for the training of field workers so that the workers can correctly identify clinical eye symptoms that are related to vitamin A deficiency. This consultant, in addition to training the field workers, will evaluate these field workers with regard to the reliability and reproducibility of their clinical observations and the proper recording of the observations on appropriate data forms.
 (2) Consultant services of a nutritional biochemist experienced in the carrying out of serum vitamin A assays and familiar with the problems of conducting such analysis in LDCs. The consultant will report on the feasibility of conducting a vitamin A survey in pre-school children in Sri Lanka when serum vitamin A assay is the technique to be employed. The report will include specific listings as to equipment and materials
 (Continued on Continuation Sheet)

C. Technicians

(1) (a) Number	(b) Specialized Field	(c) Grade and/or Salary	(d) Duration of Assignment (Man-Months)
1	Nutritional Biochemist, Ph.D.	(per diem only) 1600*	1½
1	Clinician (vitamin A), M.D.	(per diem only)	½
1	Lab Technician (supervisor)	(per diem only)	3

(plus local lab director, lab technician, 10 field workers)

*Note: 16 days @ \$100/day fee (per diem not included)

(2) Duty Post and Duration of Technicians' Services

Colombo, Sri Lanka - 3 months

(3) Language requirements

(None)

(4) Access to Classified Information (not applicable)

(5) Dependents Will Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - \$ 27,560

(2) By Cooperating Country -

Cooperating Country Worldwide	PIO/T No. 931-11-560-045	Page 3 of 6 Pages
Project/Activity No. and Title Development of Vitamin A Delivery Systems (Sri Lanka)		

20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
10	Insulated dry-ice containers	\$30/each	\$300/10
10	Field centrifuges (plus accessories)	\$300/each	\$3000/10
10	Field generators (kerosene type)	\$350/each	\$2500/10
1	Revco freezer	\$1500/each	\$1500/1
1	Dry-ice storage chest	\$250/each	\$250/1
1	CO ₂ dry-ice converter	\$200/each	\$200/1
20	Cylinders of CO ₂ compressed gas	\$25/each	\$500/20
	*Miscellaneous analytical equipment and reagents chemicals (analytical grade)		\$20000
5	Vehicles (including Maintenance)		\$10250

*Note: Example - test tubes, collection tubes, etc.

B. Financing of Equipment and Supplies

(1) By AID - \$38,500

(2) By Cooperating Country -

21. Special Provisions

- A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.
- B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.
- C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000. Some reagents may be forbidden air transport because volatile and/or dangerous nature prevents their transport in commercial planes. Such
- D. Other (specify): reagents will be purchased locally, if possible, or in nearby countries
1. Authorizations, arrangements and payments for international travel and per diem must conform to stipulations prescribed in Standard Government Travel Regulations.
 2. Prior to making any visits to Sri Lanka, the CDC RSSA technicians will review their plans with TA/N. They will keep the AID representative informed of activities carried out in Sri Lanka. The CDC RSSA technicians will make their own appointments and logistics arrangements directly.

Cooperating Country Worldwide	PIO/T No. 931-11-560-045	Page 4 of 6 Pages
Project/Activity No. and Title Development of Vitamin A Delivery Systems (Sri Lanka)		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

Reports (6 copies) will be prepared for AID regarding the findings and activities of the clinical consultant and consultant nutritional biochemist.

The laboratory results and findings of the project will be incorporated into the report of the Sri Lanka nutrition survey to be prepared and submitted to AID this fiscal year by CDC. Thirty-five copies of this report will be submitted.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

This RSSA will complement an existing RSSA with CDC that has as its purpose to conduct Nutrition Surveys. The Survey procedure is relatively uncomplicated and involves the collection of several anthropometric measurements. The Government of Sri Lanka has inquired regarding the addition of a vitamin A survey to the original planned country survey. This RSSA will facilitate the work needed for a vitamin A survey activity. The two surveys will be conducted by CDC and integrated as best possible to result in effective measurements of both general nutrition status and vitamin A status of pre-school children.

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities	Dr. Stuart Broske (Field Director, CDC) Bureau of Smallpox Eradication - CDC Atlanta, Georgia 30333 (404) 633-3311	Dr. Lane, Director BSE/CDC Atlanta, Georgia (404) 633-3311
B. Cooperating Country Liaison Official		
C. AID Liaison Officials	Dr. I. Hornstein, Deputy Director AID/TA/N Washington, D. C. 20523 (202) 632-3884	Dr. S.G. Kahn AID/TA/N Washington, D. C. 20523 (202) 632-3884

10/T

Cooperating Country Worldwide	PIO/T No. 931-11-560-045	Page 5 of 6 Pages
Project/Activity No. and Title Development of Vitamin A Delivery Systems (Sri Lanka)		

LOGISTIC SUPPORT

25. Provisions for Logistic Support

A. Specific Items (Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments")	In Kind Supplied By		From Local Currency Supplied By	
	AID	Cooperating Country	AID	Cooperating Country
(1) Office Space		X		
(2) Office Equipment		X		
(3) Housing and Utilities				
(4) Furniture		X		
(5) Household Equipment (Stoves, Refrig., etc.)				
(6) Transportation in Cooperating Country	X ¹			
(7) Interpreter Services				
Other: (Specify) (8) Laboratory director (Local lab)			X ²	
(9) Laboratory technician (Local lab)			X ³	
(10) 10 Field Workers			X ⁴	
(11)				
(12)				
(13)				
(14)				
(15)				

B. Additional Facilities Available From Other Sources

C. Comments

NOTE:

¹Transportation will be 5 vehicles and drivers (including per diem) plus maintenance costs for vehicles:

5 vehicles plus drivers for 3 months	-	\$6,750
Maintenance for 5 vehicles (including gas, oil)		3,500
5 Driver per diem @ \$3/day for 3 months		1,350
		<u>\$11,600</u>

² Laboratory director (local laboratory) @ \$300/month for 3 months	\$900
³ Laboratory technician (local laboratory) @ \$200/month for 3 months	\$600

⁴Field workers (10) (local hire) for collection of blood and processing of blood in the field

Salary @ \$150/month for 3 months	\$4500/10 workers
Per diem @ \$3/day for 3 months	\$2700/10 workers

INFORMATION SHEET FORM SYMBOL PROJECT	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT	<input checked="" type="checkbox"/> Worksheet <input type="checkbox"/> Issuance	PAGE <u>6</u> OF <u>6</u> PAGES
	TITLE OF FORM PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES	1. Cooperating County <u>Worldwide</u>	2.a. Code No.
		2.b. Effective Date	2.c. <input checked="" type="checkbox"/> Original OR <input type="checkbox"/> Amendment No: _____
3. Project/Activity No. and Title Development of Vitamin A Delivery Systems (Sri Lanka)			
Indicate block numbers.	Use this form to complete the information required in any block of a PIO or PA/PR form.		
19.B.	<p>needed to carry out the serum assay survey on 1500 pre-school children and estimated time it will take to complete this task. This consultant will be involved in interpreting the results obtained from this serum vitamin A survey.</p> <p>(3) Services of a laboratory technician supervisor who will assist, in a supervisory capacity, the local laboratory and CDC in carrying out chemical assaying for serum vitamin A in blood samples taken from pre-school children. This technician will be responsible for: (a) instructing local technicians in proper laboratory techniques regarding the serum vitamin A assay selected for use, (b) reviewing the procedures used by the local laboratory and if possible supervising the local technicians who will run the serum vitamin A assays. The laboratory technician supervisor will aid CDC in collecting, tabulating and evaluating the serum vitamin A data.</p> <p>(4) Field supplies and personnel will be required for the collection of serum blood samples of 1500 pre-school children who live in rural areas of Sri Lanka. The sampling distribution of these bloods will follow a prescribed procedure as described in the CDC nutrition status survey which is to be conducted simultaneously. Field supplies will include 5 vehicles and drivers (for 3 months), maintenance costs of vehicles and driver per diem. In addition, 10 field workers will be needed for collection of blood samples. Other supplies are: 10 insulated dry-ice containers, 10 field centrifuges (plus accessories), 10 field generators (kerosene type).</p> <p>(5) Colombo, Sri Lanka, Laboratory Supplies and Personnel costs at the central Colombo laboratory include: 3 months services of its director and one laboratory technician, 1 Revco freezer, 1 dry ice storage chest, a CO₂-dry-ice converter, and assorted laboratory equipment (test tubes, etc.) and reagents needed in determining serum vitamin A.</p> <p>(6) Expenses will be incurred for the shipment by air freight of needed laboratory supplies and equipment from the U.S. to Sri Lanka.</p>		

Development of Vitamin A Delivery System
(Sri Lanka)

1. Consultant (clinical) to develop field training programs, train field workers and evaluate proficiency of field workers in identification of clinical symptoms of vitamin A deficiency.		
(a) Consultant fee @ \$100/day for 16 days	1,600	
(b) Per diem @ \$28/day for 16 days	450	
(c) Travel (½ actual cost of trip, Baltimore-Colombo)	1,200	
(d) 10 kg excess baggage for teaching materials, etc.	<u>300</u>	
		3,550
2. Consultant (nutritional biochemist) to determine feasibility of conducting serum vitamin A assays in Sri Lanka and consult in setting up procedures.		
(a) Transportation (2 round trips) San Francisco-Colombo	4,000	
(b) Per Diem for 6 weeks @ \$28/day	<u>1,240</u>	
		5,240
3. Laboratory Technician (Supervisor) to assist local laboratory and CDC in carrying out serum vitamin A assay determinations.		
(a) Transportation (round-trip) San Francisco-Colombo)	2,000	
(b) Per diem @ \$28/day for 3 months	<u>2,520</u>	
		(2,720)
4. Field Supplies and Personnel Costs		
(a) Five vehicles plus drivers	6,750	
(b) Maintenance	3,500	
(c) Per diem for drivers @ \$3/day for 3 months	1,350	
(d) Ten field workers (salary @ \$150/month for 3 months)	4,500	
(e) Ten field workers (Per diem @ \$3/day for 3 months)	2,700	
(f) Ten insulated dry-ice containers @ \$30 each	300	
(g) Ten field centrifuges (plus accessories) @ \$300 each	3,000	
(h) Ten field generators (kerosene type) @ \$350 each	<u>2,500</u>	
		24,600
5. Colombo laboratory supplies and personnel costs:		
(a) 1 laboratory director @ \$300/month for 3 months	900	
(b) 1 lab technician @ \$200/month for 3 months	600	
(c) 1 Revco freezer @ \$1,500	1,500	
(d) 1 dry-ice storage chest	250	
(e) 1 CO ₂ dry-ice converter	200	
(f) 20 cylinders of CO ₂ gas @ \$25 each	500	
(g) Laboratory analytical equipment and reagents	<u>20,000</u>	
		23,950
6. Airfreight shipment of supplies from U.S. to Colombo (Estimate for 3000 lbs @ \$2/lb)		6,000
		<hr/> \$66,060

DRAFT:Eroske:jb 9/5/75

Cost Estimates
(APPROXIMATE)
for Serum Vitamin A Assay
on 1500 Sri Lanka Pre-School Children

Shipping Wt.
(lbs.)

	1. <u>Field Supplies and Personnel</u>	
	5 vehicles (for specimen transport)	
	Hire (includes driver's salary) @ \$450/mo.	
	for 3 months.....	\$6,750.
	Maintenance (gasoline, oil, repairs).....	3,500.
	Driver per diem @ \$3/day for 3 months.....	1,350.
	10 field workers (for field collection and processing of specimens)	
	Salary @ \$150/month for 3 months.....	4,500.
	Per diem @ \$3/day for 3 months.....	2,700.
100	10 insulated dry-ice containers @ \$30/each.....	300.
250	10 field centrifuges (with accessories) @ \$300/each.....	3,000.
900	10 field generators (Kerosene fuel) @ \$350/each.....	2,500.
	Total	<u>\$24,600.</u>

Page 2:- Draft -- Cost Estimates (Approximate)
for Serum Vitamin A Assay

Shipping Wt.
(lbs.)

2. Colombo Laboratory Supplies and Personnel

	1 laboratory director @ \$300/month	
	for 3 months.....	\$900.
	1 laboratory technician @ \$200/month	
	for 3 months.....	600.
500	1 Revco freezer @ \$1,500. (for specimen storage).....	1,500.
30	1 dry-ice storage chest @ \$250/each.....	250.
20	1 co ₂ - dry ice converter @ \$200/each.....	200.
400	20 cylinders of co ₂ gas @ \$25/each.....	500.
800	Laboratory analytical equipment and reagents	20,000.
	Total	23,950.

3. Shipping Costs

(air freight) for above supplies 3000 lbs.
@ \$2.00/lb.....6000.

4. Consultant Expenses

a) 1 laboratory biochemist (Dr. H.E. Sauberlich)

1) Feasibility Study

Round trip San Francisco-Colombo.....2,000.

Per diem @ \$28/day for 2 weeks.....400.



Page 3:- Draft - Cost Estimates (Approximate)
for Serum Vitamin A Assay

Shipping Wt.
(lbs.)

2) Initiation of laboratory work

Round trip San Francisco-Colombo.....\$2,000.

Per diem @ \$28/day for 1 month.....840.

b) 1 laboratory technician supervisor

Round trip San Francisco-Colombo.....2,000.

Per diem @ \$28/day for 3 months.....2,520.

Total \$ 9,760.

i. Alternative Laboratory Cost

Specimens to be analyzed in San Francisco-

1500 assays @ \$30/assay.....\$45,000.

Three air freight shipments of 500 specimens

each @ \$800/shipment.....2,400.

Total \$47,400.

APPLICATION FOR THE PURCHASE
OF SERVICES, SUPPLIES, & EQUIPMENT

DATES		REGISTRATION NO.
REQUESTED	REQUIRED	
9/2/75	PERCENT: 100	BSE 74-019

Bureau of Smallpox Eradication by: Stuart Broske, M.D.	Allowance 6-1350 T42/239 CAN No. 6944-6542	CONTRACT NO. (if any)	PURCHASE ORDER NO.
--	---	-----------------------	--------------------

FOR PROCUREMENT USE ONLY			PURCHASE AUTHORITY:
PROPRIATION:	TIME OF DELIVERY:	DISCOUNT TERMS:	
SHIPPING POINT:	F.O.B. POINT:	METHOD OF DELIVERY:	

PROPOSED SUPPLIERS (include zip codes in addresses):

Richard Cash, M.D.
Asst. Professor
Dept of Social and Preventive
Medicine & Dept of Medicine
University of Maryland
Baltimore, Maryland

DELIVER TO:

Center for Disease Control
Bureau of Smallpox Eradication
Bldg. #3, Rm. 117
Atlanta, Ga. 30333

STOCK NUMBER	SUPPLIES or SERVICES (Please double-space between items)	QUANTITY	UNIT PRICE	AMOUNT
--------------	---	----------	------------	--------

PROVIDE PROFESSIONAL SERVICES REQUIRED TO PERFORM
THE JOB DESCRIBED BELOW:

SCOPE OF WORK:

- (1) Development and delivery of field training program. Training of field workers for Sri Lanka Nutrition Status Survey and the correct identification of clinically significant eye findings for Vitamin A deficiency.
 - (2) Proficiency evaluation of these field workers with regard to reliability and reproducibility of their clinical observations and proper recording of these observations on appropriate data forms.
- 1 Job

COST ANALYSIS:

Consultants fee @ \$100 per day for
15 days = \$1600.00
Per diem at \$28 per day for
16 days = 450.00
Travel (1/2 actual cost of trip) 1200.00
IN KC EXCESS BAGGAGE
(TEACHING MATERIALS) 300.00

DELIVERY:

Training phase - 9/22/75 thru 9/30/75- 9 days
Evaluation " -10/20/75 thru 10/26/75-7 days

3550.00
\$3250.00

TOTALS 3550.00
3250.00

AGRAM APPROVAL (Signature and Date): Shirley B. Kaufman, Staff Asst., BSE 9/2/75	ADMINISTRATIVE SERVICES APPROVAL:
---	-----------------------------------

9350-1X
(2-71)

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

1. Cooperating Country TA Bureau

Page 1 of 1 Pages

PIO/T

PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

2. PIO/T No.
931-11-560-045-3168010

3. Original or
Amendment No. 1

4. Project/Activity No. and Title
Development of Vitamin A Delivery Systems
(Sri Lanka)

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-099-00-20-61

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status

Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 9/17/75 To 6/30/76

9.A. Services to Start (Mo., Day, Yr.)

Between 9/17/75 and 9/19/75

9.B. Completion date of Services
(Mo., Day, Yr.)
6/30/76

10.A. Type of Action

A.I.D. Contract Cooperating Country Contract Participating Agency Service Agreement Other

10.B. Authorized Agent

Estimated Financing		(1)	(2)	(3)	(4)
		Previous Total	Increase	Decrease	Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars	66,060	2,800		68,860
	B. U.S.-Owned Local Currency			FUNDS RESERVED BY	
12. Cooperating Country Contributions	A. Counterpart			POSTED	11/10/75
	B. Other			SER/FM/CSD	

13. Mission/References

14. Instructions to Authorized Agent

The Office of CM/PAS is requested to prepare the documentation necessary to increase the existing agreement with the Center for Disease Control (CDC), PHS, HEW from \$66,060 to \$68,860. This addition of funds is needed due to recent readjustments in field costs.

Ref. PIO/T : 931-11-560-045-3168010
Revised budget attached.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate

TA/N: IHornstein 11/17/75
TA/N: SGKahn 11/17/75

B. Funds for the services requested are available

TA/PPU: EMcLeod 11/31/75

C. The scope of work lies within the purview of the initiating and approved Agency Program

TA/N: MJForman 10-22-75

D.

TA/PPU: MZozynski 11/17/75

E.

TA/N: APound 10/21/75

F.

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date:

Title:

17. For the Agency for International Development

Signature:

Title: Chief, Program Planning and Analysis Division, TA/PPU

19. Date of Signature

11/17/75

Paris file

B-610

F. VITAMIN A COSTS
(Sri Lanka)

1. Consultant (clinical) to develop field training programs, train field workers and evaluate proficiency of field workers in identification of clinical symptoms of vitamin A deficiency.		
(a) Consultant fee @ \$100/day for 16 days	1,600	
(b) Per diem @ \$28/day for 16 days	450	
(c) Travel (½ actual cost of trip, Baltimore-Colombo)	1,200	
(d) 10 kg excess baggage for teaching materials, etc.	<u>300</u>	
		3,550
2. Consultant (nutritional biochemist) to determine feasibility of conducting serum vitamin A assays in Sri Lanka and consult in setting up procedures.		
(a) Transportation (2 round trips) San Francisco-Colombo	4,000	
(b) Per Diem for 6 weeks @ \$28/day	<u>1,240</u>	
		5,240
3. Laboratory Technician (Supervisor) to assist local laboratory and CDC in carrying out serum vitamin A assay determinations.		
(a) Transportation (round-trip) San Francisco-Colombo	2,000	
(b) Per diem @ \$28/day for 3 months	<u>2,520</u>	
		4,520
4. Field Supplies and Personnel Costs		
(a) Five vehicles plus drivers	6,750	
(b) Maintenance	3,500	
(c) Per diem for drivers @ \$3/day for 3 months	1,350	
(d) Ten field workers (salary @ \$150/month for 3 months)	4,500	
(e) Ten field workers (Per diem @ \$3/day for 3 months)	2,700	
(f) Ten insulated dry-ice containers @ \$30 each	300	
(g) Ten field centrifuges (plus accessories) @ \$300 each	3,000	
(h) Ten field generators (kerosene type) @ \$350 each	<u>3,500</u>	
		25,000
5. Colombo laboratory supplies and personnel costs:		
(a) 1 laboratory director @ \$300/month for 3 months	900	
(b) 1 lab technician @ \$200/month for 3 months	600	
(c) 1 Revco freezer @ \$1,500	1,500	
(d) 1 dry-ice storage chest	250	
(e) 1 CO ₂ dry-ice converter	200	
(f) 20 cylinders of CO ₂ gas @ \$25 each	500	
(g) Laboratory analytical equipment and reagents	<u>20,000</u>	
		23,950
6. Airfreight shipment of supplies from U.S. to Colombo (Estimate for 3000 lbs @ \$2/15)		6,000

\$58,800

1. PROJECT STARTING DATE (Mo., Day, Yr.) September 1975	PASA PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPARTMENT OF HEALTH, EDUCATION & WELFARE Center for Disease Control	6. <input checked="" type="checkbox"/> PASA ORIGINAL <input type="checkbox"/> PASA AMENDMENT _____
2. PROJECT END DATE (Mo., Day, Yr.) By June 30, 1976		7. PASA NUMBER HA/TAB-045-04-76
3. CATEGORY <input checked="" type="checkbox"/> TDY <input type="checkbox"/> ASSIGNED		8. COUNTRY WORLDWIDE (SRI LANKA)
4. DURATION OF FUNDING <input checked="" type="checkbox"/> CURRENT YEAR <input type="checkbox"/> FORWARD FUNDING	5. PROJECT NO. AND TITLE 931-11-560-045-72 Development of Vitamin A Delivery Systems	9. TYPE <input checked="" type="checkbox"/> GRANT <input type="checkbox"/> LOAN
		10. YEAR FY 19 <u>76</u>

11. FUNDING			
A. CITATIONS	(1) APPROPRIATION NO. 72-11X1023	(2) ALLOTMENT NO. 402-31-099-00-20-61	(3) PIO/T/OBLIGATION NO. 931-045-2-3168010 & A-1
B. FOR PARTICIPATING AGENCY	(1) INITIAL OR CURRENT \$68,860	(2) CHANGE (+ OR -)	(3) NEW TOTAL
C. RETAINED BY AID	(1) INITIAL OR CURRENT	(2) CHANGE (+ OR -)	(3) NEW TOTAL
D. COSTS FOR PARTICIPATING AGENCY ONLY	(1) PRIOR YEARS (FOR CONTINUING PROJECTS) --	(2) FUTURE YEAR (INCLUDE CURRENT FUNDING-BLOCKS B(1) OR B(3)) \$68,860	(3) ESTIMATED TOTAL \$68,860
E. PRINCIPAL COST COMPONENTS (BLOCK B)	(1) SALARIES \$7,600	(2) TRANSPORTATION INCLUDING PER DIEM \$15,760	(3) Supplies and Materials \$45,500

12. STATEMENT OF PURPOSE

A. Objective and Summary

This PASA funds TDY services which the Center for Disease Control (CDC) will provide in connection with development and delivery of a field training program on clinical identification of vitamin A deficiency in Sri Lanka. It complements an existing agreement with DHEW (RSSA HEW/CDC 3-75) under which CDC is conducting a dietary and nutritional status survey in Sri Lanka involving collection of several anthropometric measurements and other baseline data to assess the nutritional status of the pre-school population of the rural and estate sectors. The Vitamin A Consultants will conduct a program of serum vitamin A assay on 1,500 pre-school children to determine the prevalence of vitamin A deficiency.

Integration of the two surveys is expected to produce effective measurements of both the general nutrition and vitamin A status of pre-school children.

(Continued)

13. GOVERNING PROVISIONS: PURSUANT TO THE GENERAL AGREEMENT DATED March 3, 1966 BETWEEN AID AND THE DHEW, THE AGENCY NAMED ABOVE AGREES TO PROVIDE THE SERVICES OUTLINED IN BLOCK 12 AMPLIFIED AS NEEDED BY APPENDIX B, UNLESS OTHERWISE AUTHORIZED BY AID. ALL SERVICES SHALL BE OF U.S. ORIGIN. ANY APPENDICES ATTACHED HERETO ARE CONSIDERED PART OF THIS PASA.

14. SIGNATURES	
NAME: <u>[Signature]</u>	NAME: <u>Edward Rawson</u>
TITLE/OFFICE: <u>Director,</u>	TITLE/OFFICE: <u>CHIEF, PARTICIPATING AGENCY STAFF CONTRACT MANAGEMENT, AID</u>
DATE: <u>Office of International Health</u>	DATE: <u>October 29, 1975</u>
DATE: <u>November 3, 1975</u>	

15. APPENDICES	16. NEGOTIATING OFFICERS
<input checked="" type="checkbox"/> APPENDIX A - BUDGET PLAN	AID: <u>CM/SOD/PAS, V.I. Tilghman</u>
<input checked="" type="checkbox"/> APPENDIX B - SCOPE OF WORK	AGENCY: <u>HEW/OIH, M. Coddling</u>
<input type="checkbox"/> OTHER (Specify) _____	<u>HEW/CDC/BSE, Dr. M. Lane</u>

BUDGET PLAN APPENDIX A PAGE <u>1</u> OF <u>2</u>	PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPARTMENT OF HEALTH, EDUCATION AND WELFARE Center for Disease Control				1. PASA NO. HA/TAB-045-04-76	2. AMENDMENT NO.	3. FISCAL YEAR 1978
	7. FUNDED BY		4. PIOT/OBLIG. NO.	5. AMOUNT	6. APPROPRIATION 72-11X1023	7. ALLOTMENT 402-31-099-00-20-61	8. AMOUNT FUNDED
		PIOT/OBLIG. NO.	AMOUNT	PIOT/OBLIG. NO.	AMOUNT	8. RELATED LOCAL SUPPORT PROVIDED BY AID	
		931-045-2-3168010 and A-1	\$68,860				

10. PASA BUDGET PLAN - FUNDING			11. STAFFING			
DESCRIPTION	AMOUNT		NAME AND TITLE	GRADE	PERIOD (MAN-MONTHS)	AMOUNT
A. PERSONNEL COSTS:			Contract Services			
SALARIES	See #11 7,600		Clinician (Vitamin A) (Dr. Richard Cash)		16 Days	3,000
BENEFITS (_____ % OF SALARIES)	-		Fee - \$100/day	1,600		
DIFFERENTIAL	-		Per Diem - \$28/day	450		
TRAVEL	See #11 7,500		Travel, Baltimore/Colombo a/ Excess Baggage, 22 lbs. for Teaching Materials, Etc. ..	1,200 300		
PER DIEM	See #11 8,260		Nutritional Biochemist (Dr. H.E. Sauberlich, Proposed)		6 Weeks	3,240
MOVEMENT EFFECTS (INTERNATIONAL) (NORMALLY ONLY MOVEMENT TO POST)	-		Per Diem - \$28/day	1,240		
MOVEMENTS/STORAGE OF EFFECTS (DOMESTIC)	-		Travel, San Francisco/Colombo (2 round trips)	4,000		
	SUB-TOTAL	23,360	Lab. Technician (Supervisor)		3 Months	4,520
			Per Diem - \$28/day	2,520		
B. OTHER: (SPECIFY IN E BELOW)	b/ 45,500		Travel, San Francisco/Colombo (1 round trip)	2,000		
C. OVERHEAD <input type="checkbox"/> SALARIES & BENEFITS <input type="checkbox"/> PERSONNEL COSTS <input type="checkbox"/> ALL COSTS	-					
D. TOTAL (INCLUDES _____ TO BE FUNDED BY FUTURE PASA AMENDMENTS)	\$68,860					

E. EXPLANATORY COMMENTS

a/ Consultant will travel to the Philippines for the American Foundation for Overseas Blind prior to TDY in Sri Lanka (Baltimore, Md./Philippines/Sri Lanka/Baltimore - \$2,400). Therefore, only one half of his travel cost, \$1,200, is charged to this PASA.

b/ Supplies and Materials (See Appendix B for itemized list)

(Continued)

BUDGET PLAN APPENDIX A PAGE <u>2</u> OF <u>2</u>	PARTICIPATING AGENCY SERVICE AGREEMENT BETWEEN THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPARTMENT OF HEALTH, EDUCATION AND WELFARE Center for Disease Control				1. PASA NO. HA/TAB-045-04-76	2. AMENDMENT NO.	3. FISCAL YEAR 1970	6. AMOUNT CURRENTLY FUNDED \$68,860
	7. FUNDED BY		4. APPROPRIATION 72-11X1023	5. ALLOTMENT 402-31-099-00-20-61		8. RELATED LOCAL SUPPORT PROVIDED BY AID	9. TRUST FUND	
PIO/T-OBLIG. NO.		AMOUNT	PIO/T-OBLIG. NO.		AMOUNT			
931-045-2-3168010 and A-1		\$68,860						

10. PASA BUDGET PLAN - FUNDING		11. STAFFING			
DESCRIPTION	AMOUNT	NAME AND TITLE	GRADE	PERIOD (MAN-MONTHS)	AMOUNT
A. PERSONNEL COSTS:			Local Hire		
SALARIES		<u>Field Personnel</u>		3	\$1,350
BENEFITS (_____ % OF SALARIES)		5 Drivers			
		Per Diem - \$3/day	1,350		
DIFFERENTIAL		10 Field Workers			
		Salary - \$150/month	4,500		
		Per Diem - \$3/day	2,700		
TRAVEL (EXPLAIN UNDER E)		<u>Colombo Laboratory Personnel</u>		3	1,500
PER DIEM (EXPLAIN UNDER E)		Laboratory Director			
		Salary - \$300/month	900		
MOVEMENT EFFECTS (INTERNATIONAL) (NORMALLY ONLY MOVEMENT TO POST)		Laboratory Technician			
		Salary - \$200/month	600		
MOVEMENTS/STORAGE OF EFFECTS (DOMESTIC)					
SUB-TOTAL					
B. OTHER: (SPECIFY IN E BELOW)					
C. OVERHEAD <input type="checkbox"/> SALARIES & BENEFITS _____ % <input type="checkbox"/> PERSONNEL COSTS <input type="checkbox"/> ALL COSTS					
D. TOTAL (INCLUDES _____ TO BE FUNDED BY FUTURE PASA AMENDMENTS)					

E. EXPLANATORY COMMENTS

APPENDIX B SCOPE OF WORK Page 1 of 3	PARTICIPATING AGENCY SERVICE AGREEMENT Between	ORIGINAL AMEND NO. _____
	THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPARTMENT OF HEALTH, EDUCATION AND WELFARE Center for Disease Control	FASA No. HA/TAB-045-04-76
		FISCAL YEAR 1976

B. Principal Responsibilities and Personnel

(1) CDC will provide three short-term experts under contract and local-hire supporting staff as follows:

(a) A Clinician (Vitamin A) who will develop and deliver a program for training field workers so that they can correctly identify clinical eye symptoms related to vitamin A deficiency. In addition, he will evaluate these workers with regard to the reliability and reproducibility of their clinical observations and the proper recording of observations on appropriate data forms.

(b) A Nutritional Biochemist experienced in carrying out serum vitamin A assays and familiar with the problems of conducting such analysis in IDCs. He will report on the feasibility of conducting a vitamin A survey in pre-school children in Sri Lanka when vitamin A assay is the technique to be employed. The report will include specific listings as to equipment and materials needed to carry out the serum assay survey on 1,500 pre-school children and estimated time to complete this task. Also, he will be involved in interpreting the results obtained from this survey.

(c) A Laboratory Technician (Supervisor) will assist, in a supervisory capacity, the local (Colombo) laboratory and CDC in carrying out chemical assaying for serum vitamin A in blood samples taken from pre-school children. He will be responsible for (i) instructing local technicians in proper laboratory techniques regarding the serum vitamin A assay selected for use, and (ii) reviewing procedures used by the local laboratory and, if possible, supervising the local technicians who will run the assays. In addition, he will aid CDC in collecting, tabulating and evaluating serum vitamin A data.

(d) Local personnel will be required for the collection of serum blood samples of 1,500 local pre-school children. Sampling distribution will follow prescribed procedures set forth in the CDC Nutrition Survey which will be conducted simultaneously. Personnel include 10 field workers for collecting and processing samples, 5 drivers for transporting specimens, and services of the Director and a Laboratory Technician from the central Colombo Laboratory for analytical work.

C. Supplies and Materials

CDC is authorized to purchase the following field and laboratory items for use in conducting the surveys:

(Continued)

APPENDIX B SCOPE OF WORK Page 2 of 3	PARTICIPATING AGENCY SERVICE AGREEMENT Between	<input checked="" type="checkbox"/> ORIGINAL AMEND NO. _____
	THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND DEPARTMENT OF HEALTH, EDUCATION AND WELFARE Center for Disease Control	PASA No. HA/TAB-045-04-76
		FISCAL YEAR 1976

Insulated dry-ice containers, 10 @ \$30	\$ 300
Field centrifuges (plus accessories), 10 @ \$300	3,000
Field generators (kerosene type), 10 @ \$350	3,500
Revco freezer	1,500
Dry-ice storage chest	250
CO2 dry-ice converter	200
Cylinders of CO2 compressed gas, 20 @ \$25	500
Misc. analytical equipment (test tubes, collection tubes, etc.) and reagents chemicals (analytical grade)	20,000
Airfreight above supplies, U.S. to Colombo (est. 3,000 lbs. @ \$2) . . .	6,000
Hire - 5 Vehicles incl. drivers (6,750); maintenance (3,500) - 3 months for specimen transport	10,250
<u>Total Cost</u>	<u>\$45,500</u>

NOTE: Some reagents may not be shipped in commercial planes because of their volatile and/or dangerous nature. Such reagents will be purchased locally, if possible, or in nearby countries.

D. Reporting Requirements

- (1) CDC will prepare and submit to AID reports (in 6 copies) regarding the findings and activities of the clinical consultant and nutritional biochemist.
- (2) Laboratory results and findings of the project will be incorporated into the report of the Sri Lanka nutrition survey to be submitted to AID (in 35 copies) in FY 1976.

E. Special Provisions

(1) Travel

(a) All overseas travel shall be in accordance with AID procedures, including approval of CM/PAS.

(b) Prior to making any visits to Sri Lanka, the PASA technicians will review their plans with the Office of Nutrition, Bureau for Technical Assistance, AID (TA/N). They will keep the AID Representative informed of their activities in Sri Lanka and make their own appointments and logistics arrangements directly.

(2) Logistic Support

(a) While in Sri Lanka, the CDC consultants will be under the general supervision of the AID Representative, or his designee. They will be entitled to the same benefits and privileges customarily provided to PASA employees on TDY, consistent with (1)-(b) above.

6
PARTICIPATING AGENCY SERVICE AGREEMENT
Between
THE AGENCY FOR INTERNATIONAL DEVELOPMENT AND
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
Center for Disease Control

<input checked="" type="checkbox"/> ORIGINAL	AMEND NO.
FASA NO. HA/TAB-045-04-76	
FISCAL YEAR 1976	

(b) The Government of Sri Lanka will provide office space/equipment.

(3) Technical Liaison Officials

(a) AID/SRI LANKA - Mr. Ernest Kaurich, AID Representative.

(b) AID/W - Dr. I. Hornstein, Deputy Director and Dr. S. Kahn, TA/N.

(c) HEW/CDC - Dr. M. Lane, Director and Dr. Stuart Broske, Field Director, Bureau of Smallpox Eradication, Atlanta, Georgia.

(4) Commodity Disposal

Non-consumable commodities may be sold and the proceeds credited to AID or donated to the Sri Lanka government, as determined by the AID Representative.

PIO/T

DEPARTMENT STATE AGENCY FOR INTERNATIONAL DEVELOPMENT
PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES

1. Cooperating Country
Worldwide, 3, 3015
2. PIO/T No.
931-11-560-045
3. Original or Amendment No.
4. Project/Activity No. and Title
Development of Vitamin A Delivery Systems: IVACG 15p

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-099-00-20-61

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 11/20/75 to 6/30/76

9.A. Services to Start (Mo., Day, Yr.)
Between 11/20/75 and 11/30/75

9.B. Completion date of Services (Mo., Day, Yr.)
6/30/76

10.A. Type of Action
 A.I.D. Contract Cooperating Country Contract Participating Agency Service Agreement Other Grant

10.B. Authorized Agent

Estimated Financing		(1)	(2)	(3)	(4)
		Previous Total	Increase	Decrease	Total to Date
11. Maximum A.I.D. Financing	A. Dollars		\$68,269		\$68,269
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

13. Mission References

14. Instructions to Authorized Agent

The Office of Contract Management is requested to negotiate a grant with the Nutrition Foundation, New York City, a non-profit organization, for the purpose of organizing, holding, and administering the next meeting of the International Vitamin A Consultative Group (IVACG) and meetings of 3 task force groups prior to the IVACG meeting.

FUNDS RESERVED

W. J. Zelfer

11/14/75

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate TA/N:SGKahn <i>[Signature]</i>	B. Funds for the services requested are available TA/PPU, EMcLeod <i>Evelyn C. McLeod</i> 11/12/75
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/N:MJForman, Director <i>[Signature]</i>	D. TA/PPU, MZozynski <i>Mary Mozynski</i> 11/12/75
E. TA/N:APound <i>[Signature]</i>	F.

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to. Signature and date: Title:	17. For the Agency for International Development <i>[Signature]</i> Signature: John Gunning Title: Chief, TA/PPU	18. Date of Signature 11/14/75
---	---	-----------------------------------

AID 1350-1X (5-70)	Cooperating Country Worldwide	PIO/T No.	Page 2 of 5 Pages
PIO/T	Project/Activity No. and Title Development of Vitamin A Delivery Systems: IVACG		

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used. To organize the meeting of IVACG (International Vitamin A Consultative Group) and meetings of three IVACG task force groups prior to the IVACG meeting.

B. Description
Task Force Meetings

Meetings of three IVACG task forces will be organized by the Nutrition Foundation (NF) during the months of November or early December 1975. Site and exact time of meetings will be at the discretion of the NF with concurrence from AID/W. The NF will arrange travel, per diem for 11 individuals, and meeting facilities necessary to bring the task force members together. Needed supplies, communications support, secretarial assistance and editing and publishing expenses will be covered by this grant as will NF administrative costs. The product of the task force meetings will be three reports, one from each task force, which will cover these areas: (1) development of protocol for determining prevalence of Vitamin A; (2) development of protocol for evaluation of Vitamin A programs; and (3) listing of research priorities for overcoming Vitamin A deficiency. These reports will be completed, edited and replicated (xeroxed) and forwarded to the IVACG membership and their interested parties of 3 to 4 weeks prior to the meeting of IVACG itself. (Continued on p. 5)

C. Technicians

(not applicable)

(1) (a) Number

(b) Specialized Field

(c) Grade and/or Salary

(d) Duration of Assignment (Man-Months)

(2) Duty Post and Duration of Technicians' Services

(3) Language requirements

(4) Access to Classified Information

(5) Dependents

Will

Will Not

Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - \$68,269

(2) By Cooperating Country -

Cooperating Country

Worldwide

PIO/T No.

931-11-560-045

Page 3 of 5 Pages

Project/Activity No. and Title

Development of Vitamin A Delivery Systems: IVACG

Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier services)

(Not Applicable)

(2) Description

(3) Estimated Cost

(4) Special Instructions

Equipment and Supplies

(2) By Cooperating Country --

grant

subject to AID ~~REGULATIONS~~ regulations.

Specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services for this PIO/T must be obtained from U.S. sources.

Specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under \$100,000.

AIC 1350-1X (9-70) PIO/T	Cooperating Country Worldwide	PIO/T No. 931-11-560-045	Page 4 of 9 Pages
	Project/Activity No. and Title Development of Vitamin A Delivery Systems: IVACG		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

- A minimum of 100 copies each of three task force reports will be prepared, edited if necessary, and sent to all members of the IVACG and other interested groups.
- A minimum of 100 copies of the minutes of the IVACG meeting will be edited, prepared and distributed to IVACG members and other interested groups.
- 100 copies of other reports that may develop out of the IVACG meeting will be edited, prepared and distributed to IVACG members and other interested groups.

BEST AVAILABLE COPY

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

- A. The IVACG is an informal international consultative group whose purpose is to:
- (1) promote coordination of activities in combatting vitamin A deficiency,
 - (2) advise on scientific, technical, operational and financial resources for the eradication of vitamin A deficiency,
 - (3) recommend priorities for research and action for the assessment and control of vitamin A deficiency and
 - (4) serve as a clearing house for collection and dissemination of information on vitamin A deficiency among regional, interregional and national technical assistance agencies and government. Its membership consists of representatives of international and bilateral agencies, other donor institutions and operational organizations that are active in combatting vitamin A deficiency. Such agencies and organizations include: AID, WHO, UNICEF, PAHO, World Bank, etc. The Group's membership also includes individual experts in the vitamin A field. AID along with the international agencies has worked diligently to develop IVACG and this consultative group is another of the Agency's activities within its program to
- (Continued on Continuation Sheet)

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

Dr. William Darby, President-
Nutrition Foundation
New York, New York
(212) 678-4830

Dr. C. O. Chichester
Vice President, Nutrition
Foundation, N.Y., N.Y.
(212) 687-1830

B. Cooperating Country Liaison Official

C. AID Liaison Officials

Dr. S.G. Kahn, Office of Nutrition
Dr. Irwin Hornstein, Office of Nutrition
AID - Washington, D. C. 20523
(202) 632-3984

CONTINUATION SHEET

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

Worksheet Initial

PAGE 5 OF 5 PAGES

FORM SYMBOL

TITLE OF FORM

1. Cooperating Country

2.a. Code No.

Worldwide

2.b. Effective Date

2.c. Original OR Amendment No.

PIO/T

PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

3. Project/Activity No. and Title

Development of Vitamin A Delivery Systems:
IVACG

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

19.B.

IVACG Meeting

The meeting of IVACG will be organized by the NF to take place in Madurai, Madras, India during January 6-8, 1976. The NF will arrange for the needed meeting facilities and the travel and per diem of participants. The necessary communications support and secretarial assistance will be covered under this grant. NF will assist in any needed editing, publication and distribution of the minutes and other reports developing out of the IVACG meeting. Furthermore, the grant will cover administrative expenses. (NOTE: The IVACG meeting at Madurai, India is tentative at this time. Another meeting site and time may be selected.)

23.

combat vitamin A deficiency in the LDCs. The Agency has committed itself to support of the IVACG and its secretariat. At the last meeting of IVACG, in New York City, plans were made to next meet in Madurai, India, January 6-8, 1976. Prior to that meeting, three task force groups are to meet to prepare background papers for this meeting.

This PIO/T is being issued so that a grant can be written with the Nutrition Foundation of New York City, authorizing the Foundation to organize and facilitate the implementation of task force group and IVACG meetings.

B. Attachment I - Estimated Budget

Attachment II - IVACG Minutes May 23, 1975

THE NUTRITION FOUNDATION, INC.
415 FIFTH AVENUE • NEW YORK, N.Y. 10017 • 212 687-4300

3 CHESTER, CALIF.
VETERINARIAN

031195

October 15, 1975

Dr. Samuel G. Kahn
TA/RUR
Department of State
21st and C Streets, N.W.
Washington, D.C. 20523

Dear Sam:

I would like to confirm the budgetary figures I gave you on the phone on 14 October for organizing, holding and administering the forthcoming meetings of the International Consultative Group on Vitamin A.

In obtaining these figures we have made the following assumptions. There will be three simultaneous meetings of the Task Forces held in New York City prior to the full committee meeting which is to be held in India. The meetings in New York will run for a period of five working days and the meeting in India for a period of three to four days, with a possible extension to the fifth day. From these meetings we will have developed a total of four reports. Individual task force reports will be consolidated and made available for the meeting in India, with a minimum of 100 copies of each reported available. Depending upon the condition of the manuscripts that the groups leave us, we may or may not have need of professional editing. Assuming we will, a figure for this cost is included.

The following budget is the one I relayed to you by phone:

IVACG (International Vitamin A Consultative Group) Meetings: New York City and Madurai, Madras, India.

TRAVEL

To Madras, India	\$26,500.00
To New York City	8,500.00

PER DIEM

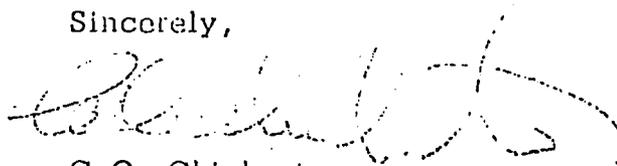
India	5,015.00
New York City	6,400.00

IVACG Budget (Continued)

Secretarial & Report Publishing	\$ 6,400.00
Meeting Room Rentals	600.00
Supplies	750.00
Communications	1,200.00
Editorial	4,000.00
Administration	<u>8,904.00</u>

TOTAL: \$ 68,269.00

Sincerely,



G.O. Chichester
Vice President
The Nutrition Foundation, Inc.

COC:sbm

International Vitamin A Consultative Group (IVACG)

Minutes - Meeting Held May 23, 1975
United Nations, New York, N. Y.

Attendees:

DeMaeyer, WHO; Teply, UNICEF; Sommers, Johns Hopkins; Olson, Iowa State; Pettiss, AFOB; Chichester, Nutrition Foundation; Bauernfeind, Hoffman-LaRoche; McLaren, American University Beirut; Venkatachalam, PAG/UN; Kupfer, NEI/NIH; Latham, Cornell University; Basta, World Bank; Kamel, University of Illinois; Beaudry-Darisme, PAHO; Venkataswamy, Madurai, India; Kahn, AID; Hornstein, AID; Forman, AID

Dr. Hornstein, Chairman pro tem, opened the meeting by welcoming all conferees and thanking Dr. Teply for arranging for the use of the UN facilities. He envisioned a 5-10 year worldwide Vitamin A program to reduce the prevalence of Vitamin A deficiency with primary emphasis on eradicating its causally related blindness in preschool aged children. He noted that the International Vitamin A Consultative Group (IVACG) had been functioning on an ad hoc basis and that a major purpose of the current meeting would be to review the proposed functions of the IVACG and to "formalize" its existence. It was proposed that IVACG assume the responsibilities for: (a) reviewing the work scope of proposed programs and recommend to member organizations action programs for combatting Vitamin A deficiency; (b) establishing priorities for country action based on the magnitude and extent of the problem and the desire of the host country to seek solutions and commit resources to carry out programs. (The actual implementation of a country program would be the expressed responsibility of an individual agency or country and the funding of such a program would be left up to that specific agency or country.) and

(c) serve as a central point for the reporting of progress of such programs.

In the discussion that followed it was pointed out by Drs. DeMaeyer and Forman that countries that have a Vitamin A deficiency problem must be made aware of the significance of this nutrition-health problem and of the alternatives available for combatting the deficiency. However, before any program can be initiated, assistance must be requested by the host government. Dr. Olson pointed out that in many situations the poor conditions in a country contribute to the country's inability to respond to its problems; thus an inverse relationship exists between severity of situation and ability to respond to that situation. Part of IVACG's concern should be to pick specific areas which need active support and to list the help which is available for this support. In this regard, Dr. Tepley mentioned that WHO is the lead UN agency for Vitamin A health problems. This role was given WHO at the time of the Rome Food Conference, November 1974.

Dr. DeMaeyer stated his support for the concept of an IVACG; whose principal role would be to: (a) coordinate international Vitamin A programs (however, it would not administer Vitamin A activities of other agencies), (b) disseminate information and (c) encourage programs to determine the Vitamin A status of populations. Dr. DeMaeyer stated that he would not recommend creation of a large Vitamin A reference center. He suggested the current Xerophthalmia Club could perhaps serve as a nucleus on to which to build a small reference center. Hornstein agreed that the reference center should be modest in size and that the Xerophthalmia Club as well as other groups should be considered as possible reference centers.

In discussions regarding membership, the consensus of the Group was that it should not be limited to those present but that the organization should be maintained small to insure flexibility. Dr. DeMaeyer recommended that new memberships be considered only for organizations and not individuals. Dr. Latham suggested that LDCs should also be considered for membership. Dr. Teply pointed out that membership at an associate level would be useful. The following groups were mentioned as possible candidates for membership: International Agency for the Prevention of Blindness (IAPB), Royal Commonwealth Society for the Blind, Xerophthalmia Club, International Union for Nutrition Sciences (IUNS). Dr. Kupfer commented that the IAPB had established a special subcommittee to develop research priorities for xerophthalmia. Dr. DeMaeyer stated that the IVACG would cover IAPB interests and be even broader in scope.

The group agreed that the most urgent and immediate problems in developing Vitamin A programs were the criteria and methodologies for (a) assessing the prevalence of Vitamin A deficiency and (b) evaluating proposed and ongoing programs. It was decided that to effectively resolve many of the concerns held by the group, three task forces would be set up to clarify the three areas that should be IVACG's chief concern. Assignment to a task force was not restricted to IVACG members. The task forces and proposed membership are listed below:

Research Task Force

Latham (chp)
Gopalan
Darby
Bauernfeind

Assessment of Status (Prevalence) Task Force

Sommers (chp)
Olson
McLaren

Evaluation Task Force

Pettiss (chp)
Arroyave
Underwood

Each task force will prepare a paper that will be presented to the Group and discussed at its next meeting. AID will provide funds for each task force to meet and to prepare a report that will be disseminated to members prior to the next group meeting.

Dr. E. DeMaeyer (WHO) was selected Chairman of the IVACG. He accepted pending official approval from WHO, Geneva. Dr. Samuel Kahn (AID/W) was selected Secretary of the IVACG.

Tentatively, the next meeting of IVACG will be held in Madurai, Madras, India. The dates January 6-8 were selected since they correspond with an international meeting of ophthalmologists to be held at the same location. Alternate choices are Brasilia, Brazil and Nairobi, Kenya. Other locations suggested were Haiti and Recife, Brazil.

The preliminary agenda for the next meeting includes:

- (1) Presentation and review of reports of each task force.
- (2) A review of past and current programs of prevention of Vitamin A deficiency.
- (3) A look at Vitamin A research programs that have been or are currently supported by international agencies and other groups.

In answer to Dr. Pettiss' question regarding action on program proposals ready for submission, Dr. DeMaeyer recommended they be submitted to the IVACG secretary for circulation. Dr. Hornstein stated that new Vitamin A proposals received by AID will be reviewed by IVACG. Dr. Basta described the World Bank's interest in Vitamin A programs as potential vehicles for incorporating applied urban programs, and he suggested that the Bank would welcome inquiries regarding proposals.

The meeting was adjourned at 3:30 p.m.

AMENDMENT/MODIFICATION NO. Amendment No. 3	EFFECTIVE DATE 9-30-76	REQUISITION/PURCHASE REQUEST NO. 3118010 and A 1	PROJECT NO. (If applicable) 931-11-56(0-5-73)
ISSUED BY 6011		ADMINISTERED BY (If other than block 9) CODE	

Central Operations Division
 Office of Contract Management
 Agency for International Development
 Washington, D.C. 20523

CONTRACTOR NAME AND ADDRESS American Foundation for the Overseas Blind, Inc. 22 West 17th Street New York, New York 10011	FACILITY CODE
---	---------------

AMENDMENT OF SOLICITATION NO. _____
DATE _____ (See block 9)
<input checked="" type="checkbox"/> MODIFICATION OF CONTRACT/ORDER NO. AID/ea-C-1321
DATE 5-28-76 (See block 11)

CERTIFIED A TRUE COPY THIS
 COPY DAY OF **June** 1976
 BY **R. O. Williams**

(9) ph

THIS BLOCK APPLIES ONLY TO AMENDMENTS OF SOLICITATIONS

The above numbered solicitation is amended as set forth in block 12. The hour and date specified for receipt of Offers is extended, is not extended. Offerors must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation, or as amended, by one of the following methods:

(a) By signing and returning _____ copies of this amendment, (b) By acknowledging receipt of this amendment on each copy of the offer submitted, or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE ISSUING OFFICE PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If, by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided such telegram or letter notes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

Allocation No. 402-31-099-00-20-51 Appropriation No. 72-11X1023 Amount Obligated \$653,203

THIS BLOCK APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS

(a) This Change Order is issued pursuant to _____
 The Changes set forth in block 12 are made to the above numbered contract/order

(b) The above numbered contract/order is modified to reflect the administrative changes (such as changes in paying office, appropriation data, etc.) set forth in block 12.

(c) This Supplemental Agreement is entered into pursuant to authority of **Foreign Assistance Act of 1961, as amended,**
 It modifies the above numbered contract as set forth in block 12 **and Executive Order No. 11223.**

DESCRIPTION OF AMENDMENT/MODIFICATION

The purpose of this Amendment is to increase the total estimated cost, provide additional funding and modify the budget. The parties agree to the following changes:

1. Face Page
 Delete the figure "\$973,453" and substitute the following "\$1,093,185".
2. Article V - "Estimated Cost and Obligated Funds",
 - a. Paragraph A, delete the figure "\$973,453" and substitute "\$1,093,185"
 - b. Paragraph B, delete the figure "\$265,000" and substitute "\$918,203".
 Delete the figure "\$708,453" and substitute "\$174,982".
3. Article VI - Budget, delete the "Budget" and substitute the following:

as provided herein all terms and conditions of the document referenced in block 8, as heretofore changed, remain unchanged and in full force and effect

<input type="checkbox"/> CONTRACTOR/OFFEROR IS NOT REQUIRED TO SIGN THIS DOCUMENT	<input checked="" type="checkbox"/> CONTRACTOR/OFFEROR IS REQUIRED TO SIGN THIS DOCUMENT AND RETURN 7 COPIES TO ISSUING OFFICE
NAME OF CONTRACTOR/OFFEROR AMERICAN FOUNDATION FOR THE OVERSEAS BLIND, INC. <i>(Signature of person authorized to sign)</i>	UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT <i>(Signature of Contracting Officer)</i>

~~CONFIDENTIAL~~
DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

Prog Mgr - S. Kuhn
TA/N
Fca - R Doucette

June 30, 1976

American Foundation for the
Overseas Blind, Inc.
22 West 17th Street
New York, New York 10011

(9) 023

Subject: Contract AID/TA-C-1321, Letter
Amendment No. 1

Gentlemen:

Under the Special Provisions of subject contract entitled "Notice to Proceed", the period of notification "thirty (30) days" is hereby modified to read "ninety (90) days".

This amendment is effective June 30, 1976.

Except as hereby modified, this contract remains in full force and effect in accordance with its terms.

Sincerely yours,



Morton Darwin
Contracting Officer
Central Operations Division
Office of Contract Management

ACCEPTED:

AMERICAN FOUNDATION FOR THE
OVERSEAS BLIND, INC.

BY Susan T. Pettiss

TYPED NAME Susan T. Pettiss, Ph.D.

TITLE Director, Blindness Prevention

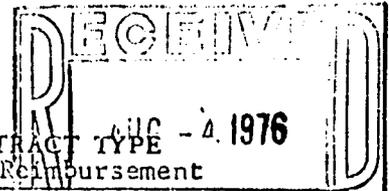
DATE July 6, 1976

CERTIFIED A TRUE COPY THIS
10th DAY OF Sept 76
BY R. P. Humiston

COST REIMBURSEMENT TYPE CONTRACT

AGENCY FOR INTERNATIONAL DEVELOPMENT
NEGOTIATED CONTRACT NO. AID/TA-C-1321

CONTRACT TYPE - **A. 1976**
Cost Reimbursement



NEGOTIATED PURSUANT TO THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED, AND EXECUTIVE ORDER 11223

AMOUNT
\$973,453

CONTRACT FOR: Project No. **931-11-560-045-73**

Characterization of Vitamin A Deficiency & Design of Effective Interventions

ISSUING OFFICE (Name and Address)
Central Operations Division
Office of Contract Management
Agency for International Development
Washington, D.C. 20523

CONTRACTOR (Name and Address)
American Foundation for the Overseas Blind, Inc.
NAME
22 West 17th Street
STREET ADDRESS
New York, New York 10011
CITY, STATE AND ZIP CODE

ADMINISTRATION BY
Same as issuing office

COGNIZANT SCIENTIFIC/TECHNICAL OFFICE
TA/N

MAIL VOUCHERS (Original & 3 copies)
Office of Financial Management
Agency for International Development
Washington, D.C. 20523

ACCOUNTING AND APPROPRIATION DATA
PIO/T NO. **931-11-560-045-73-3168047 (\$265,000)**
APPROPRIATION NO. **72-11X1023**
ALLOTMENT NO. **402-31-099-00-20-61**

EFFECTIVE DATE **6-01-76**

ESTIMATED COMPLETION DATE **7-31-79**

TYPES OF BUSINESS (CHECK APPROPRIATE BOX(ES))

<input type="checkbox"/>	SOLE PROPRIETORSHIP	<input type="checkbox"/>	SMALL BUSINESS
<input type="checkbox"/>	PARTNERSHIP	<input type="checkbox"/>	LABOR SURPLUS AREA
<input type="checkbox"/>	JOINT VENTURE		
<input checked="" type="checkbox"/>	CORPORATION, INCORPORATED IN THE STATE OF NEW YORK		

The United States of America, hereinafter called the Government, represented by the Contracting Officer executing this contract, and the Contractor agree that the Contractor shall perform all the services set forth in the attached Schedule, for the consideration stated therein. The rights and obligations of the parties to this contract shall be subject to and governed by the Schedule and the General Provisions. To the extent of any inconsistency between the Schedule or the General Provisions and any specifications or other provisions which are made a part of this contract, by reference or otherwise, the Schedule and the General Provisions shall control. To the extent of any inconsistency between the Schedule and the General Provisions, the Schedule shall control.

This Contract consists of this Cover Page, the Schedule of Pages, including the Table of Contents and the General Provisions (form AID 1420-41C, dated 7-1-75 & Attachments A-D).

NAME OF CONTRACTOR	UNITED STATES OF AMERICA AGENCY FOR INTERNATIONAL DEVELOPMENT
BY (Signature of authorized individual) <i>Susan T. Pettiss</i>	BY (Signature of Contracting Officer) <i>M. Darwin</i>
TYPED OR PRINTED NAME Susan T. Pettiss	TYPED OR PRINTED NAME /s/ Morton Darwin
TITLE American Foundation for Overseas Blind Inc.	CONTRACTING OFFICER
DATE May 28, 1976	DATE MAY 28 1976

CERTIFIED A TRUE COPY THIS
13th DAY OF June 1976
BY P. A. Munday

1350-1X
(7-71)

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

1. Cooperating Country
TAB

Page 1 of 4 Pages

PIO/T

PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

2. PIO/T No.
931-11-560- 045

3. Original or 20p
Amendment No. _____

4. Project/Activity No. and Title
Vitamin A Delivery Systems: Cost/Effective-
ness of Interventions (Cornell University)

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-099-00-20-61

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 5/1/76 To 8/1/77

9.A. Services to Start (Mo., Day, Yr.)
Between 4/15/76 and 5/1/76

9.B. Completion date of Services
(Mo., Day, Yr.) 8/1/77

10.A. Type of Action
 A.I.D. Contract Cooperating Country Contract Participating Agency Service Agreement Other

10.B. Authorized Agent
AID/Washington

Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars	0	19,060	0	19,060
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

13. Mission References

14. Instructions to Authorized Agent
GM/COD/TAB is requested to contract with Cornell University for the analysis and evaluation of the cost/effectiveness of three interventions that are being conducted to prevent vitamin A deficiency in children in the Philippines. This is follow-up work to small research contract AID/ta-c-1116.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
TA/N:SGKahn *SGKahn*
TA/N:Ilhornstein *Ilhornstein*
C. The scope of work lies within the purview of the initiating and approved Agency Programs
TA/N:MJForman *MJForman 11/27/76*

B. Funds for the services requested are available
TA/PPU:EMcLeod
D. TA/PPU:Mozynski

E. TA/N:APound *APound*

F.

Signature and date:
Title:

17. For the Agency for International Development
Signature: John Cunning
Title: Chief, Program Division

18. Date of Signature

AID 1350-1X (9-70) PIO/T	Cooperating Country TAB	PIO/T No. 931-11-560-	Page 2 of 4 Pages
	Project/Activity No. and Title Vitamin A Delivery Systems: Cost/Effectiveness of Interventions		

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used

The analysis and evaluation of cost/effectiveness of three interventions that are being used to prevent vitamin A deficiency in children in the Philippines.

B. Description

The data has been collected and requires sorting and transposing to computer cards. The data-base will include the following information (1) biochemical, (2) chemical, (3) anthropometric, (4) dietary consumption, (5) demographic, (6) economic, (7) household (health and nutrition knowledge attitudes and practices of subjects, use of social services, breastfeeding, etc.). Data will represent recently collected 1975 data and baseline information of 1973-1974.

Multiregression and other appropriate statistical analyses will be used in analyzing the data.

The analysis and evaluation will be regarded as a case study and submitted as a report.

C. Technicians

(1) (a) <u>Number</u>	(b) <u>Specialized Field</u>	(c) <u>Grade and/or Salary</u>	(d) <u>Duration of Assignment (Man-Months)</u>
1	Research Associate	\$ 1600	-
1	Computer Programmer	1800	12
1	Secretary	660	6

(2) Duty Post and Duration of Technicians' Services

Cebu, Philippines
17-18 months

(3) Language requirements

English

(4) Access to Classified Information

(not applicable)

(5) Dependents Will Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - \$ 4060

(2) By Cooperating Country -

I. Budget Information

ATTACHMENT 2

1. Salaries

Principal Investigator (Dr. Latham)	Nil	
Project Director (Dr. Solon)	Nil	
Field Director (Dr. Fernandez)	Nil	
B. Popkin - Research Associate:		
In Manila	Nil	
4 weeks in Ithaca	\$1,600.00	
Computer programmer in Philippines		
(12 person months @ \$150.00 p.m.)	1,800.00	
Secretary in Philippines (6 person months @ \$110.00 p.m.)	660.00	
2. Consultant fees	Nil	
3. Nonexpendable equipment	Nil	
4. Expendable equipment and supplies		
Stationery, office supplies	400.00	
5. Travel and subsistence	3,500.00	
6. Publication costs		
Journal articles, case study, reports to government and international organizations	2,000.00	
7. Other direct costs		
Keypunching, verifying (60,000 cards)	1,800.00	
Computer time (12 CPU hours in Manila)	5,200.00	
Computer time (Cornell)	1,000.00	
8. Indirect costs (53.4% of Cornell salaries)		Nil
9. Subcontracts (if any)		Nil
10. Contingency		<u>\$1,100.00</u>
Total Estimated Budget		\$19,060.00

Application to U.S.A.I.D.

for support for:

"Evaluation of Three Alternate Strategies to
Prevent Xerophthalmia in Children in the Philippines"

Principal Investigator:

Professor Michael C. Latham, M.D.
Director, Program in International Nutrition
Division of Nutritional Sciences
Cornell University
Ithaca, New York 14853

Abstract

Vitamin A deficiency is the major cause of blindness in many developing countries, including the Philippines. It also results in considerable illness and in many childhood deaths. Secretary Kissinger has pledged the U.S. to major support for research and programs to control vitamin A deficiency.

A study conducted in the Philippines by the Cebu Institute of Medicine and Cornell University has shown a very high prevalence of vitamin A deficiency and associated blindness. The research which was one of the most detailed conducted anywhere investigated the underlying and related causes of vitamin A deficiency so that appropriate control measures could be planned.

Three different control strategies (massive dose capsule to children; public health and horticulture intervention; and fortification of MSG) are each being tested in 4 areas, two urban and two rural. The three interventions in the 12 areas have been shown to be feasible. Both the prevalence study and the three interventions have attracted much international interest. The program has received considerable attention and has influenced work in other countries.

The request here is for funds to allow Cornell University, in cooperation with the Cebu Institute of Medicine, to conduct a detailed evaluation and analysis of the effectiveness and cost of the three interventions; to compare the relative cost and effectiveness; to prepare a case study, scientific publications and project reports; and to assist the Government of the Philippines and the Nutrition Center of the Philippines to plan a national program for the control of vitamin A deficiency.

A. Institution

Division of Nutritional Sciences, Cornell University, Ithaca, New York 14853.

September 10, 1975

B. Type of Organization

University--non profit.

C. Title of Proposed Research

Evaluation of three alternate strategies to control vitamin A deficiency in children

D. December 1, 1975 to May 31, 1977.

E. Research Plan and Objectives

1a. Summary and background

A pilot project to determine the prevalence of xerophthalmia (vitamin A deficiency) and to test the feasibility of three alternate means of control has been conducted in Cebu in the Philippines over the past 18 months. The research is conducted jointly by the Cebu Institute of Medicine (CIM) and Cornell University. CIM is one of the seven medical schools in the Philippines. The CIM director of the Program is Florentino Solon, M.D. who is now Director of the Nutrition Center of the Philippines, and the Cornell involvement is under the direction of Professor Michael C. Latham, M.D., Professor of International Nutrition and Director of the International Nutrition Program at Cornell University. Thomas Fernandez, M.D., of CIM directs the work of the project staff in the field, and Barry Popkin, Ph.D., a Research Associate at Cornell University but resident in the University of the Philippines, has responsibility for much of the data analysis.

The interventions were preceded by a large scale base-line survey of 1715 and 626 households in 12 separate locations, 6 urban and 6 rural.

The survey provided data on the prevalence of vitamin A deficiency, xerophthalmia and related factors, and allowed the design of three appropriate alternate intervention programs. These consisted of (1) a massive dose capsule of vitamin A given every 6 months to all children in 4 areas, two urban and two rural; (2) a public health and horticulture intervention designed to control related disease, to insure early treatment, and encourage greater production and consumption of vitamin A (carotene) rich foods in 4 areas, two urban and two rural; and (3) a fortification program in which commonly used packets of a popular seasoning, Monosodium glutamate (MSG), was enriched with vitamin A and supplied to families in 4 areas, two urban and two rural.

The project funded largely by the National Science Development Board (NSDB) of the Philippines, and with additional support from WHO and the participating institutions, namely CIM and Cornell University. A grant from U.S.A.I.D. allowed analysis of the base-line survey and related data.

The last phase of the project will consist of an in-depth analysis of each of these intervention approaches, the preparation of reports and papers, and the presentation of recommendations for national action. A repeated survey of each household and child is being conducted beginning in August 1975. (A detailed evaluation of each program and a cost-effectiveness analysis will then be conducted. The survey data and other data collected during the project must be analyzed. This proposal requests support for the computerization of the data, its analysis, and the preparation of publications for this important study. The budget request is for \$19,910.00

1b. Objectives

The intervention programs being utilized in Cebu are the distribution

of a mass dosage capsule of 200,000 IU of vitamin A and 40 IU of vitamin E to children in 4 areas; an integrated delivery system of health, horticulture and nutrition components termed the public health intervention (PHI) in another 4 areas; and the fortification of MSG with retinol palmitate in 4 areas. The PHI utilizes paraprofessionals called family health aides to train local volunteer workers, to help with, inter alia, nutrition and health education, the deworming and immunization of children, a carotene-rich vegetable-oriented home garden program, and other activities. Our objectives in this proposal relate to these interventions which have been conducted for a period up to 18 months. We wish to:

1. Evaluate the impact of the various components of each program on household health and nutritional status and other behavioral and attitudinal issues.
2. Compare the effectiveness of each program on eliminating xerophthalmia and in raising serum retinol levels.
3. Conduct a detailed cost-benefit analysis of each of the three intervention programs. Included will be studies of the impact of each program on blindness and morbidity which may have been reduced by the elimination of xerophthalmia. Special studies of these issues have been conducted. The relative cost and effectiveness of each intervention will be determined.
4. Prepare a case study of the overall project and other project reports based on this experiment. Agricultural breeding to increase the carotene content of vegetables, the effects of xerophthalmia on morbidity and blindness, some of the nutrition education instruments, the planning

model utilized, the home garden program, some of the social change correlates with health and nutritional change and the fortification of MSG are among the unique aspects of this project which should be reported extensively, if the results of this project are to be available for the use of others.

5. Assist the government of the Philippines and the Nutrition Center of the Philippines to plan a national program for control of vitamin A deficiency.

2. Concepts and design

Xerophthalmia is known to affect a high percentage of children in many low income nations. In the base-line analysis of 1715 children age 1-16, we found about 40% of them exhibited both clinical symptoms of xerophthalmia and had a serum A of less than 20 mcg/100 ml. Surprisingly a very high incidence was found among the school age group. This is one of the highest, if not the highest, incidence of xerophthalmia (X) so far in the world. Many of the positive clinical findings consisted of drying and wrinkling of the conjunctiva. It is realized that these are early signs and that it is difficult to be entirely objective with them. But very low serum retinol levels were found and many hospital cases of severe xerophthalmia are reported in Cebu. Based on a study of blindness in the 12 areas studied, we estimate that one out of 662 children aged 1-6 in Cebu will be blind from factors associated with X¹. Moreover, X is associated with increased mortality and morbidity. Thus, the social and economic cost of X in the Philippines is very high.

¹ A paper giving details of the study has been accepted for publication in the American Journal of Clinical Nutrition and a draft is attached as Appendix I.

A four part planning model was utilized for this pilot project. A survey was conducted in July-August, 1973 to help us understand the various socioeconomic, demographic, health and nutritional factors associated with X and to design the potentially most effective programs for eliminating this disease in our 12 sample areas. Four ecological zones--3 urban squatter areas, 3 urban fringe barrios, 3 rural coastal barrios, and 3 rural hinterland barrios--were selected to represent the important dietary, health, socioeconomic groupings. In other words, these were selected as our different planning zones. Each area is isolated from the other. The sample was selected to be representative of each of these ecological zones.

The important results of the survey were analyzed to help with the design of the intervention programs. The PHI and mass capsule distribution programs began in January-February, 1974. Technical difficulties forced us to delay the initiation of the vitamin A-fortified MSG program until 1975.¹ During the intervention period data collections were undertaken in certain of the various areas. The final base-line socioeconomic, demographic, health, dietary, anthropometric and biochemical survey instrument was designed to give us data to evaluate each program, to understand some of the key factors which might have prevented the effectiveness of a program (e.g., price changes, increase parasitic infestation in one area). Moreover, the elimination of X may have resulted from outside

¹ Because of the delay in the MSG program, it is possible that the "true" effects of the fortified MSG will not be felt in a half year. For this reason, we plan to continue the MSG fortification for an additional 6 months and will repeat the clinical examination and serum A analysis of these children if our evaluation results indicate the MSG may not have been effective.

changes such as increased income, better health care, and so on. In analyzing the effects of the various intervention programs on X, various statistical techniques will be used to control for those outside influences. The data collected in the original base-line and in the final evaluation surveys considered the need to understand these factors. For ethical and other reasons a decision was deliberately made not to have a control area where no intervention would be undertaken.

3. Methodology of the present study

a. Data Collection

Several months will be spent putting together the various types of data collected during the past two years of the project. This will include the specific data collected for evaluation in 1975. The family health aides, the project doctors and others collected other data while the interventions were being conducted and this will also be used. That data plus the project data collected during the original base-line will comprise the body of information to be used for the purposes of this analysis.

The data base will include:

1. Detailed biochemical and stool analysis from 1973 and 1975 for 1715 children plus some biochemical data collected on smaller subsamples.
2. Clinical and anthropometric data collected on each of the 1715 children at least three times.
3. Individual dietary intake data for the same 120-130 children in 1973 and 1975 plus an additional 240 children in 1975.
4. Demographic, economic, expenditure, health and nutrition

belief, use of social services, breastfeeding, and other types of household data for each of the 626 households in 1973 and 1975.

The data base is extremely extensive and over 150 computer cards of data will have been collected for each household.

b. Computerization

The data collected in 1975 must be keypunched and set up for computer analysis. Since much of the household data must be analyzed in relation to each child, we will have two types of data files, household and child. The Statistical Package for the Social Sciences, SPSS, will be the main programmed package used but numerous programs will be written by Filipino programmers to save money and enhance the use of the data. A very sophisticated computer, the IBM 370-145, which is owned by Meralco, a Filipino utility firm, will be used. The estimated computer costs are based on the 1973 work of Dr. Popkin.

c. Data analysis

A multiequation model was previously employed to analyze the factors affecting X. Multiple regression models will be used for some of the key statistical work. At the same time, descriptive analysis will be used to help us to understand the uncontrolled relationships and changes. Dr. Popkin will conduct most of the basic statistical work in 1975-76 from his base, the University of the Philippines School of Economics, under the direction of Dr. Solon, and with assistance from Dr. Fernandez and Professor Latham.

Schedule of Work

	1975	1976					Sept. 1976 - May 1977
	Dec.	Jan.	Feb.	March	April	May	
Data collection							
Coding	x	x	x	x			
Keypunching		x	x	x	x		
Programming							
Writing programs		x	x				
Setting up system			x	x	x	x	
Running system					x	x	
Analysis							
Cost	x	x					
Data base			x	x	x	x	
Write up							
Edit - rewrite							x
Final preparation of case study							x
Plans for further research							x
Recommendations for national vitamin A control program							x

4. Relevance of the study for A.I.D., L.D.C.'s and the Philippines

The Secretary of State, Mr. Henry Kissinger, in his address before the World Food Conference in Rome committed the United States to major assistance in solving some of the important world food problems. He specifically focused attention on nutritional anemias and vitamin A deficiency as examples of nutritional problems amenable to solution. Again at the U.N. on September 1, 1975 the U.S. Ambassador to the U.N. delivered a paper prepared by Secretary Kissinger in which a pledge to assist developing countries control malnutrition including vitamin A deficiency was made. The responsibility for fulfilling these commitments will fall largely on U.S.A.I.D.

The preliminary study in Cebu in the Philippines has been one of the most detailed ever conducted into the prevalence and underlying causes of xerophthalmia. This was recognized at a joint WHO/USAID International Conference on Vitamin A Deficiency held in 1974.

The plan to introduce three different strategies of control is also unusual. This is the only program of its kind anywhere. Yet it seems clear that there is a need to test the feasibility of more than one method of control before recommending the appropriate course for a national program. The research once analyzed will provide a rational basis for national policy decisions in the Philippines, but it will also contribute important knowledge concerning the epidemiology of vitamin A deficiency, and the relative cost and effectiveness of three strategies of control for other countries having a serious problem of blindness due to vitamin A deficiency. Undoubtedly in other countries certain underlying conditions will differ from those existing in Cebu, but the results of the present research will still be useful to them.

F. Available Facilities

The facilities of CIM, of Cornell University, and of the Nutrition Center of the Philippines are available for the project. Computers necessary for the analysis of the data are available both in Manila and in Ithaca. The laboratories of CIM have been and continue to be used for biochemical determinations. No equipment purchases are included in this grant application.

G. Personnel (this grant)

Principal Investigator - Professor Michael C. Latham, M.D.

Director of overall project - Florentino Solon, M.D.

Economist-data analyst (Research Associate at

Cornell, based in Philippines) - Barry Popkin, Ph.D.

Field director - Thomas Fernandez, M.D.

H. Indigenous Research Organizations

The Cebu Institute of Medicine, one of the seven medical schools in the Philippines, is the institution most involved. The nature of the involvement is given in the description of the research and in Appendix B, a report to NSDB. Dr. Florentino Solon is the project director and Dr. Thomas Fernandez is the field director. They are supported by a staff consisting of general physicians, a consultant pathologist with extensive training in the U.S. (Dr. Panopio), nutritionists, interviewers, and others.

The Nutrition Center of the Philippines whose new director is Dr. Florentino Solon is also associated with the project. This Center with its new large headquarters building in Manila provides support and will be concerned with national plans for control of vitamin A deficiency which result from the research.

8. Indirect costs (53.4% of Cornell salaries)	Nil
9. Subcontracts (if any)	Nil
10. Contingency	<u>\$1,100.00</u>
Total Estimated Budget	\$19,060.00

J. Other Research Projects by Principal Investigator (approximate amounts)

(1) Lactose intolerance research sponsored by National Dairy Council 1973-1976 Amount \$14,000 and Hatch Fund 1973-1975 Amount \$3,300	Total	\$17,300.00
(2) Relation of nutrition to productivity in sugar cane workers in Jamaica 1972-1974 Babcock Fund, Cornell CIS funds		\$3,500.00
(3) Evaluation of Nutrition Rehabilitation Centers 1971-1973 Research Corporation funds		\$9,500.00
(4) Cost effectiveness for controlling vitamin A deficiency U.S.A.I.D. funds 1973-1974		\$15,735.00
(5) Ford Foundation support to International Nutrition Program 1973-1975		\$25,000.00

I. Budget Information

1. Salaries

Principal Investigator (Dr. Latham)	Nil
Project Director (Dr. Solon)	Nil
Field Director (Dr. Fernandez)	Nil
B. Popkin - Research Associate:	
In Manila	Nil
4 weeks in Ithaca	\$1,600.00
Computer programmer in Philippines (12 person months @ \$150.00 p.m.)	1,800.00
Secretary in Philippines (6 person months @ \$110.00 p.m.)	660.00
2. Consultant fees	Nil
3. Nonexpendable equipment	Nil
4. Expendable equipment and supplies	
Stationery, office supplies	400.00
5. Travel and subsistence	3,500.00
6. Publication costs	
Journal articles, case study, reports to government and international organizations	2,000.00
7. Other direct costs	
Keypunching, verifying (60,000 cards)	1,800.00
Computer time (12 CPU hours in Manila)	5,200.00
Computer time (Cornell)	1,000.00

K. No other sponsors for this research. The field work as mentioned is supported by NSDB of the Philippines; WHO; Cornell; CIM

250-1X
71)

DEPARTMENT OF STATE
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1. Cooperating Country
TAB

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PIO/T

PROJECT IMPLEMENTATION
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2. PIO/T No.
931-11-560-045-73

3168097

3. Original or
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4. Project/Activity No. and Title
Characterization of Vitamin A Deficiency and
Xerophthalmia & Design of Effective Inter-
vention Programs

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-099-00-20-61

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 6/15/76 To 4/1/77

9.A. Services to Start (Mo., Day, Yr.)
Between 6/15/76 and 6/30/76

9.B. Completion date of Services
(Mo., Day, Yr.)
7/31/79

10.A. Type of Action
 A.I.D. Contract Cooperating
Country Contract Participating Agency
Service Agreement Other

10.B. Authorized Agent
AID/Washington

Estimated Financing		(1)	(2)	(3)	(4)
		Previous Total	Increase	Decrease	Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars		\$265,000		\$265,000
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

FUNDS RESERVED BY
[Signature]
POSTED
SER/FM/CSD
5/13/76

13. Mission References

14. Instructions to Authorized Agent

CM/COD is requested to negotiate a contract with the American Foundation for Overseas Blind (AFOB), New York City, for the services described herein.

This PIO/T addresses those services to be carried out for a duration of three years. The total estimated cost is \$1,151,017 for the period 6/15/76 through 7/31/79. Funding, in the amount of \$265,000, for the first ten months is provided at this time.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate

TA/N: IHornstein

[Signature]

B. Funds for the services requested are available

TA/PPU: EMcLeod

[Signature]
5/15/76

C. The scope of work lies within the purview of the initiating and approved Agency Program

TA/N: MJForman

[Signature] 4/15/76

D. ASIA/EA, B. E. Dupuis (draft) 5/5/76

TA/PPU: MZozynski

[Signature] 5/7/76

E.

TA/N: APound

[Signature]

F.

[Signature]

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date:

17. For the Agency for International Development

Signature: *[Signature]*
John Cunniff

Title: Chief, Program Division

18. Date of Signature

5/12/76

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SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used (1) To evaluate a methodology for establishing the magnitude and geographic distribution of vitamin A deficiency related corneal destruction; (2) to define, epidemiologically, xerophthalmia of varying degrees of severity and severe keratomalacia in order to identify the factors responsible for the occurrence which are amenable to effective intervention; and (3) to develop a methodology to utilize these findings in the design of rational intervention programs

B. Description:

The contractor will carry out this project in three phases. The first, a planning and preparatory phase, will commence on the date the contract begins and will be completed within ten months. During the first phase the contractor will prepare detailed work plans as to how the studies are to be conducted during the second phase of the project. In addition, this time will be taken to recruit and train staff, mobilize equipment, and prepare citizen groups that will be included in the studies during the course of the project. At an appropriate time during the first phase and before the second phase of the study can begin, the project

(continued on continuation sheet)

C. Technicians

(1) (a) Number	(b) Specialized Field	(c) Grade and/or Salary	(d) Duration of Assignment (Man-Months)
1	Principal Investigator	\$5,000/month*	36 months
1	Liaison Officer	\$1,667/month	36 months

(See Attachment I, Budget, which includes rate of monthly pay for Indonesian staff and technicians.)

* Only \$3,335 paid by AID.

(2) Duty Post and Duration of Technicians' Services

Indonesia - 36 months

(3) Language requirements

English

(4) Access to Classified Information

BEST AVAILABLE COPY

(1) Cooperating Country: Will Will Not Be Permitted to Accompany Technician

Processing of Technical Services

(1) By AID - 265,000

(2) By Cooperating Country -

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20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
(NONE)			

BEST AVAILABLE COPY

B. Financing of Equipment and Supplies

(1) By AID - \$

(2) By Cooperating Country

21. Special Provisions

- A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.
- B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources. Local hire is authorized under the terms of the contract.
- C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000. The purchase of commodities and equipment is authorized locally.
- D. Other (specify):
 - 1. Authorizations, arrangements, and payments for international travel and per diem that conform to stipulations prescribed in Standard Government Travel Regulations.
 - 2. Refer to making any visits to Indonesia, the contractor will review his plans closely with TA/N and obtain project monitor's approval. While in Indonesia, he will be himself available for initial briefing by the AID Mission and will keep Mission informed as his work proceeds. Contractor will make his own appointments and arrangements directly unless AID directs otherwise. The project monitor will obtain any necessary and internal official AID clearances.

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22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

- (1) During the first ten months of the project a detailed work plan will be developed and submitted covering all activities to be conducted in Phase II. This report will be the basis for the site review conducted prior to the start of phase II of the project (Implementation Phase). Twenty-five copies will be submitted to the Office of Nutrition at least three weeks prior to a site review.
- (2) An annual report (25 copies) will be submitted one year following the initiation of the implementation of phase II and each year thereafter. The annual report will follow the "Guidelines for Preparation of the Research Annual Report" (attachment II).
- (3) A final report (35 copies) will be submitted near the end of the project. This report will follow the research report guidelines except it shall report the entire history of the project.
- (4) Semi-annual financial reports (25 copies) will be submitted starting six months from when the project begins.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

Attachment I - Budget

Attachment II - Guidelines for Preparation of the Research Annual Report

Attachment III - Project Proposal

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

A. Relationships and Responsibilities

B. Cooperating Country Liaison Official Dr. Alfred Sommers:

C. AID Liaison Officials Dr. S.G. Kahn

Dr. Irwin Hornstein

LOGISTIC SUPPORT

25. Provisions for Logistic Support	IN KIND SUPPLIED BY		FROM LOCAL CURRENCY SUPPLIED BY		TO BE PROVIDED OR ARRANGED BY SUPPLIER
	AID	COOPERATING COUNTRY	AID	COOPERATING COUNTRY	
A. Specific Items (Insert "X" in applicable column at right. If entry needs qualification, insert asterisk and explain below in C. "Comments")					
(1) Office Space		X			
(2) Office Equipment	X				
(3) Housing and Utilities	X				
(4) Furniture				X	
(5) Household Equipment (Stoves, Refrig., etc.)					
(6) Transportation in Cooperating Country					
(7) Transportation To and From Country			X	X 50%	
(8) Interpreter Services/Secretarial					
(9) Medical Facilities					
(10) Vehicles (official)					
(11) Travel Arrangements/Tickets					
Other: (12)					
(specify) (13)					
(14)					
(15)					

B. Additional Facilities Available From Other Sources

- APO PX COMMISSARY

 OTHER (specify, e.g., duty free entry, tax exemption)

C. Comments

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numbers.

19.B.

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will be reviewed by AID and the host government and concurrence by both on plans and preparations for work must be obtained before the second phase of the project can be implemented.

The second phase of the project, the Implementation Phase, will start on or about April 15, 1977. This phase will run approximately the next two years during which four inter-related but discrete studies will be conducted. The studies are:

- a. A study of 5000 children between 6 and 60 months of age to determine the incidence of various stages of severity of xerophthalmia, classified as X1, X2 and X3, and the epidemiologic characteristics thereof;
- b. A detailed clinical, biochemical, bacteriological and epidemiological investigation of clinical and hospital patients presenting vitamin A deficiency related corneal disease, together with detailed information regarding their response to alternative treatment regimens;
- c. An evaluation of the effectiveness of a bi-monthly distribution of massive dose vitamin A supplementation to pre-school children in reducing keratomalacia; testing the feasibility of using village level non-health workers in such a distribution program;
- d. A countrywide prevalence survey to evaluate a methodology and determine the magnitude and geographical variations of the problems.

The third phase, Analysis and Reporting, will be carried out during the final 4 to 6 months of the project and will involve final analysis and preparation of papers and the final report. A final review will be conducted near the end of this phase.

Description and Scope of WorkPhase I - Planning and Preparatory Phase

This first phase is critical to the implementation and successful completion of this project. The four studies proposed are covered in considerable detail below. They are obviously complex studies which will require careful planning, not only regarding technical aspects, but equally on such aspects as effectively involving the populations studied so that their active cooperation is obtained. Attention must

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be given to the design of questionnaires and interview patterns for obtaining dietary data, to the variety of dosage forms for vitamin A supplementation and varying forms of treatment for clinical and hospital patients presenting vitamin A deficiency corneal symptoms. Attention must also be given to developing the criteria for determining the parameters of effective systems for vitamin A delivery systems for general application throughout Indonesia.

The first phase will begin with the project and will be completed within 10 months. It will include the development of the detailed work plans for the four studies, and the recruitment and training of the personnel needed to carry out the studies. All plans will be reviewed by AID and the host country with necessary modifications being incorporated into the plans as agreed on during the site review. The concurrence of AID and the host country must be obtained before the project can be further implemented. Lastly, this phase will involve the placement of personnel in the field, mobilizing equipment, setting up the necessary headquarters, data collection facilities, etc.

Phase II - Implementation

During this phase, the four studies described below will be carried out as modified as a result of the Planning and Preparatory Phase.

STUDY I - PROSPECTIVE STUDY OF EARLY STAGES OF XEROPHTHALMIA

Summary: Study I will examine 5,000 children between the ages of 6 to 60 months over a period of 2 years to determine the incidence of the early stages of xerophthalmia, its epidemiologic characteristics, seasonal variations, and its relationship to infectious diseases and protein calorie malnutrition.

Personnel: A team of 6 nurses (5 regular nurses and 1 supervisor), one ophthalmologist, one nutritionist, and one social pediatrician.

Time Schedule: 24 months, beginning o/a Apr. 1977, preceded by four months of training and preliminary field activities.

Specific Aim:

1. Determine the incidence and natural history of conjunctival xerosis and Bitot's spots (X1).
2. Determine the epidemiologic characteristics (age, sex, seasonality, and clustering) of clinical vitamin A deficiency symptoms (X1, X2, X3, etc)

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and associated risk factors (nutritional status, including serum vitamin A and Retinol Binding Protein (RBP) levels, feeding practices, market patterns, socio-economic status, infectious diseases such as pertussis, measles, respiratory infection, chicken pox and severe gastroenteritis, and other forms of ocular pathology).

3. Determine the natural history of Bitot's spots and conjunctival xerosis, their relationship to corneal pathology, and the validity of the concept of sequential stages of xerophthalmia.
4. Determine seasonal variations in vitamin A blood levels and their relationship to market patterns, feeding practices, and the incidence of xerophthalmia.
5. Acquire information on the relationship of vitamin A deficiency, protein-calorie malnutrition, childhood infectious diseases, and growth.

Methodology: One to two kecamatans (districts) containing a total of 5,000 preschool-age children will be selected in an area of apparent high xerophthalmia prevalence. The entire area will be mapped, houses prominently numbered, and work routes defined in preparation for a house-to-house census and survey. Every family with preschool-age children will receive an official card listing all members, with room to certify their presence at subsequent rounds. This will permit allocation of family incentives and monitoring of each team's activities. Each child will be re-examined in similar but abbreviated fashion at 2 monthly intervals for two years. Children with early stages of xerophthalmia (conjunctival lesions) and matched controls (next child of same age and sex with a normal ocular examination) will be examined every week, or more frequently when epidemics of exanthematous diseases (measles, chicken pox, etc.) or gastroenteritis occur. Parents will be encouraged to bring their children to the central clinic if they develop any ocular complaints (photophobia, etc.) between examinations. At the earliest sign of corneal disease (xerosis) they will be immediately hospitalized and treated. The cost of transport, hospitalization and support of an accompanying parent will be covered.

Preliminary Activities: In preparation for the survey, two aides will map every village with the help of the Pak Lurah (village head man) and his staff. This is expected to take 2-3 months. Concomitantly, the team of nurses will receive three months of eye training at Cicendo Eye Hospital in Bandung. An additional 2-4 weeks will be spent in the field standardizing the team of nurses, the ophthalmologist and nutritionist.

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Initial Survey and Census: The survey will be conducted similar to the prevalence survey (Study IV). Additionally, serum vitamin A levels will be determined on a stratified random fraction of the sample (100 children) and a proportion of all children with active xerophthalmia and controls, age/sex/locale matched. Because of the limited travel, increased capabilities of the nurses, and prior mapping, it is expected that each team can cover 200 children per day. The survey of the initial 5,000 children should be completed in 6 weeks.

Follow-up Surveys: Every child will be re-examined, and their mother interviewed, at 2 monthly intervals by two 2-nurse teams covering an average of 100 children per day each. Mothers will be questioned about all significant interval illness in the children, bloods for vitamin A levels drawn on a stratified random subsample, (100 per round), and a larger sub-sample (1000 children) measured and weighed. A sample of children with purulent conjunctivitis will be swabbed and cultured (50 per round). All children found to have an ocular abnormality or change in their ocular status, plus an age/sex/locale matched control will be revisited by the nurses and a special team composed of an ophthalmologist, social pediatrician, supervisory nurse and nutritionist. These children (approximately 20 cases/week/team) will be re-examined by the ophthalmologist and social pediatrician for both ocular and non-ocular illness. Blood will be drawn for determination of serum vitamin A levels by the supervisory nurse on all cases with corneal disease, 40 percent of all cases with Bitot's spots and conjunctival xerosis, and their controls. In no instance will a child contribute more than two blood samples in the course of the study. In the case of infants, samples of blood will also be obtained from their mothers. The nutritionist will weigh and measure the children, obtain dietary histories, and ascertain availability and prices of food-stuffs at the local market. If any children are found to have active corneal disease, of whatever severity, they will be provided with free hospitalization and treatment, and all parents encouraged to bring children with ocular complaints for a free examination at a nearby clinic.

The special team will service each of the 2-nurse teams on different days of the week. All positives and controls from the previous 5 days will be examined.

Efficiency will be enhanced by hiring local village aides to alert study participants and collect them at a central point in advance of the nurses' visit, and reassemble all positives and controls for the special team. Any registered family not so assembled will be sought out, first by the aides, then by the nurses. If still unavailable, the aides will attempt to assemble them on the day the special team visits

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19.B.

the area. After the initial census and survey only children born into participating families will be added to the sample.

All children will be re-examined at 12 and 24 month intervals by an ophthalmologist as in the initial census-survey.

The surveillance teams activities will be utilized in field training personnel for the countrywide prevalence survey.

Time Schedule

<u>Activity</u>	<u>Time Period</u>
Nurses receive eye training Aides map villages	3-4 months
Field training and standardization	3 weeks
Initial census survey	6 weeks
Nurse (and special team) rounds	8 week cycles
Re-survey all children (ophthalmologist)	at 12 and 24 months (replaces the 6th and 12th cycles)

STUDY II - CLINICAL, BIOCHEMICAL, BACTERIOLOGICAL AND EPIDEMIOLOGICAL INVESTIGATION OF CORNEAL DISEASE

Summary: Study I will provide invaluable information on community and individual determinants of vitamin A deficiency and mild clinical disease (conjunctival xerosis and Bitot's spots). While it is assumed that these are equally important in the development of corneal destruction, other factors are obviously at work. Study II will therefore utilize the large number of cases of active corneal disease diagnosed at a hospital and clinic to develop a complete clinical, biochemical, bacteriological and epidemiological description of this entity.

Personnel: A single team composed of one ophthalmologist, 5 nurses (1 doubling as supervisor) and a pediatrician.

Time Schedule: 200 working days over a period of two years, beginning o/a April 1977.

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19.B.

Specific Aims:

1. The epidemiologic characterization of active vitamin A related corneal disease.
2. Detailed investigation of the clinical, biochemical and bacteriologic characteristics of patients with corneal xerosis, ulcers, and keratomalacia, and determination of the roles of protein deficiency and bacterial infection in their etiology.
3. The response of vitamin A related conjunctival and corneal disease to alternative treatment regimens, and, where effective, the most practical:
 - a. Oil miscible vitamin A intramuscularly, (the present regimen in Indonesia).
 - b. Water miscible vitamin A intramuscularly, (WHO's primary recommendation).
 - c. Either preparation orally (WHO's secondary recommendation.)

Methodology: The team will study 100 cases of active corneal disease (all cases of keratomalacia, corneal xerosis with ulceration, and a sample of those with corneal xerosis) and matched controls from their communities.

Two analytic techniques will be utilized: a comparison of cases and matched controls, and the study of "index" cases and "contacts", as in classical infectious disease epidemiology. The children presented at the hospital and clinic will be weighed, measure, and blood samples taken for vitamin A, RPB, serum protein, and/or serum albumin, and conjunctival swabs and corneal scrapings (where appropriate) for smear culture obtained. The mother will be interviewed about feeding practices and recent vital events. The team will then visit the patient's home and survey all preschool (an a sample of school age) children in the family, surrounding households, and RTs (cluster of 20-30 households) at varying distances. The prevalence of risk factors for these different sites will be compared. All above children in these locales will be examined, but dietary histories and blood samples obtained on only a sample of age/sex matched controls. One additional control (matched for age, sex and nutritional status) will be selected for each index case from among the non-xerophthalmic clinic population, and a history of recent vital events and feeding practices and a blood specimen obtained. Cases of active purulent conjunctivitis will be swabbed and cultured.

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Characterization of Vitamin A Deficiency
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Intervention ProgramsIndicate block
numbers.

19.B.

Use this form to complete the information required in any block of a PIO or PA/PR form.

The index cases will be studied in randomized double masked fashions for their response to alternative treatment regimens. As outlined above, all index cases will be hospitalized free of charge.

Schedule

<u>Activity</u>	<u>Time Period</u>
Training and standardization	2 weeks
Hospital and field investigations	1 year, or until such time as 100 cases presented

STUDY III - RANDOMIZED CONTROL & EVALUATION OF BI-MONTHLY DISTRIBUTION OF MASSIVE VITAMIN A SUPPLEMENTATION

Summary: An evaluation of the effectiveness of a bi-monthly distribution of massive dose vitamin A supplementation to preschool children in reducing keratomalacia.

Personnel: One team of 3 nurses with local aides, supplemented by an ophthalmologist for 4 months periods at beginning and end of project. Additionally, the Study II team will also be used for the 4 month period.

Time Schedule: April, 1977 to April 1979, after preliminary training.

Specific Aims: Determine whether vitamin A supplementation, by itself, can influence the rate of xerophthalmia, deratomalacia, and other forms of ocular and non-ocular morbidity and mortality.

Methods: Four to five contiguous kecamatans which contain a total of 40,000 preschool children (6 to 60 months) will be selected in an area of apparent high xerophthalmia prevalence. The entire area will be mapped, censused, and surveyed exactly as in Study I. All children with evidence of xerophthalmia will be given 200,000 IU vitamin A doses and dropped from the study. The remaining children will be randomized as family units and half will receive 200,000 IU vitamin A capsules by mouth every two months and another half will receive a non-vitamin A containing compound. All parents will be advised that their child/children are participating in a study to determine whether certain medicines can prevent blindness. Should their child develop any evidence of ocular abnormalities, they should immediately be brought to the eye clinic in Cikapek.

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<input checked="" type="checkbox"/> Worksheet	<input type="checkbox"/> Issuance	PAGE 13 OF 17 PAGES
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Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

19.B.

The capsules will be distributed by indigenous village personnel, who will maintain close contact with each family and file detailed forms on deaths and migration. Three highly trained field workers will maintain close supervision over their activities. At the end of two years these two groups will be re-examined and corneal scar, mortality and growth rates compared. The above regimen of bi-monthly distribution of 200,000 IU vitamin A capsules will be pretested to insure lack of risk of toxicity.

Sample Size: If the presence of corneal scars is, as assumed in Study IV, at least 1 per 1,000 (minimal WHO criteria for significant community problem) we would expect at least 20 new cases in each group at the end of two years. This is sufficient to determine whether the vitamin A program was at least 75% effective with alpha error of 0.05 and beta error of 0.20.

Since the study will be conducted in a high risk area (with a prevalence of 2 to 4 per 1,000), the actual incidence might be 2 to 4 times this number and the minimal level of effectiveness capable of detection even smaller.

Implications: Since only 50% of a massive oral dose of 200,000 IU of vitamin A is absorbed, bi-monthly administration will satisfy these children's entire daily requirements (400-600 u.g. per day). Should this fail to reduce the rate of corneal destruction, it is questionable that any form of intervention limited solely to vitamin A supplementation (mass distribution, horticultural activities, or fortification of food products) will be effective.

Schedule:

<u>Activity</u>	<u>Time Period</u>
Nurses receive training aides map villages	3-4 months
Field training and standardization	3 weeks
Initial survey	4 months
Distribution of capsules	bi-monthly
Re-survey of population	4 months, at end of 24 months

CONTINUATION SHEET

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Indicate block numbers.

19.B.

Use this form to complete the information required in any block of a PIO or PA/PR form.

STUDY IV - COUNTRY-WIDE PREVALENCE SURVEY

Summary: A country-wide prevalence survey to determine the magnitude, geographical distribution, socio-economic ramifications and variations of the problem. Teams will visit 54 sample sites and examine 7,500 preschool-age children (0 to 6 years) each of 6 zones throughout the country, for a nationwide total of 45,000 children in 324 sample sites.

Personnel: Three survey teams, each to consist of an ophthalmologist, 6 nurse aides, a supervisory nurse, a nutritionist, and 3 drivers who will function in the field as active members of the team.

Time Schedule: 9 months (one month of training and 8 months of field work) mid-1977-1978.

Specific Aims:

1. Determine the prevalence and estimate the magnitude of anterior-segment ocular pathology, vitamin A related corneal destruction and blindness among preschool-age children in Indonesia, and its relationship to the child's socio-economic status.
2. Determine the prevalence of xerosis conjunctivae and Bitot's spots (active vitamin A deficiency) among preschool-age children in the country, and its relationship to the child's nutritional and socio-economic status.
3. Determine the geographic distribution of corneal destruction, conjunctival xerosis, and Bitot's spots, and attempt to identify those regional factors (agricultural and dietary patterns, etc.) responsible for this variation.
4. Determine the relationship between regional and community variations in the prevalence of Bitot's spots and vitamin A related corneal destruction and thereby determine whether Bitot's spot prevalence (easily measured) is a valid indicator of a community's risk of keratomalacia.
5. In-depth surveys in areas where the epidemiologic characteristics of xerophthalmia are found to be unusual. One example might be a comparison of Bantul, where the population is thought to be well-nourished, but have a high rate of xerophthalmia and Gunung Kidul, where they are thought to be poorly nourished, and have a low rate of xerophthalmia. (Approximately three such comparisons are planned, requiring one month for each.)

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numbers.

19.B.

Use this form to complete the information required in any block of a PIO or PA/PR form.

6. Sufficient data will be acquired for initial determination of countrywide and regional levels of protein-calorie malnutrition.

Methodology: The country will be divided into 6 zones as shown below. Fifty four sample sites containing a total of 7,500 preschool-age children will be visited in each zone.

<u>Geographical Area</u>	<u>Zonal Divisions</u>		
	<u>Zones</u>	<u>Sample Sites</u>	<u>No. of Children</u>
Java			
East	1	54	7500
Central	1	54	7500
West	1	54	7500
Sumatra	1	54	7500
Sulawesi	1	54	7500
Kalimantan	1/2 (approx.)	24	3750
Lombok	1/6	10	1250
Bali	1/6	12	1250
Ambon	1/6	8	1250
			45000

Each site will be visited in advance, the Pak Lurah (village head) contacted and informed about the purposes and requirements of the study, arrangements made for the local provision of motorcycles and bicycles where necessary, and maps of the selected Census Blocks obtained. Travel time and market days will be ascertained and incorporated into the final schedule. The Pak Lurah will be contacted again the day prior to the visit and requested to ensure that families in the sample site remain at home for the survey.

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numbers.

19.B.

Use this form to complete the information required in any block of a PIO or PA/PR form.

The nurse aides, accompanied by local guides, will visit every house, compile identifying information (name, age, sex) and socio-economic data on every eligible child in the household, and assemble all available children at a central point for the ophthalmologist. He will examine the anterior-segment of every child's eyes with a handlight, note obvious abnormalities, and estimate the potential visual acuity as better or worse than 20/200 (6/60). Special attention will be paid to those lesions potentially related to active xerophthalmia (conjunctival xerosis, Bitot's spots; corneal xerosis, and keratomalacia) and its healed sequelae (nebulae, leukomata, staphylomata, and phthisis bulbi).

With historical data provided by an older family member, the ophthalmologist will attempt to assign an etiology to all old, healed corneal abnormalities. Major categories will include congenital (noted at or shortly after birth in an otherwise white and quite eye), trauma (clear-cut history of injury at the time of onset of the corneal damage), infection (gross purulence, especially if bilateral and in children less than 2 months of age at onset), measles (characteristic rash), and xerophthalmia (none of the above, in children at least 2 months of age, usually ill or malnourished at the time of onset).

The team will measure the weight and height of every third child, as well as all children with active signs of vitamin A deficiency, and a matched control (the next normal child of the same age and sex) roughly 10-16 additional children a day. The nutritionist will supervise their activities, and obtain a short dietary history on all abnormals and controls (in double blind fashion).

The supervisory nurse will review 10-20 percent of the forms with the appropriate families to check completeness and standardization, and assist the ophthalmologist. The two will review all forms in the evening and prepare a daily summary. This will encourage detection and correction of errors and inconsistencies on a running basis, while the teams are still in the field, rather than after the survey is completed.

Preliminary trials indicate that by working from 7 a.m. to 5 p.m., 6 hours of which are allotted to travel and lunch, a team can complete one sample site of 125 children in a single day (4 hours of actual field work). It will therefore take 3 teams 1 month to complete each zone, and 6 months to complete the entire study. Although it would be considerably cheaper, and somewhat quicker to assign two complete zones to each item, one runs the risk that zonal variation will be ascribed (rightly or wrongly) to differences in the teams rather than the populations under study.

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Characterization of Vitamin A Deficiency and
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vention ProgramsIndicate block
numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

19.B.

Upon completion of the primary survey, the zone of greatest prevalence will be resurveyed, using 54 new sites, to confirm and more sharply define the maximum prevalence, its distribution within that zone, and the associated risk factors. All the children with active xerophthalmia will be treated.

Schedule: Training and standardization will require three weeks: one week for classroom review, a second for field practice, and a third for standardization. The survey will begin in Java and results carefully monitored for loss of standardization. After the completion of Java (3 months), the teams will get 1 week off and reassemble for a week of restandardization. They will then do Sumatra, Sulawesi and Kalimantan, and divide up to cover Bali, Lombok and Ambon. They will then be given another week off, restandardization, and resurvey the region of highest prevalence.

Training and Standardization	3 weeks
Survey 3 zones on Java	12 weeks
Vacation	1 week
Restandardization	1 week
Survey 3 remaining zones	16 weeks
Vacation and restandardization	1 week
Resurvey high prevalence area	4 weeks
Total	Approx. 9 months (October, 1977 to June, 1978)

COST REIMBURSEMENT CONTRACT WITH AN EDUCATIONAL INSTITUTION

58

AGENCY FOR INTERNATIONAL DEVELOPMENT NEGOTIATED CONTRACT NO. AID/ta-C-1319

NEGOTIATED PURSUANT TO THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED, AND EXECUTIVE ORDER 11223	TOTAL ESTIMATED CONTRACT COST \$19,060.00
CONTRACT FOR: <u>045</u>	CONTRACTOR (Name and Address) Cornell University
PROJECT NO: 931-17-560-585-73	NAME Department of Nutrition
ISSUING OFFICE (Name and Address) Agency for International Development Office of Contract Management Central Operations Division Washington, D.C. 20523	STREET ADDRESS Ithaca, New York 14850
ADMINISTRATION BY CM/COD/IT	CITY, STATE, AND ZIP CODE Ithaca, New York 14850
MAIL VOUCHERS (Original and 3 copies) Agency for International Development Office of Financial Management Washington, D.C. 20523	COGNIZANT SCIENTIFIC/TECHNICAL OFFICE AID/TA/N
EFFECTIVE DATE 6-1-76	ACCOUNTING AND APPROPRIATION DATA PIO/T NO. <u>931-11-560-045-73-3168046</u> APPROPRIATION NO. <u>72-11X1023</u> ALLOTMENT NO. <u>402-31-099-00-20-61</u>
	ESTIMATED COMPLETION DATE 9-1-77

The United States of America, hereinafter called the Government, represented by the Contracting Officer executing this Contract, and the Contractor, an educational institution chartered by the State of New York with its principal office in Ithaca, New York, agree that the Contractor shall perform all the services set forth in the attached Schedule, for the consideration stated therein. The rights and obligations of the parties to this contract shall be subject to and governed by the Schedule and the General Provisions. To the extent of any inconsistency between the Schedule and the General Provisions and any specifications or other provisions which are made a part of this contract, by reference or otherwise, the Schedule or the General Provisions shall control. To the extent of any inconsistency between the Schedule and the General Provisions, the Schedule shall control.

CERTIFIED A TRUE COPY THIS
15th DAY OF June 1976
BY R. C. Mulmaloto

FUNDS OBLIGATED
"buw"

This Contract consists of this Cover Page, the Table of Contents, and the Schedule consisting of 8 pages, the General Provisions (Form AID 1420-23C), dated 7-1-75 & Attachments A, B, C, D & E.

NAME OF CONTRACTOR Cornell University	UNITED STATES OF AMERICA AGENCY FOR INTERNATIONAL DEVELOPMENT
BY (Signature of authorized individual) <u>Peter A. Curtiss</u>	BY (Signature of Contracting Officer) <u>Morton Darvin</u>
TYPED OR PRINTED NAME <u>Peter A. Curtiss</u>	TYPED OR PRINTED NAME Morton Darvin
TITLE <u>Assistant Director, OFFICE OF ACADEMIC FUNDING</u>	CONTRACTING OFFICER
DATE <u>May 25, 1976</u>	DATE <u>May 25, 1976</u>

AID 1350-1X
(7-71).

PIO/T

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1. Cooperating Country
TAB 31600/6
2. PIO/T No.
931-11-560-045-73
4. Project/Activity No. and Title
Vitamin A Delivery Systems: Cost/Effective-
ness of Interventions (Cornell University)

Page 1 of 1 Pages
3. Original or
Amendment No. _____

DISTRIBUTION

5. Appropriation Symbol
72-11X1023
7. Obligation Status
 Administrative Reservation Implementing Document
9.A. Services to Start (Mo., Day, Yr.)
Between 4/15/76 and 5/1/76
10.A. Type of Action
 A.I.D. Contract Cooperating
Country Contract Participating Agency
Service Agreement Other
10.B. Authorized Agent
AID/Washington

6.A. Allotment Symbol and Charge
402-31-099-00-20-61
6.B. Funds Allotted to:
 A.I.D./W Mission
8. Funding Period (Mo., Day, Yr.)
From 5/1/76 To 8/1/77
9.B. Completion date of Services
(Mo., Day, Yr.) 8/1/77

Estimated Financing

Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars	0	19,060	0	19,060
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart	0			
	B. Other				

FUNDS RESERVED BY
JCB
POSTED 5/14/76
SER/EM/CSD

13. Mission References

14. Instructions to Authorized Agent
CM/COD/TAB is requested to contract with Cornell University for the analysis and evaluation of the cost/effectiveness of three interventions that are being conducted to prevent vitamin A deficiency in children in the Philippines. This is follow-up work to small research contract AID/ta-c-1116.
Reference Project Proposal: "Evaluation of Three Alternate Strategies to Prevent Xerophthalmia in Children in Philippines", attached.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
N:SGKahn *SH (Per)*
N:IHornstein *I Hornstein*
The scope of work lies within the purview of the initiating and approved Agency Program
Martin Johnson 5/14/76
JForman
and *Amy Barend*

B. Funds for the services requested are available
TA/PPU:EMC *Evelyn C. McLeod* 5/12/76
D. *3 12 76*
TA/PPU:MMozynski
F. *17*
TA/PPU:CLadenheim *5/12/76*

Cooperating country: The terms and conditions herein are hereby agreed to

17. For the Agency for International Development
Signature: *John Gunning*
Title: Chief, Program Division

18. Date of Signature
5/13/76

AID Y30-IX
(7-71)

PIO/T

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1. Cooperating Country
TAB 3175001
2. PIO/T No. 931-11450-045
4. Project/Activity No. and Title
931-11-560-045
IVACG Secretariat
Contractor: The Nutrition Foundation
Vitamin A Delivery Systems

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3. Original or Amendment No. 15p

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-099-00-30-71

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 11/15/76 to 11/15/78

9.A. Services to Start (Mo., Day, Yr.)
Between 11/15/76 and 12/1/76

9.B. Completion date of Services
(Mo., Day, Yr.)
11/15/78

10.A. Type of Action
 A.I.D. Contract Cooperating Country Contract Participating Agency Service Agreement Other Grant

10.B. Authorized Agent
AID/W

Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars	0	160,000	0	160,000
	B. U.S.-Owned Local Currency			FUNDS RESERVED BY	
12. Cooperating Country Contributions	A. Counterpart			ALG/S	
	B. Other			POSTED 11/18/76 SER/PPU/CSD	

13. Mission References

14. Instructions to Authorized Agent
The Office of Contract Management is requested to prepare a grant with the Nutrition Foundation, a non-profit organization located in New York City. This will be a two-year grant for a total cost of \$160,000. These funds should be obligated from the program area of "Vitamin A Delivery Systems". This grant will succeed grant AID/ta-G-1280. Under this grant, the Nutrition Foundation will serve as the Secretariat of the International Vitamin A Consultative Group (IVACG).

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
 TA/N, SGKahn [Signature]
 TA/N, IHornstein [Signature]
 C. The scope of work lies within the purview of the initiating and approved Agency Programs
 TA/N, FJLevinson [Signature]
 E.
 TA/N, LRudel [Signature]

B. Funds for the services requested are available
 TA/PPU, EMcLeod [Signature] 10/13/76
 D.
 TA/PPU, MZozynski [Signature] 10/18/76
 F.

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

17. For the Agency for International Development

18. Date of Signature

Signature and date:

Signature: John Gunning

11/4/76

Title:

Title: Chief, TA/PPU

Cooperating Country TAB	PIO/T No.	Page 2 of 5 Pages
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J/T

SCOPE OF WORK

Scope of Technical Services

A. Objective for which the Technical Services are to be Used (1) Organize and facilitate the advisory functions of IVACG, and (2) expand and promote communications between various groups' and organizations' activities engaged in programs to prevent vitamin A deficiency and xerophthalmia.

B. Description

to achieve the objectives outlined, the following activities shall be carried out.

Organize the annual meetings of IVACG in years 1977 and 1978. Tentative sites for the meetings are: Basel, Switzerland in 1977 and San Paulo, Brazil in 1978. Organizing these meeting will include obtaining meeting facilities, providing communications support, providing supplies, secretarial assistance, providing travel and per diem for participants (estimate approximately 21-25 participants per meeting). Also, included are the editing, publishing and distribution of minutes and other reports developed out of IVACG meetings.

(Continued Page 5)

C. Technicians

(1) (a) <u>Number</u>	(b) <u>Specialized Field</u>	(c) <u>Grade and/or Salary</u>	(d) <u>Duration of Assignment (Man-Months)</u>
-----------------------	------------------------------	--------------------------------	--

(Not Applicable)

(2) Duty Post and Duration of Technicians' Services

(3) Language requirements

(4) Access to Classified Information

(5) Dependents Will Will Not Be Permitted to Accompany Technician

D. Financing of Technical Services

(1) By AID - \$ 160,000

(2) By Cooperating Country -

PIO/T	Cooperating Country TAB	PIO/T No.	Page 3 of 5 Pages
	Project/Activity No. and Title IVAOG Secretariat		

20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
-----------------	-----------------	--------------------	--------------------------

(Not Applicable)

B. Financing of Equipment and Supplies

(1) By AID: \$ 0

(2) By Cooperating Country: \$ 0

21. Special Provisions

Grant Request

- A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.
- B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.
- C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000.
- D. Other (specify):

Authorization, arrangements, and payments for international travel and per diem must conform to stipulations prescribed in Standard Government Travel Regulations.

The grantee will review travel plans jointly with TA/N and obtain project monitor's approval.

The project monitor will obtain any necessary and internal official AID clearances.

PIO/T	Cooperating Country TAB	PIO/T No. 931-11-560-045	Page 4 of 5 Pages
	Project/Activity No. and Title 931-11-560-045 IVACG Secretariat		

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

- The Nutrition Foundation will submit six copies of a financial report every six months.
- The Nutrition Foundation will submit 35 copies of an annual report covering the grant's activities for the previous year. One of the two annually required six-month fiscal reports may be included as part of the annual report.
- A minimum of 500 copies will be published of each (2) IVACG meeting report and 35 copies forwarded to AID/W. Remaining copies will be distributed to IVACG members and other interested groups.
- A minimum of 500 copies will be published of each IVACG task force report and 35 copies forwarded to AID/W. Remaining copies will be distributed to IVACG members and other interested groups.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

- Attachment 1 - Proposed Budget
- Attachment 2 - Grant Proposal Letter, Nutrition Foundation
- Attachment 3 - Current Grant (AID/ta-G-1280)

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

- A. Relationships and Responsibilities
 - Dr. C.O. Chichester (212) 687-4830
 - Vice President
 - The Nutrition Foundation
 - 489 Fifth Avenue
 - New York, N.Y. 10017
- B. Cooperating Country Liaison Official
- C. AID Liaison Officials
 - Dr. S.G. Kahn (202) 632-3942
 - Office of Nutrition
 - A.I.D.
 - Washington, D. C. 20523

CONTINUATION SHEET

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IVACG Secretariat

Indicate block numbers.

Use this form to complete the information required in any block of a PIO or PA/PR form.

19.B.

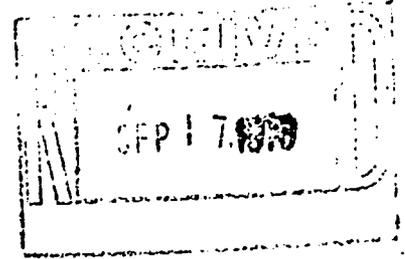
- 2. Organize ad hoc subcommittee meetings of IVACG. At least two ad hoc meetings are expected to be held during the next two years. These ad hoc meetings shall be held in the United States, preferably in New York City or Washington, D. C. Exact site and time of meetings will be determined by the Nutrition Foundation in coordination with AID. Organizing these meetings will include the same services as described in item one (1). Also included are editing, publishing and distribution of reports developed out of ad hoc meetings of IVACG subcommittees.
- 3. Develop information services in support of IVACG and groups working toward the eradication of vitamin A deficiency and xerophthalmia. This will include the editing, publishing and dissemination of IVACG minutes and reports and related vitamin A reports and information to IVACG members and other interested groups.
- 4. With concurrence of AID arrange consultant service for IVACG and AID related to vitamin A and xerophthalmia concerns.



THE NUTRITION FOUNDATION, INC.
489 FIFTH AVENUE • NEW YORK, N.Y. 10017 • 212 687-4830

C. O. CHICHESTER, Ph.D.
VICE PRESIDENT

14 September 1976



Dr. Samuel G. Kahn
Senior Nutrition Advisor
Agency for International Development
Office of Nutrition
Department of State
Washington, D.C. 20523

Dear Dr. Kahn:

The Nutrition Foundation would like to request a grant-in-aid to provide secretariat support for the International Vitamin A Consultative Group (IVACG). The Foundation would organize and facilitate the advisory functions of IVACG in conjunction with your office. Specifically, the Foundation would support and administer the meetings of IVACG in Basel, Switzerland, in 1977 and in Sao Paulo, Brasil, in 1978. Under the grant, the Foundation would also promote and coordinate the activities of organizations seeking to combat vitamin A deficiency. Additionally, it would also act to expand and promote communication between various groups and organizations with active programs directed towards the prevention of vitamin A deficiency and xerophthalmia.

In the course of these activities, it would issue at least two reports based upon the meetings of IVACG and would develop, coordinate, edit and publish reports from ad hoc committees of IVACG as may be deemed necessary (at least 2). It would also furnish, upon request, consultatory services within limits to either groups or organizations active in vitamin A prevention after consulting with AID.

A minimum of 500 copies of each of the reports (4) developed in this project will be published and made available, after editing, to IVACG members and other interested groups. All reports developed from either the IVACG meetings or ad hoc groups will be provided to AID.

In order to carry out these objectives, a plan of implementation is proposed:

1. Organize two meetings of IVACG. Sites for the meetings are as follows: 1977 - Basel, Switzerland; 1978 - Sao Paulo, Brasil. The exact time of the meetings will be determined by the Foundation in coordination with AID. (21 people)
2. Organize two ad hoc sub-committee meetings of IVACG to be held in the United States, preferably in New York City or Washington, D.C. Site

and exact time of the meetings will be determined by the Foundation in coordination with AID. (6 people)

3. Arrange travel, per diem and meeting facilities for the IVACG meetings as well as the ad hoc meetings.
4. Provide supplies, communications support, secretarial assistance and editing/publishing services.
5. Publish, edit and distribute minutes and other reports developed by the groups of experts.
6. Develop information services directed towards supporting IVACG and the groups working in this field of vitamin A deficiency elimination. This service will not be general but directed rather specifically towards the problem of vitamin A.

It is estimated that the number of individuals attending the IVACG meetings in Brasil and Switzerland will be 21 and 6 will attend the U.S. meetings. Allowance has been made for increases in air fare in the attached budget which is as follows:

Budget November 1, 1976 - October 31, 1978

<u>Purpose</u>	<u>First Year</u>	<u>Second Year</u>
International Travel		
Basel, Switzerland	\$30,000.	
Sao Paulo, Brazil		\$36,000
Domestic Travel		
Washington, D.C. or New York City	2,500	2,500
Per Diem -International		
Basel	9,000	
Sao Paulo		10,000
Per Diem - Domestic		
	1,600	1,600
Consultants (40 man days)		
	5,000	5,000
Report Publication		
	5,000	5,000
Editorial and Documentation Services		
	4,500	4,500
Meeting Room Rentals		
	400	800

Communications	1,700	1,700
Supplies	1,000	1,200
Secretarial	7,000	7,500
Administration	<u>8,000</u>	<u>8,500</u>
Total:	\$75,700	\$84,300

Two Year Total: \$160,000

Sincerely,



C. O. Chichester
Vice President
The Nutrition Foundation, Inc.

COC:sbm

AID 1550-1X (7-71)	DEPARTMENT OF STATE AGENCY FOR INTERNATIONAL DEVELOPMENT		1. Cooperating Country TA Bureau		Page 1 of 1 Pages																																		
	PIO/T	PROJECT IMPLEMENTATION ORDER/TECHNICAL SERVICES		2. PIO/T No. 931-11-560-045-3168015		3. <input type="checkbox"/> Original or Amendment No. <u>1</u>																																	
DISTRIBUTION		5. Appropriation Symbol 72-11X1023		6.A. Allotment Symbol and Charge 402-31-099-00-20-61		6.B. Funds Allotted to: <input checked="" type="checkbox"/> A.I.D./W <input type="checkbox"/> Mission																																	
	7. Obligation Status <input checked="" type="checkbox"/> Administrative Reservation <input type="checkbox"/> Implementing Document			8. Funding Period (Mo., Day, Yr.) From <u>11/1/75</u> To <u>12/31/76</u>																																			
	9.A. Services to Start (Mo., Day, Yr.) Between _____ and _____			9.B. Completion date of Services (Mo., Day, Yr.) <u>12/31/76</u>																																			
	10.A. Type of Action <input type="checkbox"/> A.I.D. Contract <input type="checkbox"/> Cooperating Country Contract <input type="checkbox"/> Participating Agency Service Agreement <input type="checkbox"/> Other Grant																																						
10.B. Authorized Agent AID/Washington																																							
<table border="1"> <thead> <tr> <th colspan="2">Estimated Financing</th> <th>(1) Previous Total</th> <th>(2) Increase</th> <th>(3) Decrease</th> <th>(4) Total to Date</th> </tr> </thead> <tbody> <tr> <td>\$1.00=</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">11. Maximum A.I.D. Financing</td> <td>A. Dollars</td> <td>68,269</td> <td>0</td> <td>0</td> <td>68,269</td> </tr> <tr> <td>B. U.S.-Owned Local Currency</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td rowspan="2">12. Cooperating Country Contributions</td> <td>A. Counterpart</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>B. Other</td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date	\$1.00=						11. Maximum A.I.D. Financing	A. Dollars	68,269	0	0	68,269	B. U.S.-Owned Local Currency					12. Cooperating Country Contributions	A. Counterpart					B. Other				
Estimated Financing		(1) Previous Total	(2) Increase	(3) Decrease	(4) Total to Date																																		
\$1.00=																																							
11. Maximum A.I.D. Financing	A. Dollars	68,269	0	0	68,269																																		
	B. U.S.-Owned Local Currency																																						
12. Cooperating Country Contributions	A. Counterpart																																						
	B. Other																																						

13. Mission References

14. Instructions to Authorized Agent

The office of CM/COD is requested to extend this grant from 9/30/76 to 12/31/76 without the addition of new funds.

to Contract 6/28

NOTED llc/s
SER/EM/CSD

DATE 6/25/76

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate TA/N, SCKahn <i>SKahn</i>	B. Funds for the services requested are available TA/PPU, EMcLeod <i>EmcLeod 6/25/76</i>
C. The scope of work lies within the purview of the initiating and approved Agency Programs TA/N, MJForman <i>MJForman (for)</i>	D. <i>MEMO 6/25/76</i> TA/PPU, MZozynski
E. TA/N, APound <i>APound</i>	F.

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

Signature and date: _____
Title: _____

17. For the Agency for International Development
Signature: *John Gunning*
Title: Chief, TA/PPU

18. Date of Signature
6/25/76

February 4, 1976

TO : Mary
John

FROM : Evelyn

Subj: Development of Vitamin A Delivery Systems: IVACG

S. Kahn informed me a couple of weeks ago that the Contract Office did not process the PIO/T re. subj. until December 31, 1975. G. Meyer requested that the dates for the funding period, services to start, and the completion of services be changed. A PIO/T ~~would be~~ *Amendment* necessary for this purpose.

The Grant Agreement was signed by the Nutrition Foundation on 1/1/76 with the changes included as requested in the attached PIO/T. Therefore I suggest that this PIO/T be back-dated to Dec. 31, 1975.

2/5/76

Mr. O'Brien agreed extensions to PIO/Ts for the purpose of changing blocks 8, 9A and 9B are not required. He will inform his staff.

Mary Mozynski

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

DEC 31 1975

Dr. William Darby
President,
The Nutrition Foundation
489 Fifth Avenue
New York, New York

Subject: Grant No. AID/ta-G-1280
PIO/T No. 931-11-560-045-73-3168015
and Amendment No. 1 thereto

Dear Dr. Darby:

Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D." or "Grantor") hereby grants to The Nutrition Foundation (hereinafter referred to as "The Nutrition Foundation" or "Grantee") the sum of \$68,269 to provide support for a program in the development of Vitamin A delivery systems as more fully described in the attachment to this Grant entitled "Program Description".

This Grant is effective and obligation is made as of the date of this letter and shall apply to commitments made by the Grantee in furtherance of program objectives during the period January 1, 1976 through September 30, 1976.

This Grant is made to The Nutrition Foundation on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment A entitled "Program Description", and Attachment B entitled "Standard Provisions", which have been agreed to by your organization.

Dr. William Darby

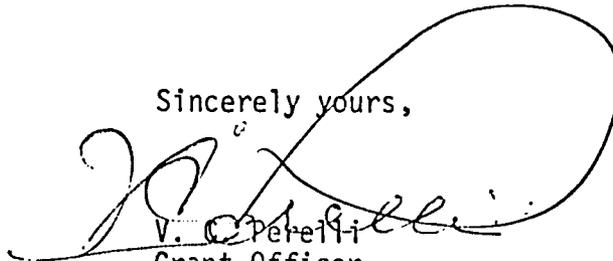
• Grant No. AID/ta-G-1280

-2-

Please sign the Statement of Assurance of Compliance, enclosed herein, and the original and seven (7) copies of this letter to acknowledge your acceptance of the conditions under which these funds have been granted.

Please return the Statement of Assurance of Compliance and the original and six (6) copies of this Grant to the Office of Contract Management.

Sincerely yours,



V. C. Perelli
Grant Officer
Technical Assistance Branch
Central Operations Division
Office of Contract Management

Attachments:

- A. Program Description
- B. Standard Provisions
- C. Payment Provisions
- D. Statement of Assurance

ACCEPTED:

THE NUTRITION FOUNDATION

BY:

William J. Darby

TITLE:

President

DATE:

1/1/76

PROGRAM DESCRIPTION

ATTACHMENT A
AID/ta-G-1280

A. Purpose of Grant. The purpose of this Grant is to provide support for organizing the meeting of the International Vitamin A Consultative Group (IVACG) and meetings of three IVACG task force groups prior to the IVACG meeting.

B. Specific Objectives. The specific objectives of this Grant are as follows:

1. To organize the meeting of IVACG and promote coordination of activities in combatting vitamin A deficiency.

2. To sponsor three IVACG task force meetings focused at:

a. Development of protocol for determining prevalence of Vitamin A.

b. Development of protocol for evaluation of Vitamin A programs.

c. Listing research priorities for overcoming Vitamin A deficiency.

C. Implementation. To achieve the above objectives, the Grantee shall carry out the following activities with funds provided by this Grant:

1. Organize three meetings of IVACG task forces to be held simultaneous. Site and exact time of meetings will be determined by the Grantee in coordination with A.I.D.

2. Arrange travel, per diem and meeting facilities for eleven task force members.

3. Provide supplies, communications support, secretarial assistance and editing/publishing expenses.

4. Organize the meeting of IVACG to include obtaining meeting facilities, providing communications support, secretarial assistance and providing travel/per diem for participants.

5. Publication, editing and distribution of minutes and other reports developing out of the IVACG meeting.

D. Reporting. Grant funds shall be utilized to provide for the following reports:

1. At least 100 copies of the minutes of the IVACG meeting will be edited, prepared and distributed to IVACG members and other interested groups.

2. At least 100 copies of the minutes of the IVACG meeting will be edited, prepared and distributed to IVACG members and other interested groups.

3. 100 copies of other reports that may develop from the IVACG meeting will be prepared, edited and distributed to IVACG members and other interested groups.

E. Budget. The funds provided herein shall be used to finance the items listed below. The Grantee may not exceed the total amount of the Budget. Adjustment among the line items are unrestricted.

<u>Category</u>	<u>Amount</u>
Travel:	
International	\$26,500.00
Domestic	8,500.00
Per Diem	
International	5,015.00
Domestic	6,400.00
Report Preparation & Publication	6,400.00
Meeting Room Rentals	600.00
Supplies	750.00
Communications	1,200.00
Editorial Expenses	4,000.00
Administration	<u>8,904.00</u>
TOTAL	\$68,269.00

AID 1350-1X
(7-71)

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT

PIO/T

PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

1. Cooperating Country
TAB *5/16/80 15*

Page 1 of 1 Pages

2. PIO/T No.
931-11-560-045-73-~~316215~~

3. Original or
Amendment No. 1

4. Project/Activity No. and Title
Development of Vitamin A Delivery Systems:
IVACC

DISTRIBUTION

5. Appropriation Symbol
72-11x1023

6.A. Allotment Symbol and Charge
402-31-099-20-61

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 1/1/76 To 9/30/76

9.A. Services to Start (Mo., Day, Yr.)
Between 12/31/75 and 1/1/76

9.B. Completion date of Services
(Mo., Day, Yr.)
9/30/76

10.A. Type of Action
 A.I.D. Contract Cooperating
Country Contract Participating Agency
Service Agreement Other Grant (AID/ta-G-1280)

10.B. Authorized Agent
AID/W

Estimated Financing		(1)	(2)	(3)	(4)
		Previous Total	Increase	Decrease	Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars	\$ 68,269	0	0	\$ 68,269
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

13. Mission
References

14. Instructions to Authorized Agent

The Office of Contract Management is requested to amend the original PIO/T so that it reflects the dates indicated in blocks 8 and 9A and B above. In addition, a reference to an India meeting, as stated in Block 19B, p. 5, should be changed to read: March or April 1976.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications and scope of work are technically adequate

TA/N:SGKahn *[Signature]*

TA/N:IHornstein *[Signature]*

C. The scope of work lies within the purview of the initiating and approved Agency Programs

TA/N:MJForman *[Signature]*

TA/N:APound *[Signature]*

B. Funds for the services requested are available

TA/PPU:EMcLeod *[Signature]*

D.

TA/PPU:M Mozynski

F.

For the cooperating country: The terms and conditions set forth herein are hereby agreed to

17. For the Agency for International Development

Signature: John Gunning

Title: Chief, TA/PPU

18. Date of Signature

AID 1550-1X (7-71)
PIO/T

DEPARTMENT OF STATE
AGENCY FOR
INTERNATIONAL DEVELOPMENT
PROJECT IMPLEMENTATION
ORDER/TECHNICAL
SERVICES

1. Cooperating Country
TAB 3178012
2. PIO/T No.
931-0045-73
3. Original or
Amendment No.
4. Project/Activity No. and Title
28 p
Vitamin A Delivery Systems
(International Eye Foundation)

Page 1 of 4 Pages
 Original or
Amendment No.

DISTRIBUTION

5. Appropriation Symbol
72-11X1023

6.A. Allotment Symbol and Charge
402-31-99-00-20-71

6.B. Funds Allotted to:
 A.I.D./W Mission

7. Obligation Status
 Administrative Reservation Implementing Document

8. Funding Period (Mo., Day, Yr.)
From 1/25/77 To 12/25/77

9.A. Services to Start (Mo., Day, Yr.)
Between 1/25/77 and 2/25/77

9.B. Completion date of Services
(Mo., Day, Yr.)
12/25/77

10.A. Type of Action
 A.I.D. Contract Cooperating Country Contract Participating Agency Service Agreement Other Grant

10.B. Authorized Agent
AID/W

Estimated Financing		(1)	(2)	(3)	(4)
		Previous Total	Increase	Decrease	Total to Date
\$1.00=					
11. Maximum A.I.D. Financing	A. Dollars		104,873		104,873
	B. U.S.-Owned Local Currency				
12. Cooperating Country Contributions	A. Counterpart				
	B. Other				

FUNDS RESERVED BY
POSTED 1/27/77
SER. RM/CSD

13. Mission References

14. Instructions to Authorized Agent
CM/COD/TAB is requested to process a grant in the amount of \$104,873 to the International Eye Foundation (IEF) to develop a curriculum and carry out a training project for vitamin A deficiency programs as more fully described in the quantee's proposal which is attached as addendum A.

15. Clearances - Show Office Symbol, Signature and Date for all Necessary Clearances.

A. The specifications in the scope of work are technically adequate
TA/N: John I. McKigney *John I. McKigney*
TA/N: Irwin Hornstein *Irwin Hornstein*

B. Funds for the services requested are available
TA/PPU: *Evelyn C. McLeod*
Evelyn McLeod

C. The scope of work lies within the purview of the initiating and approved Agency Program
TA/N: F. James Levinson *F. James Levinson*

D.
TA/PPU: *MCM*
Mary Mozynski

E.
TA/N: L. Rudel *L. Rudel*
TA/N: F. Finley *F. Finley* 11/26/76

F.
ASIA/BIS: *MDwyre* 1/21/77
Mary Dwyre

16. For the cooperating country: The terms and conditions set forth herein are hereby agreed to

17. For the Agency for International Development

18. Date of Signature

Signature and date
Title

Signature: *[Signature]*
Title: Chief Program Division, TA/PPU

1/24/77

PIO/T

Cooperating Country TA Bureau	PIO/T No.	Page 2 of 4 Pages
Project/Activity No. and Title Vitamin A Delivery Systems (International Eye Foundation)		

SCOPE OF WORK

19. Scope of Technical Services

A. Objective for which the Technical Services are to be Used

See attached proposal

B. Description

See attached proposal

C. Technicians

(1) (a) <u>Number</u>	(b) <u>Specialized Field</u>	(c) <u>Grade and/or Salary</u>	(d) <u>Duration of Assignment (Man-Months)</u>
N.A.			

(2) Duty Post and Duration of Technicians' Services

N.A.

(3) Language requirements

N.A.

(4) Access to Classified Information

N.A.

(5) Dependents Will Will Not Be Permitted to Accompany Technician
N.A.

D. Financing of Technical Services

(1) By AID - \$ See budget schedule attached (2) By Cooperating Country -
proposal

1350-1X (9-70) PIO/T	Cooperating Country TA Bureau	PIO/T No.	Page 3 of 4 Pages
	Project/Activity No. and Title Vitamin A Delivery Systems (International Eye Foundation)		

20. Equipment and Supplies (Related to the services described in Block 19 and to be procured outside the Cooperating Country by the supplier of these services)

A. (1) Quantity	(2) Description	(3) Estimated Cost	(4) Special Instructions
	See budget schedule attached proposal		

B. Financing of Equipment and Supplies
(1) By AID - \$

(2) By Cooperating Country -

21. Special Provisions

- A. This PIO/T is subject to AID (contracting) (PASA implementation) regulations.
- B. Except as specifically authorized by AID, or when local hire is authorized under the terms of a contract with a U.S. Supplier, services authorized under this PIO/T must be obtained from U.S. sources.
- C. Except as specifically authorized by AID/W, the purchase of commodities authorized under this PIO/T will be limited to the U.S. under Geographic Code 000.
- D. Other (specify): 1. Authorizations, arrangements, and payments for international travel and per diem must conform to stipulations prescribed in Standard Government Travel Regulations. 2. Prior to formal notification of participants for the training program, the grantee will obtain appropriate biographical information on each candidate, review the candidates' qualifications jointly with TA/N and obtain the project monitor's approval of each participant selected. 3. Grantee will obtain necessary clearances from the governments of India, Hong Kong and the U.S. for Course Director and participants to visit those countries as outlined in the proposal and will be responsible for the logistic arrangements required by the project. The project monitor will obtain any necessary official AID clearances.

1350-1X
(9-70)
PIO/T

Cooperating Country
TA Bureau

PIO/T No.

Page 4 of 4 Pages

Project/Activity No. and Title
Vitamin A Delivery Systems (International Eye Foundation)

22. Reports by Contractor or Participating Agency (Indicate type, content and format of reports required, including language to be used if other than English, frequency or timing of reports, and any special requirements)

1. A report on progress and an evaluation of results will be submitted to TA/N by the grantee within two months of completion of the field training portion of the project.
2. The grantee will develop and submit to TA/N two hundred copies of a training manual for use in training additional specialists in hypovitaminosis A detection, eradication, and prevention methods. A draft of the manual shall be submitted to TA/N for review by a panel which shall make recommendations for incorporation into the final version.
3. Grantee shall submit three copies of all reports listed as being a product of the grant (administrative, progress, final and technical reports containing R&D findings) to the Documentation Coordinator, TA/PPU/EUI, Technical Assistance Agency for International Development, Washington, D.C. 20523, or his designee. Such reports shall include a title page showing the title of the report, project title as set forth in this grant and the grant number. One copy of each report shall be clearly typed or printed on white paper so that it may be photographed to produce a microfilm master. Technical reports shall be accompanied by an author-prepared abstract.

23. Background Information (Additional information useful to Authorized Agent and Prospective Contractors or Participating Agency; if necessary cross reference Block 19.C(4) above.)

24. Relationship of Contractor or Participating Agency to Cooperating Country and to AID

- A. Relationships and Responsibilities
N.A.
- B. Cooperating Country Liaison Official
N.A.
- C. AID Liaison Officials
TA/N, John McKigney

UNITED STATES GOVERNMENT

Memorandum

09
0045

TO : Mr. Robert Simpson, TA/PPU
THRU : Dr. F. James Levinson, TA/N *F. Levinson*
Dr. Irwin Hornstein, TA/N *I. Hornstein*
FROM : Dr. John I. McKigney, TA/N *J. McKigney*

DATE: January 18, 1977

SUBJECT: Proposed TA/N Grant to the International Eye Foundation

The purpose of this memo is to present the rationale for including a grant to the International Eye Foundation (IEF) within the Vitamin A Delivery Systems Project. Under this grant IEF will:

- A. Develop a curriculum;
- B. Train a nucleus of twelve selected medical specialists (6 from U.S., 6 from LDC's) specifically in the clinical assessment of avitaminosis A and secondarily give them an appreciation of (1) the design of vitamin A deficiency prevalence studies, (2) the establishment and (3) evaluation of vitamin A delivery systems;
- C. Develop and print a manual for training individuals in LDC's who will be in charge of national programs to combat vitamin A deficiency.

Activities to date under the Vitamin A Delivery Systems Project have concentrated on workshops to identify priority research and program areas, establishment of the International Vitamin A Consultative Group; prevalence studies and initial testing of promising new approaches to vitamin A delivery programs and seeking new biochemical indices of early to moderate vitamin A deficiency.

Experience in this project to date has shown there is an extremely limited number of individuals in the world who have the training and experience required to assist LDC's in accurately assessing the prevalence of vitamin A deficiency and train LDC personnel in identifying clinical signs of avitaminosis A, standardization and questionnaire techniques.



The services of the few available people are in increasing demand as more countries and donor agencies recognize the serious consequences of vitamin A deficiency and the scope of the problem. The proposed grant to IEF will expand the present pool of potential consultants by approximately 100% and will provide the materials for training additional personnel within LDC's as they mount full-scale prevention and surveillance programs.

The six participants from LDC's will assume key roles in their own country vitamin A programs and serve as catalysts in encouraging and assisting adjacent countries to initiate appropriate assessment and intervention programs.

The need for funds to carry out this training was unforeseen at the time the FY 78 ABS was developed. The \$104,873 required will be taken from funds programmed for sub-activity number 1, Prevalence of Vitamin A Deficiency, in the ABS. It is anticipated that the balance of \$352,000 reserved for this sub-activity will be adequate to fund prevalence studies to be initiated during the remainder of FY 77. The current plans are that these studies will be mounted with the assistance of individuals who have participated in the IEF training course.

UNITED STATES GOVERNMENT

Memorandum

copy to EM
MM
/ project file

(9) 045

TO : TA/PPU, John N. Gunning

DATE: December 8, 1976

THRU : TA/N, F. James Levinson
THRU : TA/N, Irwin Hornstein
FROM : TA/N, John I. McKigney

John I. McKigney

SUBJECT: Vitamin A Delivery Systems - IVACG

Your memorandum of November 22, 1976 to Dr. Samuel Kahn requested an indication of TA/N plans for allocation to specific activities of the \$457,000 remaining in this project for FY 1977.

It is planned that \$104,873 will be allocated by a grant to the International Eye Foundation (IEF) to develop a curriculum and carry out a training program on methods for assessment of vitamin A deficiency in populations. The PIO/T has been sent forward from TA/N and is being processed.

Six of the participants of the IEF training program will be ophthalmologists or physicians from LDC's where vitamin A deficiency is known to be prevalent (i.e. Haiti, Philippines, Tanzania, Kenya, Central America, Ethiopia, Zambia, Sri Lanka). Their training will be completed by March 20. It is anticipated that the remaining \$352,000 of the FY 77 budget will be allocated the design and implementation of valid vitamin A prevalence studies and initiation of preventive programs in several of those countries.



MEMORANDUM

November 22, 1976

TO : TA/N, Dr. Samuel Kahn
FROM : TA/PPU, John N.  Gungling
SUBJECT : Vitamin A Delivery Systems - IVACG

On November 14, 1976, I signed the PIO/T authorizing a grant in the amount of \$160,000 to the Nutrition Foundation to act as Secretariat to the IVACG. The Foundation will be fulfilling an obvious requirement of the Vitamin A program for which your office wants to fund.

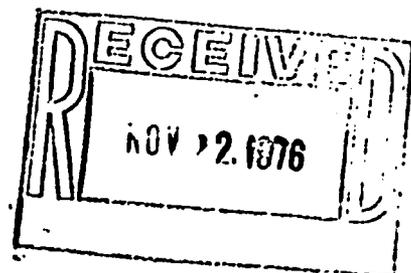
The Agency made a deliberate decision to approve a Vitamin A Delivery Systems program when endorsing the Project Paper which did not provide a specifically designed project. Within this context, however, one of TA/PPU's assigned responsibilities is to assure that technical offices have planned their programs in reasonable fashion.

Your memorandum, dated 10/26/76, shows how the grant to the Nutrition Foundation can be attributed to the PP budget for FY 1977 which was illustrative in the first place.

In looking at your ABS budget, the following activities are listed for FY 77 funding:

Prevalence of Vitamin A -	\$ 500,000
Evaluation of Sugar Fortification with Vitamin A -	100,000
Characterization of Vitamin A Deficiency -	600,000
	<u>\$1,200,000</u>

Since we were able to provide another tranche of funds (\$617,000) for the Characterization of Vitamin A Deficiency activity (the American Foundation Overseas Blind contract) in the T.Q., your FY 77 budget was cut to \$617,000. You now have approximately \$457,000 remaining. If you have not already done so as a part of the Implementation plan exercise, we would appreciate an indication of how you plan to allocate these funds to specific activities.



MEMORANDUM

TO: TA/PPU, John Gunning

October 26, 1976

FROM: TA/N, Samuel G. Kahn. *10/26/76*

SUBJECT: Vitamin A Delivery Systems -- IVACG Secretariat

A PIO/T was submitted in September for grant funding of the Nutrition Foundation (NF) to continue its function as Secretariat of the International Vitamin A Consultative Group (IVACG). This activity, initiated during FY 76, will expire at the end of this calendar year. Activities of the NF appear in the program paper under the categories of planning and coordination, dissemination of information and consultant services. Current grant funding is \$68,000. The proposed new grant is \$160,000 (approximately \$80,000 per calendar year). Increased costs are due to expanded services in categories of dissemination of vitamin A information and consultative services, plus FY 77 budgeted workshops and conference and expenses planned for development of a program compendium.

The NF has carried out its responsibilities in a very professional and efficient manner. The IVACG meeting in Haiti was well conducted and successful as were the task-force workshops before and after the meeting. The IVACG guidelines recently published by the NF have been well received. Because of this success, TA/N has developed a new two-year grant. The current Vitamin A Delivery Systems' program budget can provide the funds for this grant as shown in the following table.

	<u>Budget (X000)</u>		<u>NF Grant</u>
	<u>FY '77</u>	<u>FY '78</u>	<u>FY 77</u>
Planning & Coordination	30	30	30
Prevalence Surveys	240	240	-
Assay & Tech. Dev.	50	50	-
Field Demonstrations	600	500	-
Education	150	123	-
Eval. Meth. & Compendium	150	200	50
Workshop & Conf.	45	-	45
Dissemination	10	10	10
Consultant Group	<u>25</u>	<u>25</u>	<u>25</u>
	\$1300	\$1178	\$160

May 12, 1976 .

MEMORANDUM

TO: TA/PPU, John Gunning

FROM: TA/N, Samuel G. Kabw **SK**

SUBJECT: Project Funding Under Small Activities (Utilization)

PROJECT: Vitamin A Delivery Systems: Cost/Effectiveness of Interventions

CONTRACTOR: Cornell University, Ithaca, New York

The purpose of this project is to analyze and evaluate the cost/ effectiveness of three interventions that are being used to prevent vitamin A deficiency in children in the Philippines. The interventions consist of (1) massive oral doses of vitamin A given to children at 6 month intervals; (2) an integrated public health, nutrition, horticulture program to encourage greater consumption and production of vitamin A Carotene rich foods, and (3) fortification of a commonly used seasoning, monosodium glutamate (MSG), with vitamin A. These interventions are defined by the final phase of a four part project supported, in part, by AID in conjunction with Cornell University and the government of the Philippines, and the project will lead to determining the intervention most suitable for utilization.

The purpose of AID's program in developing vitamin A delivery systems is to assist LDCs in implementing programs for alleviating vitamin A deficiency. The Cornell-Philippine project is unique in that it is the only program in which different vitamin A strategies are compared. The research, once analyzed, will provide a rational basis for national policy decisions in the Philippines, but it will also contribute important knowledge which will be of use to other countries. It is for these reasons that TA/N proposes that this project be supported under utilization funds.

MEMORANDUM

TO: CM/COD/TAB, Robert Doucette April 14, 1976

FROM: TA/N, Samuel G. Kahn *S.G. Kahn*

SUBJECT: Justification for Non-Competitive Procurement

PROJECT: Vitamin A Delivery Systems: Cost/Effectiveness of Interventions

CONTRACTOR: Cornell University, Ithaca, New York

The purpose of this project is to analyze and evaluate the cost/effectiveness of three interventions that are being used to prevent vitamin A deficiency in children in the Philippines. The interventions consist of (1) massive oral doses of vitamin A given to children at six-month intervals; (2) an integrated public health, nutrition, horticulture program to encourage greater consumption and production of vitamin A (carotene) rich foods; and (3) fortification of a commonly used seasoning, monosodium glutamate (MSG), with vitamin A.

The field study data has been collected by the proposed contractor and is ready for analysis. TA/N recommends that, because of their predominant capability to complete this segment of the study, we negotiate only with Cornell University, Ithaca, New York for the required data analysis. Justification for non-competitive procurement includes the following:

1. Cornell has received support under small research contract (AID/ta-c-1116) to analyze the preliminary survey that was the initial activity in the Philippines regarding vitamin A deficiency and xerophthalmia (an eye condition that can lead to blindness due to vitamin A deficiency). The currently proposed activity is to analyze the data collected during the fourth and final stage of the program, in order to determine the cost/effectiveness of interventions. The experience and knowledge of the Cornell group regarding this program puts them in the unique position of being most qualified to complete the required analysis.
2. The Cornell group in conjunction with their Philippine counterparts and the Government of the Philippines has designed, developed and carried out this program on the island of Cebu. It would be inappropriate to replace Cornell with another contractor because of the rapport developed between Cornell and local institutions.

3. Cornell can analyze the data immediately. Another contractor would require time to become familiar with the data collection methods and data itself. This would cause delay in AID's receiving the final report on the analysis of the data. Rapid availability of the results of this work are important because they will be used by national planning groups in determining which vitamin A delivery system should be used in their country's national vitamin A programs.
4. The collected data is the property of Cornell and certain Philippine groups and may not be released to other groups for analysis. Therefore, if AID wishes to obtain the results of this study in the immediate future, the Agency must contract with Cornell.
5. The principal investigator, Dr. Michael Latham, is internationally recognized as an expert in clinical nutrition and in the specific area of vitamin A deficiency. It would be difficult to find his expertise in another U.S. institution.

MAY 10 1976

ACTION MEMORANDUM FOR THE DEPUTY ADMINISTRATOR

THRU: ES

FROM: AA/PPC, Mr. Philip Birnbaum

MAY 11 11 23 AM '76
EXECUTIVE SECRETARIA

Problem: Your approval is required for a revision and increase in funding of the TA Bureau project, "Development of Vitamin A Delivery System," from an approved total funding level of \$668,000 to a new level of \$4,089,000.

Discussion: This Technical Assistance Bureau (TAB) activity was initiated in FY 74 as a five year program with the purpose to assist LDCs in implementing programs for alleviating vitamin A deficiency. The program supports development of:

- (1) Country specific procedures for determining:
 - a) extent of blindness due to vitamin A deficiency
 - b) techniques to be implemented for alleviating the deficiency
 - c) methodologies to use for evaluating effectiveness of programs and
 - d) techniques to be utilized to maintain effective surveillance programs.
- (2) LDC personnel trained to carry on in-country vitamin A programs.
- (3) Biochemical method of detection of vitamin A deficiency in target population groups.
- (4) Information relative to the progress of vitamin A programs for dissemination to LDCs and donor agencies.

In 1974, A comprehensive review of the state of the art was held with respect to vitamin A. A three volume status report outlining vitamin A requirements, deficiencies, diagnostic criteria, ongoing programs and available technology was prepared and distributed to scientists, institutions and donor agencies dealing with vitamin A programming.

AID has provided a grant to WHO in support of a conference on vitamin A deficiency, which was held in November 1974. A technical report on the conference was reviewed by AID last May, and is now being printed for worldwide distribution.

In 1975, a contract with the Institute of Nutrition of Central America and Panama in Guatemala for the evaluation of vitamin A fortification of sugar was signed. Initial six month funding was provided. INCAP reported data on feasibility of conducting project evaluation in Guatemala and Costa Rica. These findings were submitted in November 1975 and reviewed by TAB and consultants. The result of this review was the elimination of Costa Rica as a project site, and the addition of El Salvador as a potential

new site. The project is continuing with funding for the next 20 months.

The International Vitamin A Consultative Group was officially formed in May, 1975, at the U.N. Headquarters. A second meeting of IVAGG was held in Haiti in March 1976. The members reviewed vitamin A problems existing in the world and made recommendations for pursuing activities for combatting vitamin A deficiency. Draft guidelines have been prepared and will be published in July.

The original PROP (attached) was approved in FY 1974 at a total cost of \$668,000. TAB, to date, has obligated \$468,000 and anticipates an additional obligation of \$284,000 during FY 1976 if the expanded proposal is approved. This acceleration over the original program has resulted from the added support given the program by the Secretary of State's position presented at the World Food Conference in Rome, November 1974. Dr. Kissinger stressed the need for immediate campaigns against blindness due to vitamin A deficiency and stated that the United States was prepared to initiate a multi-million dollar program for this purpose. The World Food Conference included in its resolution a recommendation to eradicate this nutritional problem.

The increase in funding level requested for this program is in response to the worldwide concern in the problem of vitamin A deficiency and resulting blindness. Vitamin A surveys originally were planned for 6-8 countries, however this will be increased to 10-12 countries. Implementation of appropriate vitamin A delivery systems will increase from 2 to 5 countries.

The proposed PP revision was discussed and endorsed by the Research and Development Committee on December 16, 1975. Major issues focused on LDC involvement, criteria for selecting LDC, field research, and cost effectiveness. (See Attachment B: Informal Minutes of R&DC Meeting, 12/16/75). The R&DC comments and suggestions were incorporated in the PP revision which again was circulated to the R&DC for optional comments. No other issues were raised regarding this project.

PPC subsequently questioned whether the project should be approved in the full proposed amount of \$4,089 million through FY 1979. We agreed with TAB on a joint recommendation that the total project be approved in principle but that funding be limited to an amount not to exceed \$2.6 million. This funding level provides partial funding in the amount of \$590,000 for FY 78 with the remainder of funding for that fiscal year and beyond contingent upon an indepth evaluation in 1977 and a revised project paper which includes the recommendations therein.

Funds for this project are included in the Activity Data Sheets, "Reaching the Pre-School Child," p.33 of the FY 1976 CP Interregional Book and p.37 of the FY 1977 CP Interregional Book.

Recommendation: That you approve the attached Project Paper Revision in principle, with the condition that funding is limited at this time to a total of \$2.6 million with funding beyond FY 78 contingent upon an in-depth evaluation and revised project paper which reflects that review. Language incorporating this caveat is included on page 1A for your review and approval. We recommend that you approve this PP Revision by signing page 1A of the PP.

Attachments:

- A. PROP - Development of Vitamin A Delivery Systems
- B. Informal Minutes of the Research and Development Committee Meeting, 12/16/75.

Clearances:

AA/TA:CFarrar	<i>CF</i>	date	<u>5/6/76</u>
GC:WWarren	<i>CA</i>	date	<u>5/21/76</u>
GC/TFHA:ARichstein	<i>ARichstein</i>	date	<u>5/5/76</u>
PPC/DPRE:AMHandley	<i>AMHandley</i>	date	<u>5/1/76</u>

for ECMcL TA/PPU:ECMcLeod:TA/N:SGKahn:asj:4/28/76

TAB/PPU, Mr. Carl Fritz

April 23, 1976

PPC/DPRE. Arthur Handlv

Development of Vitamin A Delivery Systems Project

We have reviewed the above project and are forwarding our recommendations for your consideration.

The initial activities carried out under this project have - to date - been modest and discreet in nature. This activity had originally been approved for a life-of-project funding of \$667,500. The commitment of the Secretary of State dictates a substantiation of our original assessment that this is an important area to investigate. However, the new proposal increases life-of-project funding almost sevenfold.

We recommend that the project be funded through FY 77 with a total of \$3,204,000 life-of-project funding. An in-depth evaluation, as specified in the PP for April 1977, would determine how effectively the project is achieving its purpose. The revision, termination or continuance of this project would be based on the finding of this evaluation.

The scope of this project would be limited to two Fiscal Years (FY 76 - FY 77) and a total of \$3.214 million.

cc: AA/PPC, A. Shakow
PPC/DPRE/PR, R. Bobel

PPC/DPRE/PR:JWelty:4/23/76

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

JUN 27 1974

Dr. Halsdon T. Mahler
Director General
World Health Organization
Avenue Appia 1211
Geneva 27, Switzerland

CERTIFIED A TRUE COPY THIS
28 DAY OF August, 74
BY Deane Colbert

Subject: Grant No. AID/ta-G-1132 ✓
PIO/T 931-11-560-045-73-3148051

Dear Mr. Mahler:

Pursuant to the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D."), hereby grants to the World Health Organization (hereinafter referred to as "WHO"), the sum of Forty Thousand Dollars (\$40,000) to provide support to conduct a conference on Vitamin A deficiency to be held in Djakarta, Indonesia from November 25 to 29, 1974.

The objectives of this conference are (a) to make recommendations and develop guidance for international and national organizations, industry, and private institutions in developing action programs for control of hypovitaminosis A and (b) to identify priorities in epidemiological studies, laboratory research and operational evaluation of both short term as well as long term programs. These recommendations will take into account evaluation of achievements and impediments of present trials and programs, and identify activities ready for implementation.

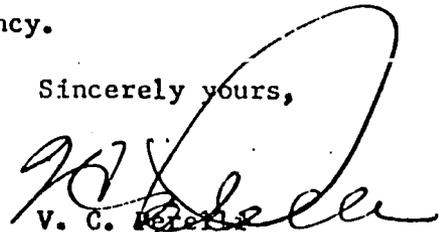
as well as country and regional programs which should be initiated. W.H.O. will collect all presentations and record all conference data for inclusion in a final report. A.I.D. (Office of Nutrition) shall be provided with 75 copies of the final report on or before June 1, 1975.

The grant is effective as of the date of this letter and the amount of funds stated hereunder are obligated as of that date. Such funds shall apply to specified costs incurred in furtherance of the support of the conference and continued related activities for a one year period thereafter.

The funds being contributed under this grant shall be used specifically to cover participant costs (excluding costs of W.H.O. participants) i.e., travel and per diem and cost of publication of the conference report. No other costs will be reimbursed from funds provided herein.

Upon receipt of cable acknowledgement of this grant together with the Special Bank Account Number, the funds provided by this grant shall be deposited in this Special Account established with the Chemical Bank, United Nations Office, New York, New York as a contribution to the W.H.O. Conference on Vitamin A Deficiency.

Sincerely yours,



V. C. K. K. K.
Grant Officer
Chief, TAB Branch
Central Operations Division
Office of Contract Management

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MR V. C. PERELLI
DEPARTMENT OF STATE
AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON DC

7481 WITH REFERENCE YOUR LETTER TWENTYSEVEN JUNE AND CABLE EO 11652
SIX AUGUST CONCERNING GRANT AID/TA G 1132 EYE HEREBY STATE
THAT EYE ACCEPT THE ABOVE MENTIONED GRANT ON BEHALF WHO

MAHLER UNISANTE,

GENEVA 15/8/74

SECSTATE 440080

Proj. No. 9310045
PX-

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

(9) 045
CR

January 27, 1977

APPROVED	
Approp. No.	72-11X1023
Allot. No.	402-31-099-00-20-71
Obj. No.	3178012 Obj. Cl. 259
Amount \$	104,873.00
Proj. No.	931-0045

1/27/77

Mr. John H. Costello
Director of Program Development
The International Eye Foundation
Sibley Memorial Hospital
Washington, D.C. 20016

Subject: AID/ta-G-1401

Dear Mr. Costello:

Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D." or "Grantor") hereby grants to the International Eye Foundation (hereinafter referred to as "The International Eye Foundation" or "Grantee") the sum of \$104,873 to provide support for a Training project for Vitamin A Deficiency Programs as more fully described in the attachment to this Grant entitled "Program Description".

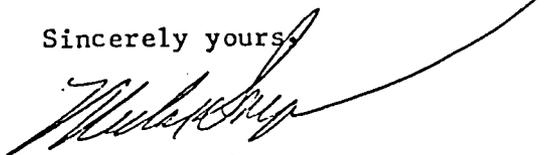
This Grant is effective and obligation is made as of the date of this letter and shall apply to commitments made by the Grantee in furtherance of program objectives during the period January 27, 1977 through November 10, 1977.

This Grant is made to The International Eye Foundation on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment A entitled "Program Description", and Attachment B entitled "Standard Provisions", which have been agreed to by your organization.

Please sign the Statement of Assurance of Compliance, enclosed herein, and the original and seven (7) copies of this letter to acknowledge your acceptance of the conditions under which these funds have been granted.

Please return the Statement of Assurance of Compliance and the original and six (6) copies of this Grant to the Office of Contract Management.

Sincerely yours,



Michael Snyder
Contracting Officer
Central Operations Division
Office of Contract Management

Attachments:

- A. Program Description
- B. Standard Provisions
- C. Payment Provisions
- D. Statement of Assurance

ACCEPTED:

THE INTERNATIONAL EYE FOUNDATION

BY _____

TITLE _____

DATE _____

PROGRAM DESCRIPTION

A. Purpose

The purpose of this Grant is to develop a curriculum and train a nucleus of skilled medical specialists to perform the following avitaminosis A related functions in selected LDCs.

1. Preliminary Assessment of (a) potential Vitamin A problem and (b) capabilities of appropriate indigenous institutions.
2. Instruction and training of local LDC health workers in recognizing and identifying clinical signs of xerophthalmia in avitaminosis A and the use of anthropometric measurements, questionnaire techniques and biochemical assessment of iron deficiency.
3. Advise host government on formal follow-through prevalence study.
4. Additionally, the Grantee shall develop a Training manual which can be used for the further training of medical professionals from lesser developed countries.

B. Specific Objectives

The specific objectives of this Grant are as follows:

1. Organize and present a training course which will include a two week didactic program at the Grantee's facilities in Washington D.C. for up to twelve (12) participants; participants selected must be approved by A.I.D. . Following this training course the Grantee shall organize a practical clinical experience of up to three (3) weeks. The exact sites and timing will be determined in coordination with A.I.D., Grantee will obtain necessary country clearances for the course Director and participants.
2. Develop a definitive instructional manual.

C. Implementation

To achieve the foregoing objectives, the Grantee shall carry out the following activities with funds provided by this Grant:

1. Organize the academic and field training in accordance with the Grantee's proposal entitled "Training Project For Vitamin A Deficiency Programs" dated November 1976.

-2-

2. Arrange for necessary facilities, travel and per diem.
3. Provide supplies, communications support, secretarial assistance and editing/publishing service.
4. Arrange for the training manual preparation.

D. Reports

Grant funds will be utilized to provide for the following reports:

1. The Grantee will submit six (6) copies of a financial report every six months to TA/N.
2. The Grantee will submit a report on progress and an evaluation of results within two (2) months of completion of the field training to TA/N.
3. The Grantee will submit a draft of the training manual to TA/N prior to September 1, 1977. The report will be reviewed and recommendations made for incorporation into the final manual by October 1, 1977.
4. The Grantee will submit to TA/N by November 10, 1977, two hundred (200) copies of the training manual.
5. In addition to the above cited reports the Grantee shall submit three copies of all reports listed as being a product of the grant (administrative, progress, final and technical reports containing R&D findings) to the Documentation Coordinator, TA/PPU/EUI, Technical Assistance Agency for International Development, Washington, D.C. 20523, or his designee. Such reports shall include a title page showing the title of the report, project title as set forth in this grant and the grant number. One copy of each report shall be clearly typed or printed on white paper so that it may be photographed to produce a microfilm master. Technical reports shall be accompanied by an author-prepared abstract.

E. Budget

The funds provided herein shall be used to finance the items listed below. The Grantee may not exceed the total amount of the Budget. Adjustments among the line items are unrestricted.

Personnel	\$ 21,825
Fringe (Secretarial)	1,800
Travel	45,000
Per Diem	17,583
Field Cost	800
Manual Development	11,615
Other Direct Costs	<u>6,250</u>
Total	\$104,873

58007

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

CR
⑨ 045

JAN 25 1977

Dr. William Darby
President,
The Nutrition Foundation
489 Fifth Avenue
New York, New York 10017

CERTIFIED A TRUE COPY THIS

1977 DAY OF February
BY [Signature]

Subject: Grant No. AID/ta-G-1375

Dear Dr. Darby:

Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, the Agency for International Development (hereinafter referred to as "A.I.D." or "Grantor") hereby grants to The Nutrition Foundation (hereinafter referred to as "The Nutrition Foundation" or "Grantee") the sum of \$160,000 to provide support for a program in the development of Vitamin A delivery systems as more fully described in the attachment to this Grant entitled "Program Description".

This Grant is effective and obligation is made as of the date of this letter and shall apply to commitments made by the Grantee in furtherance of program objectives during the period January 1, 1977 through December 31, 1978.

This Grant is made to The Nutrition Foundation on condition that the funds will be administered in accordance with the terms and conditions as set forth in Attachment A entitled "Program Description", and Attachment B entitled "Standard Provisions", which have been agreed to by your organization.

-2-

Please sign the Statement of Assurance of Compliance, enclosed herein, and the original and seven (7) copies of this letter to acknowledge your acceptance of the conditions under which these funds have been granted.

Please return the Statement of Assurance of Compliance and the original and six (6) copies of this Grant to the Office of Contract Management.

Sincerely yours,



Morton Darwin
Grant Officer
Central Operations Division
Office of Contract Management

Attachments:

- A. Program Description
- B. Standard Provisions
- C. Payment Provisions
- D. Statement of Assurance

ACCEPTED:

THE NUTRITION FOUNDATION

BY:

TITLE:

DATE:

William J. Darby
President
Jan. 25, 1977

PROGRAM DESCRIPTION

A. Purpose

The purpose of this Grant is to provide support to the Nutrition Foundation to enable it to organize and facilitate the advisory functions of the International Vitamin A Consultative Group (IVACG).

B. Specific Objectives

The specific objectives of this Grant are as follows:

1. To organize the meetings of the IVACG and facilitate its advisory functions.
2. To promote communications between various organizations activities engaged in programs seeking to prevent Vitamin A Deficiency and Xerophthalmia.

C. Implementation

To achieve the foregoing objectives, the Grantee shall carry out the following activities with funds provided by this Grant:

1. Organize the annual meeting of IVACG in 1977 and 1978. Tentative sites for the meeting are: Switzerland 1977 and Brazil 1978. The exact site and time of the meeting will be determined by the Grantee in coordination with A.I.D.
2. Organize two ad hoc subcommittee meetings of IVACG to be held either in New York or Washington, D.C. Site and time will be determined by the Grantee in coordination with A.I.D.
3. Arrange travel, per diem and meeting facilities for the IVACG meetings as well as the ad hoc meetings. It is estimated that the number of participants at the IVACG meetings will be 21; the estimated

number of participants at the ad hoc meetings will be six.

4. Provide supplies, communications support, secretarial assistance and editing/publishing services.

5. Develop information services in support of IVACG and groups working toward the eradication of vitamin A deficiency and xerophthalmia. This will include the editing, publishing and dissemination of IVACG minutes and reports and related vitamin A reports and information to IVACG members and other interested groups.

6. With concurrence of AID arrange consultant service for IVACG and AID related to vitamin A and xerophthalmia concerns.

D. Reporting

Grant funds will be utilized to provide for the following reports:

1. The Grantee will submit six copies of a financial report every six months to TA/N.

2. The Grantee will submit to TA/N 35 copies of an annual report covering the grant's activities for the previous year. One of the two annually required six-month fiscal reports may be included as part of the annual report.

3. A minimum of 500 copies will be published of each (2) IVACG meeting reports and 35 copies forwarded to AID/W, TA/N. Remaining copies will be distributed to IVACG members and other interested groups.

4. A minimum of 500 copies will be published of each IVACG task force report and 35 copies forwarded to AID/W, TA/N. Remaining copies will be distributed to IVACG members and other interested groups.

E. Budget

The funds provided herein shall be used to finance the items listed below. The Grantee may not exceed the total amount of the Budget. Adjustment among the line items are unrestricted.

<u>Category</u>	<u>Amount</u>	
	<u>1-01-77</u> <u>12-31-77</u>	<u>1-01-78</u> <u>12-31-78</u>
TRAVEL: INTERNATIONAL (21 persons)	\$30,000	\$36,000
DOMESTIC (6persons)	2,500	2,500
PER DIEM: INTERNATIONAL (21 persons)	9,000	10,000
DOMESTIC (6 persons)	1,600	1,600
CONSULTANTS (40 MD)	5,000	5,000
PUBLICATION COSTS	5,000	5,000
EDITORIAL & DOCUMENTATION SERVICES	4,500	4,500
MEETING ROOM RENTAL	400	800
COMMUNICATIONS	1,700	1,700
SUPPLIES	1,000	1,200
SECRETARIAL	7,000	7,500
ADMINISTRATION	<u>8,000</u>	<u>8,500</u>
TOTAL	\$75,700	\$84,300
TWO-YEAR TOTAL		\$160,000