

Revised 8/17/79

AGENCY FOR INTERNATIONAL DEVELOPMENT

COOPERATIVE AGREEMENT - EDUCATIONAL INSTITUTIONS

NO. AID/DSAN-CA-0267

PROJECT TITLE: Vitamin A Delivery System

PROJECT NO. 931-0045

AWARDED PURSUANT TO SEC. 635 OF THE FOREIGN ASSISTANCE ACT OF 1961, AS AMENDED, AND THE FEDERAL GRANT AND COOPERATIVE AGREEMENT ACT OF 1977

ISSUING OFFICE

Agency for International Development  
Office of Contract Management  
Washington, D.C. 20523  
Cognizant AID Scientific/Technical Office  
Office of Nutrition  
Development Support Bureau  
Agency for International Development  
Washington, DC 20523

September 15, 1980

EFFECTIVE DATE:

September 14, 1982

EXPIRATION DATE:

RECIPIENT

The Johns Hopkins University

Name

Charles and 34th Streets

Street Address

Baltimore, MD 21218

City State Zip Code

MAIL VOUCHERS (original and 3 copies) TO

FM/PAD

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

ACCOUNTING AND APPROPRIATION DATA

Amount Obligated: \$200,000

Appropriation No: 72-1101021.3

Allotment No: 043-36-099-00-20-01

PIO/T No: ~~3606684~~ 3606687

The United States of America, hereinafter called the Government, represented by the AID Grant Officer executing this Agreement, and the Recipient agree as follows: That the entire Agreement consists of: The Cover Page; the Schedule, consisting of 3 pages; Attachment "A", Program Description, and Attachment "B", Standard Provisions.

RECIPIENT The Johns Hopkins University	UNITED STATES OF AMERICA AGENCY FOR INTERNATIONAL DEVELOPMENT
BY: (Signature of Authorized Individual)	BY: (Signature of AID Grant Officer)
TYPED OR PRINTED NAME	TYPED OR PRINTED NAME Morton Darvin
TITLE	TITLE AID Grant Officer
DATE	DATE

SCHEDULEARTICLE I - COOPERATIVE AGREEMENT

A. Pursuant to the authority contained in the Foreign Assistance Act of 1961, as amended, and the Federal Grant and Cooperative Agreement Act of 1977, the Agency for International Development (hereinafter referred to as A.I.D.) hereby enters into a Cooperative Agreement with The John Hopkins University (hereinafter referred to as Recipient). Funding in the amount of \$200,000 is presently available for expenditure by the Recipient. The Recipient expenditures exceeding this funding will not be reimbursed. Subject to the availability of funds and the mutual consent of AID and the Recipient, additional funding in the amount of \$623,992 may be added to this Cooperative Agreement at a later date.

B. This agreement is effective as of the date indicated on the cover page and shall remain in effect until 9/14/82. Funds made available hereunder shall be used in furthering the program objectives during the period 9/15/80 thru 9/14/82.

C. This Cooperative Agreement is made with the Recipient 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".

ARTICLE II - SPECIAL PROVISIONS

A. As soon as possible after the effective date of this Cooperative Agreement the Recipient with the concurrence of the AID project office will recruit an individual to occupy the following key position:

Program Director

Prior to appointing or replacing this individual, the Recipient will notify and seek concurrence from the AID project officer.

B. Consultants: No compensation for consultants will be reimbursed unless funds for such consultant effort are included in the budget of this agreement, or such consultant effort has the specific prior written approval of the AID grant officer. Unless approved in writing by the AID grant officer, compensation to the consultant shall not exceed, (1) the current compensation or the highest rate of annual compensation received by the consultant during any full year of the immediately preceding three or (2) the maximum daily salary rate of a Foreign Service Officer Class 1, whichever is less.

NOTE: The daily rate of a Foreign Service Class 1 is determined by dividing the annual salary by 260 days. The maximum daily salary rate of a Foreign Service Officer, Class 1 as of the effective date of this agreement is \$192.

C, OVERHEAD RATES: Pursuant to the standard provision entitled "Negotiated Overhead Rates - Predetermined", predetermined rates have been established for the period beginning 7/1/80 and ending 6/30/81. Pending established of fixed overhead rates for the remaining period of this agreement, provisional payments on account of allowable indirect costs shall be made on the basis of the following negotiated rates applied to the bases which are set forth below:

<u>PREDETERMINED AND PROVISIONAL RATES:</u>	<u>RATE</u>
On-Campus	40%
Off-Campus	14%

BASE: Salaries and wages, fringe benefits, materials and supplies, services, and travel.

The Recipient will use the above rates for reimbursements under this cooperative agreement until such rates have been superseded in accordance with the standard provisions entitled "Negotiated Overhead Rates - Predetermined".

D. TITLE TO PROPERTY: For purposes of the standard provision entitled "Title to, Use, and Care of Property", title to nonexpendable property vests in the Recipient.

E. ALTERATIONS TO STANDARD PROVISIONS: The following standard provision contained in Attachment B of this Cooperative Agreement is hereby deleted in its entirety as being nonapplicable:

9B Payment - Periodic Advance

ARTICLE III - BUDGET

<u>LINE ITEM</u>	<u>FR: 9-15-80 TO: 9-14-82</u>
SALARIES	\$315,954
FRINGE BENEFITS	60,688
OVERHEAD	194,700
TRAVEL	151,200
TRAINING	21,000
OTHER DIRECT COSTS	<u>80,450</u>
TOTAL ESTIMATED COST	\$823,992

Adjustments among line items are unrestricted. The recipient will not be reimbursed for expenditures exceeding the funding obligated to this agreement. See Article I - Cooperative Agreement and Attachment B Standard Provision No. 10 entitled "Limitation of Funds".

As an in-kind contribution to the performance of this Cooperative Agreement, the Recipient will provide computer time on Wilmer Computer, use of Wilmer professional slide duplicator, use of library search machinery and use of laboratory. The value of this in-kind contribution is estimated to be \$89,300.

## Attachment A

### Program Description

#### I. PURPOSE

The purpose of this Cooperative Agreement is to assist the Recipient, as a resource center specializing in xerophthalmia control, in developing theoretical and operational concepts for the design, implementation, management and evaluation of nutritional blindness prevention programs, in developing approaches which will encourage and support developing country initiatives, and in identifying the most effective and efficient use of financial, technical and institutional resources for the prevention of blindness caused by vitamin A deficiency. The recipient institution will collaborate closely with A.I.D. and other U.S. Government agencies, the U.N. agencies and other donors supporting activities for the prevention of nutritional blindness in developing countries.

#### II. DESCRIPTION

##### A. Participating Countries

The Recipient will be expected to participate in in-depth cooperative efforts with three or more countries which will be active in the project. Such efforts will involve the Recipient in applied research, project design, development, implementation, evaluation and training, as vehicles for the development of comprehensive and systematic approaches to national xerophthalmia control programs.

The selection of countries for in-depth participation will be based on a joint decision between the Recipient, A.I.D. and host countries. Selection criteria will include, but not be limited to the following:

1. Countries selected must have an A.I.D. program;
2. Countries selected must have on-going or planned strategies for developing xerophthalmia control programs;
3. Countries selected must be receptive to involvement of the Recipient in activities directed toward the development of these programs;
4. Countries selected must offer maximum potential for strengthening the Recipient as a resource center in xerophthalmia control.

In the selection process preference will be given to those countries which are among the poorest of the developing countries; which have projects clearly directed toward their poorest populations in rural areas; and in which the Recipient has the greatest potential for rapid involvement, in terms of language, cultural and professional development. The priorities of A.I.D. Regional Bureaus will be used to establish a preference ordering for country participants.

B. Types of Activity

The project will include the following activities which will contribute to further development of the Recipient's capabilities through building the institutional base of a resource center in the prevention of nutritional blindness

1. In-depth Country Programs - In each of the three or more countries selected for in-depth program efforts, the Recipient will collaborate with the host country government and USAID to:
  - (a) determine the information base necessary for defining the geographic distribution, public health and economic significance of vitamin A deficiency.
  - (b) work with government officials in the design and implementation of methods and procedures for obtaining this information.
  - (c) assist in formulating the conceptual framework and strategy for an intervention program appropriate to the country situation.
  - (d) assist in the design, pilot testing, initiation of implementation, management, and evaluation components of the vitamin A program.
  - (e) define the equipment and commodities required for pilot testing the food fortification strategy, and conduct feasibility tests in collaboration with Nutrition and Agri-business Group, (USDA).
  - (f) conduct applied research aimed toward an increased understanding of the theoretical and operational problems encountered in the real-life conduct of the vitamin A program.
  - (g) document in applied field manuals, handbooks and papers published in appropriate technical journals; the advances in background knowledge and the results of applied research and program activity which focus on major gaps in information or problems identified in the course of the participating country activity.

2. Short-term technical assistance - As the project develops, requests received by DS/N for short-term assistance in xerophthalmia control from LDC governments through USAID Field Missions will be referred to the Recipient.

Upon a joint decision by the Recipient, USAID and DS/N that responding to the request will be feasible and consistent with the objectives of this cooperative agreement, the Recipient will assign consultants to work with USAID, other donor agencies and government staff in the requesting country. It is anticipated that such requests will usually be for exploratory work or to provide discrete technical or operational assistance for vitamin A program activities being implemented by the host government alone or with donor agency assistance. Such short-term assistance will normally not exceed four person-weeks of effort per country.

3. Training - As a means of enhancing its training capability in epidemiologic and preventive ophthalmology, the Recipient will develop, test, utilize and disseminate training materials of three types: (a) reference materials for use in the clinical classification and diagnosis of xerophthalmia according to standardized procedures; (b) technical materials for use in the training of technicians who will be involved in the various aspects of xerophthalmia control, program development or operation; and (c) operationally-oriented materials which will be used to train program and project management and administrative staffs who will manage program operations in one or more component facets. These training materials will be developed and tested in conjunction with the participating country programs, and will be used throughout these programs for orientation of policy and program officials and training of technical and operational staffs in each country.

Short-term specialized training will also be provided at the Recipient university to impart specific expertise to host country nationals responsible for assuming key operational or management roles in participating country programs. Such short-term training will generally not exceed four months in length. From time to time, there may be a need to provide longer term training to participating country nationals at the Recipient university in order to develop the institutional capability or particular skills required for successful operation of the host government's xerophthalmia control program. In each case that longer term training is deemed to be required, the Recipient shall consult with the USAID and DS/N prior to making a commitment to provide it.

The selection of individuals to receive training at the recipient university shall be made by the Recipient and host government officials

responsible for the nutritional blindness control programs with concurrence of the USAID and DS/N. Approvals of proposed training will be based on a formal request from the host government to the USAID, which is then referred to DS/N for concurrence.

The Recipient will follow guidelines similar to those prescribed in AID Handbook No. 10 for health and accident insurance coverage of foreign national trainees.

4. Vitamin A Support Unit - In conjunction with and as a means of enhancing its ability to effectively carry out the above activities, the recipient institution will establish and maintain a vitamin A support unit, which will carry out the following tasks:
  - a) assemble a small library with copies of articles and publications relevant to xerophthalmia, nutritional blindness and its prevention. Such articles will be cross indexed on a computer, by a variety of criteria. The unit will thus be capable of producing computer generated lists of articles as required.
  - b) develop and maintain a master set of photographs depicting the various ocular manifestations of xerophthalmia. The set will incorporate existing photographs and new knowledge of vitamin A deficiency-related ocular pathology as it becomes available. The set will be used to produce slides for use as teaching and diagnostic aids and to support relevant publications.
  - c) work with their scientific staff to design data collection, entry, edit and analysis programs suitable for standard survey work; prepare data analysis programs of past and ongoing xerophthalmia control programs and applied research projects; and provide in-country consultation for data management aspects of xerophthalmia control programs.
  - d) provide short-term training, technical assistance and vitamin A support unit to improve and standardize analytical procedures and programs of analysis in developing countries. On occasion, the unit will analyze samples derived from assessment or intervention programs.

While in-depth country programs will be accorded highest priority for assignment of services and products of the vitamin A support unit, these will also be provided to other cooperating countries, donor agencies supporting activities for the prevention of nutritional blindness upon mutual agreement of the Recipient, relevant USAID Missions and the DS/N project officer. The Recipient may establish collaborative arrangements with other groups to facilitate implementation of its vitamin A support unit activities.

5. Publications - In addition to clinical diagnosis materials, field manuals and handbooks developed in the course of training and operational activities in participating countries, the Recipient will be expected

to publish papers reporting on the results of applied research in appropriate technical and scientific journals. The Recipient will also prepare state-of-the-art documents addressed to the definition of key conceptual and operational constraints to progress in alleviation of vitamin A deficiency on a worldwide basis.

C. Outputs

The project is intended to have the following outputs:

1. Determination of the Magnitude and distribution of Vitamin A deficiency.
  - a. Preliminary survey and evaluation of existing information on the incidence and public health significance of xerophthalmia;
  - b. Determination of needs and mechanisms of obtaining the additional information.
  - c. Design and execution of preliminary and in-depth surveys, required to complete baseline informational requirements.
2. Identification and development of appropriate Program Strategies
  - a. Problem analysis and definition of appropriate strategies;
  - b. Design, feasibility and pilot testing of proposed approaches;
  - c. Determination of probable impact and cost effectiveness of proposed program;
  - d. Design, implementation and evaluation of regional or national programs.
3. Operational research to advance the state-of-the-art of Xerophthalmia Control Programs
  - a. Development of simplified or more appropriate methods for clinical diagnosis and surveillance of vitamin A deficiency.
  - b. Field test simplified biochemical or physiological procedures for evaluating vitamin A status, should such become available.
  - c. Determine the efficiency and cost-effectiveness of different program approaches.
  - d. Improvement of nutrition education techniques designed to increase home production of foods rich in vitamin A, and increased consumption of those by young children.
  - e. Devise and field test methods for measuring the impact of xerophthalmia control programs.

f. Determine means for effective transfer of vitamin A program technology and management skills from one country to another.

4. Information Dissemination

a. Publication of applied research results; printing of field methodology manuals, handbooks and other materials.

b. Preparation of state-of-the-art documents.

c. Dissemination of program experiences, new methodologies and improved techniques through participation in relevant coordinative and advisory bodies such as the International Vitamin A Consultative Group (IVACG) and the WHO Advisory Committee on Blindness Prevention.

d. Dissemination of information, methods and materials through the Vitamin A Support Unit.

Upon request, and when deemed by the Recipient and DS/N project officer to be consistent with the objectives of this cooperative agreement, make available to developing countries and donor agencies samples of slide sets, manuals, handbooks and other materials developed under this project.

III. IMPLEMENTATION

A. Project Management Requirements

The project will clearly require a heavy investment in project management on the part of the Recipient, together with the utilization of effective and innovative management techniques at the cooperating university to provide the flexible, inter-disciplinary inputs required for the project.

The Principal Investigator will be a senior staff person with established credentials in preventive ophthalmology and extensive field research and program experience in developing countries. In connection with his or her managerial duties, the Principal Investigator will be available for consultation with AID/Washington and USAID staff to plan and design work under the project and to advise on AID policies and strategy in promoting xerophthalmia control programs in developing countries.

B. Annual Work Plan

At the outset of each year of the project, the Recipient will prepare an annual work plan for review and approval by the DS/N Project Officer within 60 days after initiation of the project; subsequent work plans for each following year will be due on 30 days before completion of the current project year.

Projected training of host government participants at the Recipient institution will also be included in the Annual Work Plan; specifying country, nature, period and approximate cost of training, and role in country program to be assumed by each proposed trainee.

The Annual Work Plan will be intended to provide:

1. A clear understanding of the overall allocation of funding (including delineation of cost sharing by line items) and staffing patterns, shown against anticipated outputs;
2. A clear statement of staff obligations for specified outputs at specified times;
3. A separation of clearly defined activities from more emergent and loosely defined activities;
4. Notification to USAIDs and Regional Bureaus of the scope of work and timing of activities planned for their countries and regions;
5. Guidance for programming of DS/N support activities over the course of the year.

All staff appointments, other than short-term consultants, will be included in the Annual Work Plan, together with proposed activities and curriculum vitae. Short-term consultants must be cleared with DS/N's Project Officer if they are to be recruited for overseas work.

#### C. Tasks to be Accomplished

The following tasks are expected to be accomplished during the project, in the year indicated:

##### 1. First Year

- a. Annual Work plan for first year is required 60 days after the initiation of agreement.
- b. After consultation with and concurrence from AID, visits will be made to approximately 6 countries whose governments have indicated an interest in participating in the project and which meet the minimum criteria for selection. Visits are to be made by senior project investigators, as the primary purpose of the visits will be to explore the feasibility and desirability of having the visited countries serve as sites for in-depth efforts. Short-term consultants services may also be provided as part of these visits.
- c. Short-term consultants visits will be made to 3 or more countries. These will usually be in response to expressed needs of the host government/USAID - the specific sites selected conforming to AID/W priorities.

- d. Selection will be made of 2 participating countries with which the Recipient will cooperate in in-depth vitamin A activities (countries #1 and #2). Choice of in-depth countries will be based on a joint decision among the host government, recipient, DS/N and the USAID in question. The choice of country will be initiated by the Recipient and host government reviewed by the project committee and DS/N for consistency with the selection criteria, and approved by the USAID and host government. The scope of work for the long-term involvement will then be specified in a Memorandum of Understanding signed by the USAID, Regional Bureau, and DS/N.
  - e. Agreement will be reached between the Recipient and the DS//N Project Officer on specific implementation plans for countries #1 and #2, including the mutual responsibilities and commitments of the Recipient, participating host country and USAID.
  - f. In-depth cooperative efforts in participating countries #1 and #2 will be initiated.
  - g. Training materials will be prepared and tested in at least 1 participating country.
  - h. The Vitamin A support unit will be established and services initiated in support of activities underway in cooperating countries.
  - i. Preparation of one state-of-the-art document.
  - j. An annual work plan for the second year of project activities will be prepared.
  - k. Preparation of all reports required by the Cooperative Agreement, as stipulated on Page 9 .
2. Second Year (The procedures outlined in the first year work plan will be followed.)
- a. Cooperative efforts in participating countries #1 and #2 will be continued.
  - b. Participating country #3 will be selected.
  - c. Specific implementation plans for participating country #3 will be agreed upon.
  - d. In-depth cooperative efforts will begin in participating country #3.
  - e. Training materials will be developed and/or adapted and tested in participating countries #2 and #3.
  - f. Short-term consultation visits will be made to 3 or more countries.
  - g. Activities of the Vitamin A support unit will continue as approved within the annual work plan.

- h. Preparation of one state-of-the-art document.
- i. Preparation of all reports required by the Cooperative Agreement, as stipulated on Page 9 .

D. Level of Effort

It is estimated that the recipient institution will dedicate a total of no less than 60 person-months of senior and associate project staff time to the activities carried out during the period of this Cooperative Agreement. The total level of effort estimated to be applied during the first year is 30 person-months; 30 person-months is the estimated level of effort to be applied during the second year.

IV. Reports

- A. The Annual Work Plan
- B. Quarterly and annual administrative reports covering accomplishments, expenditures and personnel employed under the Agreement.
- C. Technical reports of the results of applied research and consulting activities.
- D. Reports on all overseas trips, to be submitted within 30 days after the end of travel.
- E. Copies of applied field manuals, handbooks, and papers based on project activities which are published in technical journals.
- F. State-of-the-art documents.
- G. Training reports as required by the AID Office of International Training.
- H. The Recipient Institution will also cooperate in preparing any reports required by cooperative evaluations of the projects.

All reports are to be submitted as follows:

- to DS/N: 1 copy of G, 2 copies of B and D, 10 copies of A, 25 copies of C, E and F.
- to the Documentation Coordinator: DS/DIU/DI; AID/Washington, D.C. 20523: 4 copies of C, E and F.
- to the AID Reference Center, Washington, D.C. 20523: 2 copies C, E and F.

All reports shall include a title page showing:

(1) the title of the report; (2) project title as set forth in the Cooperative Agreement; and (3) the Cooperative Agreement 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 accompanied by author-prepared abstract.

BUDGET

Preventive Ophthalmology Cooperative Agreement  
Recipient - Johns Hopkins University

<u>A. Ophthalmological Center Staff</u>	<u>Time (Months)</u>	<u>Year of Project I</u>	<u>Year of Project II</u>
Center Director	6	\$35,400*	\$38,940*
Program Director	8	31,500	34,650
Research Associate	12	26,000	28,600
Secretary/Data Entry Clerk	24	37,000	40,700
<u>3. School of Public Health Staff</u>			
Assoc. Investigators	6	23,600	25,960
Laboratory Director	4	9,000	9,900
Statistician/Programmer	8	17,000	18,700
		<u>179,500</u>	<u>197,450</u>
Overhead (56%)		100,000	110,000
Total		279,500	307,450
<u>C. Training at J.H.U.</u>		<u>10,000</u>	<u>11,000</u>
		10,000	11,000
<u>D. Travel</u>			
International		67,000	73,700
Domestic		<u>5,000</u>	<u>5,500</u>
		72,000	79,200
<u>E. Communication and Supplies</u>		<u>5,000</u>	<u>5,500</u>
		5,000	5,500
<u>F. Computer terminals and printer</u>		<u>6,000</u>	<u>6,600</u>
		6,000	6,600
<u>3. Expenses in Developing Countries</u>			
Equipment, Supplies		13,000	14,300
Computer Time		4,500	4,950
Transportation, Incidentals		<u>6,000</u>	<u>6,600</u>
		<u>23,500</u>	<u>25,850</u>
TOTAL AID FUNDED COSTS		\$396,000	\$435,600
ESTIMATED COST SHARING CONTRIBUTION FROM RECIPIENT UNIVERSITY		<u>42,500</u>	<u>46,800</u>
GRAND TOTAL FOR PROJECT		\$438,500	\$482,400*

\* Includes Fringe Benefits of 18% of Base Salary

\*\* Year two of Project assumes an overall cost increase of 10%.