

**THE NUTRITION FOUNDATION, INC.**

**ANNUAL REPORT OF  
COOPERATIVE AGREEMENT  
DAN-5115-A-00-7114-00**

**1 OCTOBER 1989 to 30 SEPTEMBER 1990**

## Table of Contents

Executive Summary	3
Individual Program Reports	
International Vitamin A Consultative Group (IVACG)	7
International Nutritional Anemia Consultative Group (INACG)	15
Project SUSTAIN	20
International Nutrition Planners Forum (INPF)	20
International Nutrition Network Exchange (INNE)	25
General Cooperative Agreement Activities	
Monitoring and Tracking Requests for Information	26
Reporting Requirements	27
FY91 Workplans and Budgets	27
Financial Report	28
Status of Cooperative Agreement Financial Standing	29
List of Appendices	30

**Cooperative Agreement No. DAN-5115-A-00-7114-00**

**Annual Report, Fiscal Year 1990**

**1 October 1989 to 30 September 1990**

**Executive Summary**

Fiscal year 1990 was especially significant for The Nutrition Foundation, Inc. (NF). Negotiations between NF and the Office of Nutrition, Bureau for Science and Technology (S&T/N), Agency for International Development (AID) continued for the first three quarters and culminated in Modification #4 to Cooperative Agreement DAN-5115-A-00-7114-00 (CA) that was signed during the last week of July, 1990.

A restructuring of the S&T/N portfolio of Child Survival and Household Food Security programs lead to the removal of Project SUSTAIN from the CA, since its activities fell completely within a third category entitled "Nutribusiness". Two new programs were then added -- the International Nutrition Planners Forum (INPF) and the International Nutrition Network Exchange (INNE). Both have elements similar to the ongoing programs of the International Vitamin A Consultative Group (IVACG) and the International Nutritional Anemia Consultative Group (INACG). Secretariat support for INPF began in April due to the urgency of already scheduled meeting dates. Obligations for INNE required immediate effort by the secretariat to organize and plan a meeting held only ten weeks after funding was authorized on 27 July. This Annual Report summarizes on the following pages events and activities for all five of these programs during FY90.

The XIII International Vitamin A Consultative Group (IVACG) Meeting in Kathmandu, Nepal was a productive gathering that brought together a record 270 participants from 33 countries to discuss worldwide vitamin A policies and issues. As a result of presentations at the conference, the IVACG Steering Committee took an unprecedented step and issued a statement that summarized important evidence of the need for adequate vitamin A status in children. The steering committee's leadership role in the international nutrition community was demonstrated by this call to action to address global nutrition problems, and the secretariat distributed this statement to publications having a combined circulation of over 79,000.

The IVACG meeting also broke new ground by including field program managers in the presentations and discussions. Opportunities for information exchange were

expanded by adding poster sessions to the agenda. In addition, the published summary of the meeting proved to be a popular document; over 1,000 copies are in circulation, most in response to individual requests.

Plans are underway for the next IVACG meeting to be held in Guayaquil, Ecuador in June 1991. Ecuador was chosen from among several Latin American countries that offered to host the meeting. This XIV IVACG Meeting will focus attention on community based intervention programs.

Considerable effort was devoted this year to produce *Guidelines for the Use of Vitamin A in Immunization Programs*, a task force manual anxiously awaited by WHO, UNICEF and other international organizations. The manual is intended to be a practical, concise guide to integrating vitamin A distribution with a national immunization program. Although the targeted completion deadline had to be extended, the secretariat was encouraged by the greater-than-anticipated demand by various international groups to review the draft guidelines. These evaluations will help ensure that recommendations made in the document are uniformly acceptable. The involvement of several groups also will facilitate immediate widespread distribution of the manual through multiple simultaneous channels, once it is published.

The secretariat was successful in its efforts to increase international awareness of activities of both IVACG and INACG through news releases, publications, and meetings. For example, international promotion of its new INACG publication, *Guidelines for the Control of Maternal Nutritional Anemia*, resulted in a tremendous number of inquiries and a review of the document in *The American Journal of Clinical Nutrition*. The short, action-oriented format of the brochure, which has been translated into French and Spanish, has garnered considerable praise and has been deemed a model for other secretariat publications.

The secretariat's progress in translating its other publications into French and Spanish has also assisted in developing alliances with other groups concerned with nutrition affairs in French- and Spanish-speaking countries. FY90 saw a marked increase in interest of organizations wishing to collaborate with IVACG's regional representatives in Africa. The secretariat began working with several international agencies to foster relationships with IVACG's African representatives.

International contact with individuals and organizations expanded the visibility of secretariat programs. Most information requests emanate from developing countries, a result of involving policy-makers, nutrition specialists and news organizations from those countries in meetings and sending them publications and information about secretariat activities. Strengthening contacts this year with such international organizations as UNESCO and Groupe D'Etudes et De Recherches Sur La Malnutrition (GERM) were important for future collaboration in tackling global nutrition issues.

The Administrative Coordinating Committee/Subcommittee on Nutrition of the United Nations (ACC/SCN) worked closely with the secretariat to produce a document reviewing the status of iron deficiency anemia that was presented to its Advisory Group on Nutrition. Recommendations from that meeting resulted in an international workshop in Dublin that dealt primarily with iron supplementation. INACG representatives participated in that meeting and described past and present INACG activities. There was strong endorsement for plans already underway to convene an INACG international meeting on iron fortification technology as a complement to the Dublin meeting.

Based upon the successful format of the IVACG meeting in Kathmandu, the secretariat made several suggestions to improve INACG conference participation. With the theme of "Combatting Iron Deficiency Anemia Through Food Fortification Technology", the XII INACG meeting will provide a much needed practical emphasis on implementing food based solutions aimed increasing iron intake. The meeting has been scheduled for 5-7 December, 1990, in Washington, D.C.

Earlier in the year an INACG advisory group was selected from a broad spectrum of nutrition disciplines including academia, U.N. agencies and the private sector. After reviewing past INACG activities during the first part of the January meeting, the group was asked to develop ranked priorities for new initiatives addressing the global control of iron deficiency anemia.

Important research to determine whether infant cereal as it is currently fortified in North America is effective in preventing iron deficiency anemia in children, is in its final stages. The study has been administered by the INACG Secretariat with funds from the U. S. food industry, another notable coalition fostered by the secretariat.

The INPF Steering committee met in June and selected Bangkok, Thailand as the site for the 6<sup>th</sup> International INPF Conference. "Effective Nutrition Communication for Behavioral Change" was decided as the theme for the conference that will be held 10-13 September, 1991. Timing of the steering committee meeting was planned to coincide with the annual meeting of the National Council for International Health enabling several committee members to give a panel presentation on "Crucial Elements of Successful Community Nutrition Programs". In addition, the influential members and invited observers of the INPF Steering Committee met with AID's Assistant Administrator, Bureau for Science and Technology to discuss nutrition concerns and solutions being implemented in their native countries.

Two INPF task forces were formed, one on nutrition information needs of nutrition workers in developing countries and the other to provide practical assistance to groups wishing to include nutrition components in community based intervention programs.

Preparation for the 2-3 October 1990 1<sup>st</sup> Annual INNE Convocation was a major effort for the secretariat during the last month of the fiscal year. However, a successful meeting should provide valuable opportunities to establish affiliations among implementors working with the Office of Nutrition. The meeting will be held in Washington, DC during the first days of the next fiscal year.

Responding to information requests is time consuming in the midst of other pressing demands on the secretariat staff; however, it is an integral and essential part of the secretariat's operations. During FY90, the secretariat made significant strides in improving its information delivery and tracking. A new database was installed that provides the capability to analyze the hundreds of information requests received each year on behalf of IVACG, INACG, and now also INPF. The ability to review this data by individual, country, and region will aid the secretariat in future programming and targeting of upcoming news and publications announcements.

## **International Vitamin A Consultative Group (IVACG)**

### **Introduction**

The Nutrition Foundation, Inc. entered into a cooperative agreement with S&T/N for the partial support of IVACG on 1 October 1987. The mission of IVACG is to guide international activities aimed at reducing vitamin A deficiency in the world. In order to carry out this mission, IVACG sponsors international meetings and scientific reviews. It convenes task forces to analyze issues related to the etiology, treatment and prevention of vitamin A deficiency. The examination of these issues is important to the establishment of public policy and action programs. IVACG provides a forum to foster the interchange of ideas, the presentation of new research findings and survey data, and discussions of action or field programs.

IVACG assists governments in the establishment of national programs for the reduction of vitamin A deficiency through the development of strategies for a particular region or country and by furnishing consultants to these programs. IVACG's monographs and meetings provide technical and political support for the programs in the developing world. These monographs and meeting reports achieve worldwide circulation through channels of the United Nations Agencies, AID, and direct contact with workers in developing countries.

All these functions of IVACG are undertaken in close collaboration with the Office of Nutrition, Bureau for Science and Technology, AID. Dr. Frances R. Davidson, Senior Nutrition Advisor, S&T/N, serves as secretary of IVACG.

### **IVACG International Meetings**

#### **National Symposium and XIII IVACG Meeting**

IVACG, the government of Nepal, and the Nepal Prevention of Blindness Program (Nepal Netra Jyoti Sangh) co-hosted the National Symposium and the XIII IVACG Meeting, 5-10 November 1989 in Kathmandu, Nepal. Policy-makers, program managers, and scientists from the fields of health, nutrition, biochemistry, agriculture, horticulture, and development were among the record 270 participants from 33 countries who gathered for the back-to-back sessions.

The IVACG Secretariat, the IVACG Steering Committee, and the local committee for the meeting coordinated the National Symposium's program, which included lectures on four key topics:

- global dimensions of vitamin A deficiency
- vitamin A metabolism
- assessment of vitamin A nutriture
- intervention strategies and long-term solutions for prevention and control of vitamin A deficiency

In addition to these topics, the two-day symposium increased awareness among the Nepalese and participants from other countries about activities in Nepal. A copy of the final agenda and list of meeting participants is included as Appendix 1.

The XIII IVACG Meeting highlighted data confirming previous reports that where vitamin A deficiency constitutes a significant public health problem, intervention with vitamin A reduces childhood mortality. The meeting marked the first time preliminary results of an important new Indian study on vitamin A supplementation were presented at a public scientific forum. Dr. Laxmi Rahmathullah of the Aravind Eye Hospital in Madurai, India told the group that their research on more than 15,000 children showed that frequent low-dose vitamin A supplementation led to reduced childhood mortality. The implications of this study are that significant effects on mortality may be achieved by modestly improving the daily intake of vitamin A sources.

The IVACG meeting also broke new ground in other respects. Increased involvement of program managers added a valuable dimension to the meeting discussions. Their practical experience complemented the more theoretical presentations about program delivery. Through its Vitamin A Technical Assistance Program (VITAP), Helen Keller International (HKI) generously provided funding to program staff from several private voluntary organizations (PVO) to attend the event. These PVO's included World Vision, CARE, African Medical and Research Foundation (AMREF), PLAN International, AFRICARE, and Adventist Development and Relief Agency.

Abstracts submitted in advance formed the basis for the IVACG meeting program. The IVACG Steering Committee selected for presentation those abstracts critical to the meeting's primary theme and also to the secondary theme of newer techniques for assessing marginal vitamin A deficiency. Country reports and presentations by international agencies and non-governmental organizations were integral components of the program. In addition, for the first time, the meeting included poster sessions. Twenty-eight displays were shown and these presented a welcome opportunity for participants to discuss abstracts with the authors in a less formal setting. In conjunction with the meeting, two groups of about 25 participants each visited

vitamin A field programs in Nepal to observe and discuss local efforts in more detail. Although rigorous, most participants would agree that these trips were a valuable part of their experience in Nepal.

Following the meeting, the IVACG Secretariat produced, published and distributed nearly 1,000 copies of a 143-page meeting summary to all those invited to the meeting. Demand from UNICEF and HKI necessitated a substantial second printing which was partially funded by those organizations. Appendix 2 includes a copy of the cover and table of contents from this summary.

A news release about the meeting and the availability of the meeting summary was sent to the USAID press office, and to newsletters and journals with international circulations that included developing countries. Articles appeared in many publications including *Xerophthalmia Club Bulletin*, *Vitamin A Newsnotes*, *ILSI News*, *Nutrition Center of the Philippines Bulletin*, *Journal of the American Dietetic Association* and *Community Eye Health*. These publications have a combined readership of more than 70,000. The news release and mailing lists are included as Appendix 3.

The secretariat's leadership in planning and coordinating the National Symposium and XIII IVACG Meeting involved handling a myriad of logistic details such as budget planning; invitations and confirmations for meeting participants; travel and lodging arrangements for 82% of the participants; financial transactions in Nepal; long-distance coordination with the local committee in Kathmandu and conference site staff; food and beverage functions and special events; greeting participants at the Kathmandu airport; on-site management; and follow-up reports and correspondence. In addition, the secretariat helped the local committee in Nepal plan the symposium agenda. It also assisted the IVACG Steering Committee in choosing the designated session chairpersons and meeting rapporteurs and supplied each with copies of relevant abstracts and available papers in advance.

#### **XIV IVACG Meeting**

"Community-Based Interventions" will be theme of the XIV IVACG Meeting scheduled to take place 17-20 June 1991 in Guayaquil, Ecuador. The IVACG Steering Committee chose Ecuador as the site although official invitations were received from both Mexico and Guatemala to host the conference in their countries. The secretariat consulted with these countries and found encouraging support from some of their important corporations and associations. However, it also found that Ecuador is launching a national vitamin A program that would benefit enormously from the attention an IVACG meeting would generate. Such international recognition for Ecuador's program will help accelerate the implementation of their plans. Moreover, Ecuador is preparing to hold a national symposium on vitamin A in December 1990.

IVACG Steering Committee Chairperson, Dr. Barbara A. Underwood, will attend that conference and review the vitamin A program with Ecuadorian policy makers.

The interval between the national symposium and the IVACG meeting in June will give Ecuador time to begin its vitamin A program. Although difficulties in determining the meeting site delayed preparations for the session, once the decision was made the secretariat moved ahead and issued a call for abstracts (Appendix 4) with an abstract submission deadline of 15 November 1990. The secretariat also worked with the local committee chairperson in Ecuador to investigate suitable hotel accommodations and other meeting details.

### **IVACG Steering Committee**

The IVACG Steering Committee held three meetings this year -- two in Kathmandu (on 4 and 9 November during The National Symposium and XIII IVACG Meeting) and the third on 8-9 March, 1990 in Bethesda, MD. In an unprecedented step, this year the steering committee issued an interim statement that summarized important evidence on the relationship of vitamin A depletion and deficiency to child health and survival. The announcement was prompted by the weight of evidence on the subject presented at the XIII IVACG Meeting in Kathmandu. This carefully worded statement and list of publications and institutions receiving it are included as Appendix 5. The committee determined that the information warranted immediate recognition in the nutrition community. Publications carrying the statement included *Tropical Doctor*, *Xerophthalmia Club Bulletin*, *IAPB News*, *Garden to Kitchen Newsletter*, *The Ark*, *VITAL News*, *Community Eye Health*, and *ARI News*.

Two new members joined the steering committee during this fiscal year. The secretariat issued formal invitations for membership to Dr. Vinodini Reddy, Director of the National Institute of Nutrition in Hyderabad, India, and to Dr. Franz Simmersbach, Nutrition Officer, Community Nutrition Group, Food Policy and Nutrition Division, FAO. Both accepted their posts and began their participation with the March meeting. During this fiscal year the steering committee also selected Dr. Pawlos Quana'a as an IVACG Regional Representative for Africa to replace Dr. Demissie Habte.

The tragic airplane crash in December 1989 that killed U.S. Congressman Mickey Leland and his companions in Africa prompted the steering committee to send a letter to President Bush. The letter emphasized the importance of Congressman Leland's vision and work on developing country food issues. His death was a great loss to those concerned with the urgent problems of hunger and nutrition worldwide.

The steering committee proposed that the secretariat establish four new task forces to be responsible for describing and giving guidance regarding:

- assessment of marginal vitamin A status
- community level programs
- use of vitamin A during diarrheal episodes
- the effect of food preparation on vitamin A content of meals

### **Task Force Activities**

#### Communication/Education Task Force

Throughout the year, efforts continued to produce a suitable report from the Communication/Education Task Force. Task force members and steering committee members commented on a draft report. Some reviewers from developed countries see a need for a more polished product while the reviewers from developing countries (the intended users) maintain that the manual can be a valuable and helpful publication once recent comments are incorporated.

As suggested by Dr. Underwood and Dr. Davidson, Dr. Suttalak Smitasiri, a communications specialist in Thailand, reviewed the manuscript. Additionally, the secretariat shared the draft and materials received with VITAL staff to assist them in a related project.

In the fourth quarter the secretariat began the search for a writer to complete the manuscript. A more pressing challenge, however, is to establish a clear vision of what the manual should be. The secretariat would prefer that the Office of Nutrition contribute comments regarding goals for the document before further expenditures. Based on the needs expressed by developing country representatives, the secretariat, has determined that the document should:

- describe the use of communication techniques to deliver nutrition education information to a country's citizens
- give specific examples of how to communicate messages, e.g., radio and television scripts for public service announcements, T-shirt logos, and news releases
- emphasize the importance of using the manual as a guide to implementing a country's own creative ideas about delivering nutrition education information to its population

The secretariat has requested guidance and clarification from the Office of Nutrition regarding resolution of the polarized comments from the different reviewers and will proceed with completion of the manuscript once it receives this specific direction.

### Integration of Vitamin A Distribution with Immunization Programs

WHO, UNICEF, and other international organizations are awaiting the publication of this task force's manuscript, *Guidelines for the Use of Vitamin A in Immunization Programs*. This is to be a practical, concise guide to integrating vitamin A distribution with a national immunization program. Its preparation, however, has met with considerable delay. The task force chairperson delivered the initial draft to the secretariat in October 1989, eight months behind schedule. Then, at the suggestion of the steering committee, the secretariat distributed the document to task force members, steering committee members, Dr. Abraham Horwitz, and Dr. Frances Davidson for review. Based upon the comments from this evaluation, the IVACG Steering Committee requested a meeting to resolve issues raised by the reviewers and advised that the discussion should be among individuals with expertise in the specific areas of controversy. Therefore, the secretariat planned and coordinated a meeting that was held 13 July 1990 at UNESCO in Paris. Prior to the meeting the secretariat prepared a new draft of the document which incorporated many of the suggestions from the manuscript review.

The group left the Paris meeting with consensus of opinion on several key issues. This consensus led the secretariat to prepare another draft by 4 September 1990 for review by the task force and the Paris meeting participants. The plan at that time was to receive comments, revise the document one more time, and then submit it to Dr. Robert Kim-Farley, head of WHO's Expanded Programme on Immunization (EPI), in time for presentation at the October EPI Global Advisory Group Meeting. However, during review of the 4 September manuscript, WHO staff members expressed concerns about some of the same issues previously resolved in Paris, specifically dosage levels and scheduling. They maintained that there is inadequate documented evidence to support the recommendations in the draft.

Although the secretariat has tried to bring this effort to conclusion, important issues must again be agreed upon before the document can be published. The secretariat will discuss the current dilemma with Dr. Underwood and Dr. Kim-Farley and seek appropriate resolution in early FY91.

### **Other IVACG Activities**

#### IVACG Regional Representatives for Africa

During this year, a new regional representative for Eastern Africa was selected by the IVACG Steering Committee. Dr. Pawlos Quana'a, a respected ophthalmic surgeon from Ethiopia, accepted the secretariat's invitation to take the appointment. He has been actively involved with vitamin A issues, has a wide circle of contacts, and is familiar with concerns of policy makers. Dr. Quana'a succeeded Dr. Demissie Habte,

who relocated to Dhaka, Bangladesh. Due to his remoteness from East Africa, Dr. Habte was unable to continue his role as an IVACG Regional Representative for Africa.

This year there was a marked increase from the program's inaugural year in interest by other organizations wishing to collaborate with the regional representatives. The secretariat began working with the Vitamin A Field Support Program (VITAL) of the International Science and Technology Institute (ISTI) and HKI's VITAP to include IVACG regional representatives as presenters in local conferences and to use them as program resources.

### Xerophthalmia Club Bulletin

The secretariat addressed recent concerns about the editorial content of the newsletter. The editor, Dr. Donald McLaren, wrote some provocative editorials this year prompting reconsideration by steering committee members of IVACG's financial contribution to the publication. A meeting was called between the editor and representatives of the two donor agencies -- IVACG and the Royal Commonwealth Society for the Blind (RCSB) -- for 1 June 1990 in London to discuss the newsletter's editorial content and the review process. Dr. McLaren maintained that his editorials should be protected by freedom of speech. IVACG and RCSB concurred, but with the admonition that the editor carefully consider the tone and sensitivity of his comments as they reflect back on the sponsors, and clearly identify them as his own. IVACG renewed its pledge to support the newsletter jointly with RCSB. The matter was considered settled, but the next issue of the newsletter contained a cartoon that some steering committee members found inappropriate. This sentiment was conveyed to the editor.

### News Releases

A release concerning the steering committee's statement about the role of vitamin A in child health and survival was sent to more than 150 institutions, publications, and agencies worldwide. Another release was distributed to international publications and organizations alerting them to the availability of the summary of the National Symposium and XIII IVACG Meeting. In addition, the secretariat dispatched a call for abstracts for the XIV IVACG Meeting as a news release to more than 500 publications and individuals who have expressed interest in previous meetings. Subsequently, this call appeared in *Vitamin A Newsnotes* and several other publications.

### Collaboration with Other Groups Active in Vitamin A Programs

The XIII IVACG Meeting provided an excellent opportunity to renew ties with many international agencies and non-governmental organizations and to share information about IVACG activities. A review of the agenda and meeting participant list included

in Appendix 1 will reveal the diversity of international groups that were represented and played an active role in presentations and discussions.

The secretariat continued to assist HKI with its revision of the brochure, *Saving A Child From Xerophthalmia: A Disease of Darkness*. NF was a collaborator on previous editions. The secretariat also furnished comments to HKI's VITAP staff about a draft for their survey of national vitamin A policies and provided referrals in several developing countries for this questionnaire. The secretariat furnished additional assistance and information throughout the year, e.g., articles for the VITAP Newsletter, *Vitamin A Newsnotes*.

VITAL also regularly received information and support from the secretariat staff. VITAL staff members visited the secretariat to discuss their collaborative relationship and to review the IVACG Communication/Education Task Force survey files. Another cooperative task in progress between VITAL and the secretariat stemmed from an urgent demand for Spanish language vitamin A materials. VITAL arranged for Spanish translations of IVACG publications for use in Latin America. The materials will be reviewed and finalized by VITAL and then sent to the IVACG Secretariat for publication and distribution.

The secretariat also assisted the following groups and individuals on various projects: Find Your Feet, USA; Howard University, Division of Ophthalmology; USAID Press Office; ORANA; CARE, Bolivia; Centers For Disease Control; Administrative Committee on Coordination-Subcommittee on Nutrition of the United Nations (ACC/SCN); and Dr. Olivier Amédée-Manesme.

## **IVACG Publications**

### General Distribution of IVACG Publications

The IVACG Secretariat and the IVACG Regional Representatives for Africa distribute publications primarily in response to direct requests. The AID Office of Nutrition, the WHO Nutrition Unit, HKI, the Dana Center for Preventive Ophthalmology, VITAL, and the Clearinghouse on Infant Feeding and Maternal Nutrition also distribute IVACG publications.

Copies of the new IVACG publications, *Methodologies for Monitoring and Evaluating Vitamin A Deficiency Intervention Programs* and *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A*, were supplied to the IVACG Regional Representatives for Africa for distribution. They were also provided to the XIII IVACG Meeting participants, and their availability was announced in the *Xerophthalmia Club Bulletin* and *Vitamin A*

*Newsnotes.* Additional copies of *Methodologies for Monitoring and Evaluating Vitamin A Deficiency Intervention Programs* and a supply of *The Safe Use of Vitamin A By Women During the Reproductive Years* were furnished to AID's State-of-the-Art (SOTA) workshop for USAID Health, Population and Nutrition Officers during the summer. The secretariat has received several complimentary letters about *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A*. In fact, the University of Hawaii plans to use the publication as a text for a public health graduate course.

Early in the year the steering committee considered revising *Guidelines for the Eradication of Vitamin A Deficiency and Xerophthalmia*. Dr. C.O. Chichester had reviewed and edited a proposed revision; however, the plan to revise it, along with *The Symptoms and Signs of Vitamin A Deficiency and Their Relationship to Applied Nutrition*, was abandoned in favor of concentrating writing efforts on new publications needed in the field.

The French translation of *Vitamin A Supplements: A Guide to Their Use in the Treatment and Prevention of Vitamin A Deficiency and Xerophthalmia* is now available from the secretariat and WHO. Although this document is listed as part of the monograph series, it is printed by WHO and copies are purchased by the secretariat for distribution. The secretariat will reproduce a Spanish translation arranged by VITAL and have it available for distribution in the next fiscal year.

## **International Nutritional Anemia Consultative Group (INACG)**

### **Introduction**

The Nutrition Foundation, Inc. first received financial support as secretariat for INACG in 1977. Funding continued through a series of grants and extensions until the present cooperative agreement was signed, providing a five year period of funding.

The mission of INACG is to guide international activities aimed at reducing iron deficiency anemia in the world.

INACG sponsors international meetings and scientific reviews and convenes task forces to analyze issues related to etiology, treatment, and prevention of nutritional anemias. Examination of these issues is important to the establishment of public policy and action programs. INACG provides a forum to foster the interchange of ideas, the presentation of new research findings and survey data, and the discussion of action programs. INACG assists governments in the establishment of national programs to combat nutritional anemia through the development of strategies for the

particular region and by furnishing consultants to these programs. All of these functions are carried out in close collaboration with the Office of Nutrition, AID. Dr. Samuel G. Kahn, Senior Nutrition Advisor, S&T/N, serves as INACG Secretary.

### **INACG Advisory Committee**

The INACG Advisory Committee was formed this year to broaden the guidance available to the administrative committee and held its first meeting in January. Comprised of Dr. Fatimah Linda Collier Jackson, Dr. Richard Theuer, Dr. J. Peter Greaves, Dr. Ray Yip, and Dr. Samuel Fomon, the advisory committee represents private and public sectors in addition to a representative from a U.N. agency. Earlier in the year Dr. Alberto Pradilla, Chief of WHO's Nutrition Unit, agreed to serve as INACG Senior Advisor. The Advisory Committee recommended that INACG provide counsel regarding the severity of nutritional anemia to all classes of society. The recommendation were as follows:

- Establish a clearinghouse of information to facilitate the reduction of nutritional anemia
- Increase the awareness of the prevalence and severity of iron deficiency anemia including identifying population groups at risk of suffering impairment in mental and physical productivity
- Better define the conceptual and organizational nature of INACG in light of the need for identifiable experts to facilitate development of operational programs by countries and donor groups
- Increase the INACG funding base to permit expansion into areas mentioned above including a substantial social marketing scheme to promote implementation of these recommendations

During the fourth quarter of fiscal year 1990 discussions took place concerning formation of an INACG Steering Committee as specified in the modified cooperative agreement (Appendix 6). No decisions on membership were made by the close of the fiscal year, but regional representation from developing countries will be required.

### **Task Force Activities**

#### **Maternal Nutritional Anemia**

The task force completed its objective with the publication of *Guidelines for the Control of Maternal Nutritional Anemia* in September 1989. During this fiscal year, copies of the publication were sent to the Maternal Nutritional Anemia Workshop participants and to S&T/N. A news release announcing the publication was circulated to 70 newsletters and journals which focus on issues of nutrition, health, and development. Many publications printed the announcement including *Journal of the*

*American Dietetic Association, Nutrition Center of the Philippines Bulletin, Tropical Doctor, Health Technology Directions, Mothers and Children, NCIH Healthlink, ILSI News, Community Nutrition Institute Week, and Nutrition Today.* The combined circulation of these publications is more than 79,000. The announcement generated a continuous stream of requests for the guidelines. The news release is included as Appendix 7 and includes a listing of where it was sent.

Because of the widespread popularity and importance of this publication, it was decided to translate it into Spanish and French to further enhance distribution into non-English speaking countries. Several native Spanish speakers reviewed the Spanish translation and suggested revisions. French interpretation met with considerable difficulty and after several French speakers reviewed the French translation, it became evident that retranslation was appropriate. A well regarded expert who has translated many AID documents into French was recommended and her services were chosen to retranslate the entire document. Publication of both of these translations is expected during Q1 FY91.

#### Task Force on NaFeEDTA

Dr. Sean Lynch discussed with Dr. Morck and Dr. Kahn the possibility of forming a task force to produce a monograph on the use of NaFeEDTA in iron fortification systems. Dr. Kahn designated the formation of the iron-EDTA task force a priority for the INACG Secretariat and agreed that Dr. Lynch should develop a preliminary outline of the topic. A meeting will be planned for next quarter to determine the steps and individuals necessary to move ahead with this monograph.

Ideas for this task force have been articulated over the past five years. A 1985 outline, drafted by Dr. Fernando Viteri for Dr. Kahn, for the preparation of a monograph on NaFeEDTA as a compound to fortify diets in developing countries, is on file in the secretariat office. Associated cost and timeframe to complete that monograph were included, but the file contains no response from AID. Dr. Lynch has asked for INACG's commitment to publish the monograph if he devotes his time and effort to preparing it. It will be included in workplans for FY91.

#### Relationship of Anemia to Mental and Behavioral Development

Task force members developed chapters for this monograph in 1989. During FY90, editing done by Dr. David Levitsky was incorporated into the manuscript and the manuscript was reviewed by Dr. Kahn and Dr. Morck. They recommended that Dr. Moussa Youdim have an opportunity to further edit the chapter he authored due to the extremely technical nature of his topic. Additionally, Dr. Kahn recommended that Dr. C.O. Chichester draft an introduction and conclusion for the monograph.

Dr. Youdim revised the chapter considerably but further review concluded that it was still inconsistent in language and technical detail relative to the other chapters. In order to achieve a cohesive and readable monograph, several technical writers were contacted to consider restructuring the document. There was a unanimous conclusion that the extensive editing and rewriting required to achieve continuity could be better applied to rewriting the entire document, and updating with recent data published since the original manuscript. This will be carried out during FY91.

### **Other INACG Activities**

#### **Research Project to Determine the Effectiveness of Iron Fortified Infant Cereal in the Prevention of Iron Deficiency Anemia**

This study is administered by the INACG Secretariat with funds from the U.S. food industry. The research project, which began in 1988, is determining whether infant cereal as it is currently fortified in North America--with electrolytic iron powder--is effective in preventing iron deficiency anemia in young children. The principal investigators are Dr. Tomas Walter of Instituto De Nutricion Y Tecnologia De Los Alimentos (INTA), University of Chile and Dr. Peter Dallman of the University of California, San Francisco.

The secretariat monitored the study's progress, reviewed the project budget and reports, provided administrative support, and placed orders for laboratory equipment and research supplies. It is anticipated that the study will be completed during the second quarter of fiscal year 1991.

#### **Administrative Coordinating Committee/Subcommittee on Nutrition of the United Nations (ACC/SCN) Background Paper**

The INACG Secretariat helped a consultant, provided by the ACC/SCN, prepare a background paper on developing global strategies to control iron deficiency anemia. The secretariat furnished the consultant with work space and several references from INACG files and, with Dr. Samuel Kahn, participated in a critical review of the draft paper. The final document was presented to the SCN's Advisory Group on Nutrition (AGN) at its February 1990 meeting.

Subsequently, a joint ACC/SCN workshop on Iron Deficiency Control was held 6-8 June, 1990 in Dublin, Ireland. Co-sponsored by the World Bank, UNICEF, and WHO, this workshop dealt primarily with iron supplementation programs and only gave alternate approaches cursory attention. Dr. Samuel Kahn, INACG Secretary, and Dr. Timothy Morck, INACG Secretariat Director, participated in the meeting. In response to the group's desire to see the topic of iron fortification of foods updated, INACG

finalized plans that were already underway to hold a meeting on that topic before the end of 1990.

### XII INACG Meeting

The INACG Secretariat recommended that this meeting have a broad invitation list and that adequate time be allowed to invite submission of abstracts. Based on its experience with IVACG, the secretariat believed that INACG could benefit tremendously from the contributions of seasoned researchers, young scientists, and program managers. The secretariat also suggested that INACG meetings be open to individuals who are interested in development and wish to learn more about controlling iron deficiency anemia.

Preparations for the December meeting began in May 1990. The secretariat, working with Dr. Kahn, designed the meeting theme, format and program content. Secretariat staff initiated meeting site selection, speaker invitations, and travel arrangements. The invitation list and proposed budget were developed as well. Several revisions of these documents complicated and prolonged the planning process, but the dates 5-7 December, 1990, have been selected and the meeting site will be the Pan American Health Organization in Washington, DC. The proposed agenda and meeting objectives are shown in Appendix 8.

### Collaboration with Other Groups Active in Nutritional Anemia Programs

The INACG Secretariat was instrumental in contributing names of individuals and contacts to Dr. Stuart Gillespie, for use in developing the invitation list and conference material for the June workshop in Dublin. The INACG Secretariat was represented at this meeting and, consequently, finalized plans to host a complementary workshop that would contribute to a better understanding of the role of iron fortification systems in combatting widespread iron deficiency.

In addition, the secretariat sent INACG publications and information to China with Dr. Y.H. Yang for distribution to his colleagues and other secretariat contacts. The following individuals and groups received assistance from the secretariat on various projects: Find Your Feet, Ltd.; Dr. Samuel Fomon; Academy for Educational Development; and the World Bank. The secretariat also met with representatives of various international agencies and non-governmental organizations, including UNESCO and Groupe D'Etudes et De Recherches Sur La Malnutrition (GERM), to share information about INACG activities.

## **INACG Publications**

### *Measurements of Iron Status*

*Measurements of Iron Status*, an INACG monograph, was cited in the "Books Received" section in the January 1990 issue, of to the *American Journal of Clinical Nutrition*. This led to numerous requests for the document.

### *Guidelines for the Control of Maternal Nutritional Anemia*

As previously described, *Guidelines for the Control of Maternal Nutritional Anemia* is a popular document. The secretariat has handled a steady stream of inquiries about the publication since its introduction. Consequently, format and style of the publication may be used as a model for comparable future texts. French and Spanish translations of this publication were prepared and reviewed this year, with distribution available in early FY91.

### General Distribution of INACG Publications

INACG publications are distributed primarily as a result of direct requests to the INACG Secretariat, the AID Office of Nutrition, the WHO Nutrition Unit, and the Clearinghouse on Infant Feeding and Maternal Nutrition.

## **Project SUSTAIN**

Project SUSTAIN, a program linking private U.S. food industry technological expertise with food problems of developing countries, was receiving more requests for technical information, short term consultant services and training programs than current funding was able to support. Under the NF cooperative agreement there was no mechanism whereby USAID country missions could assist with funding travel and per diem for Project SUSTAIN consultants who donated their time. Since SUSTAIN addressed a food and nutrition need that was different from the child survival and household food security theme of IVACG and INACG, S&T/N chose to relocate SUSTAIN with another industry-oriented group, the National Cooperative Business Association. Under this new arrangement, mission buy-in funding is authorized which will significantly augment Project SUSTAIN's core support and offer much greater potential for program expansion. It can now grow as the cornerstone program of S&T/N's "Nutribusiness" initiative.

The decision to relocate Project SUSTAIN was made in late 1989, with the official termination date of Project SUSTAIN as part of Cooperative Agreement No.

DAN-5115-A-00-7114-00 being 31 December 1989. The Program Manager and his assistant continued through January 1990 to conclude work that had already been in progress. A final report of Project SUSTAIN activities while under Cooperative Agreement No. DAN-5115-A-00-7114-00 during the period 1 January 1988 through 31 December 1989 is included as Appendix 9.

## **International Nutrition Planners Forum (INPF)**

### **Introduction**

With the restructuring of the S&T/N portfolio child survival and household food security categories, NF was selected to serve as the secretariat for the International Nutrition Planners Forum (INPF). This is an informal organization of professionals from developing countries with expertise and responsibilities for food and nutrition-related policies and programs. The INPF provides opportunities and channels of communication for its members to exchange ideas and experiences; learn from one another; discuss common nutrition problems and possible solutions; formulate policy and technical recommendations; make points of view of developing countries known internationally; and become influential on important decisions made by international organizations and donors.

Under the terms of the modified cooperative agreement, the INPF secretariat provides managerial, administrative, and logistical support to the INPF and the INPF Steering Committee consisting of seven members. Two members represent each of the three geographic regions (Latin America & Caribbean, Asia-Near East, and Africa) and the AID Project Officer for INPF is the seventh member.

### **INPF Steering Committee**

Active support for INPF Steering Committee activity began well before the modification to the cooperative agreement was signed and finalized (and before promised funds were guaranteed) because of the time-sensitive nature of planning for the next international meeting. Dr. Jerome met with Dr. Morck on 7 April 1990 to initiate planning for the steering committee meeting that was held 16-17 June 1990 at the Hyatt Regency Crystal City in Arlington, VA. The dates had been previously selected to coincide with the annual meeting of the National Council for International Health (NCIH) because a panel presentation by INPF members had been included on the program. The secretariat established contact with steering committee members and invited guests, coordinated details with the NCIH meeting staff, prepared the steering committee agenda, and undertook all international and local travel and lodging arrangements. Since designated funds had not yet been authorized, no additional staff could be hired to assist with these tasks.

The steering committee meeting successfully addressed all proposed agenda items and finalized details associated with the 6<sup>th</sup> International INPF Conference. This will be held 10-13 September 1991 in Bangkok, Thailand on the theme "*Effective Nutrition Communication for Behavioral Change*". Particular subject matter expertise was provided by Mr. Mark Lediard, Academy for Educational Development, who will continue as a consultant during program development. An agenda and minutes from the INPF Steering Committee meeting are included as Appendix 10.

On behalf of Professor Gabr, INPF Chairman, the secretariat formally invited Ms. Julia Tagwireyi from Zimbabwe to join the INPF Steering Committee. With the assistance of Dr. T.N. Maletnlema, President of AFRONUS, Dr. Nago from Benin was identified as a West African nutritionist who could effectively represent the Francophone countries of West Africa on the steering committee. The secretariat began initiating communications with him during the last quarter.

Letters of appreciation were sent to former INPF Steering Committee members Dr. Adenike O. Grange and Dr. Walter J. Santos who completed their term of service on the steering committee.

During the last quarter of the fiscal year, the secretariat initiated plans to hold the next INPF Steering Committee Meeting in Cairo, Egypt in January 1991. With events in the Persian Gulf adding uncertainty to safe travel within that region, the site for the meeting was changed to Paris, France since nearly all flights already reserved connected in Paris en route to Cairo. The agenda for this meeting will entail finalizing the program for the Bangkok meeting and determining criteria for inviting countries to send a 3-person national team consisting of a nutrition programmer, a nutrition resource expert, and a communications leader.

## **INPF International Meetings**

### **6<sup>th</sup> International INPF Conference**

Planning for this conference occurred during several written and oral communications between the secretariat, Mr. Mark Lediard (Academy for Educational Development), and Dr. Norge W. Jerome (S&T/N). Plans for a background document outlining the approach to be taken in presenting nutrition communication techniques and strategies during the conference were discussed and the document will be sent to steering committee members prior to the January meeting for their comments.

Communication was exchanged between the secretariat office and Dr. Aree Valyasevi concerning potential hotels that could host the September 1991 meeting in Bangkok. In a telephone conversation with Dr. Sakorn Dhanamitta, Director of Mahidol

University's Institute of Nutrition, the protocol and time allowance for opening and closing ceremonies was discussed in preparation for planning the agenda.

The secretariat asked Dr. Aree Valyasevi to request a place early on the agenda of the 6<sup>th</sup> Asian Congress of Nutrition (ACN) for presentation of a summary of the findings from the 6<sup>th</sup> International INPF Conference. The ACN will meet in Malaysia during the week immediately following the INPF meeting. The opportunity to reach a wider audience with the findings from the Bangkok meeting within a close distance and such a short time after the meeting represents important leverage of AID funds in communicating these findings.

### **INPF Task Force Activities**

#### **Task Force on Communications**

One of the topics under discussion at the June steering committee meeting concerned the most appropriate mechanism to improve communication between nutrition workers in developing countries. A task force was formed with co-chairs of Dr. Jaime Ariza and Dr. A. W. Patterson to explore the different aspects of this issue. They met with secretariat staff briefly and decided that a questionnaire sent to nutrition workers in developing countries would provide useful data upon which to base future action. Steering committee members were requested to forward suitable mailing lists to the secretariat to ensure the intended target groups are reached with the questionnaire.

#### **Crucial Elements of Successful Community Nutrition Programs in Community Based Nutrition Intervention Programs**

The idea for this task force began with the desire to use the proceedings from the 5<sup>th</sup> International INPF Conference entitled *Crucial Elements of Successful Community Nutrition Programs* as a training tool rather than a shelf-bound reference book. The objective will be to bring together a small group of practical, program-oriented nutrition experts with field experience to propose guidelines on how to use the proceedings as curriculum material that can be made available to any group wishing to increase its nutrition component. This likely will include programs within ministries of health, agriculture, education, private enterprise, among others, but the lessons learned in Seoul provide valuable insight into how to set up successful programs *in the developing country context*. Terms of reference will be drawn up and task force members invited in early FY 91.

## **Other INPF Activities**

### NCIH Panel Presentation

As prearranged, an INPF panel presentation was given on 19 June during the NCIH meeting. Those representing INPF were Dr. Norge W. Jerome, Chairperson; Professor Mamdouh Gabr, Summarizer; Dr. Aree Valyasevi, Mrs. Julia Tagwireyi, and Dr. Jose Mora gave regional reports on Asia, Africa, and Latin America/Caribbean, respectively. The secretariat provided to all attending the session copies of the proceedings of the 1989 5<sup>th</sup> International INPF Conference, *Crucial Elements of Successful Community Nutrition Programs*, also the title of the NCIH presentation. Attendance exceeded 100 and the room was literally overflowing. Several positive comments were made concerning the value of hearing developing country experts present their own data instead of expatriates, and appreciation for a solid nutrition session in an otherwise all "health" program.

### Meeting with the AID Assistant Administrator for Science and Technology

On the day following the INPF Steering Committee meeting, the secretariat facilitated a meeting of between the INPF participants and Dr. Richard Bissell, Assistant Administrator, Bureau for Science and Technology, AID. Dr. Jerome had arranged this meeting to afford an opportunity for dialogue between Dr. Bissell and leading nutrition experts from several developing countries. Photographs were taken and the secretariat prepared a brief article that was forwarded to *Front Lines*, a widely circulated USAID monthly newsletter.

## **INPF Publications**

Distribution of the proceedings from the 5<sup>th</sup> International INPF Conference held in Seoul, Korea in 1989 were previously handled by another S&T/N contractor. With the establishment of the INPF Secretariat with NF came this responsibility. During the INPF presentation at the NCIH meeting, copies of the above proceedings "*Crucial Elements of Successful Community Nutrition Programs*" in three languages were distributed. In order to develop an INPF mailing list, forms were also included and requested to be returned for a record of recipients of the booklet. The secretariat distributed 54 copies during this fiscal year, including 9 Spanish and 7 French translations.

## **International Nutrition Network Exchange (INNE)**

### **Introduction**

The International Nutrition Network Exchange (INNE) is a two-day convocation of individuals from all organizations participating in S&T/N-funded activities under grants, cooperative agreements, and contracts. The purpose of this meeting is to foster the development of a strategy for enhancing information exchange and networking, strengthening nutrition programs, and identifying areas for policy development. The Office of Nutrition, AID, chose the Nutrition Foundation, Inc. to serve as secretariat for the INNE and provide managerial, administrative, and logistic support to the INNE, to implement the decisions of the planning committee, to organize the annual INNE meeting, to maintain correspondence and liaison with various international organizations, and to arrange for the writing, editing, and publication of manuscripts.

### **1<sup>st</sup> Annual INNE Convocation**

Plans for the 1<sup>st</sup> Annual INNE Convocation were solidified after the modification to the cooperative became finalized at the end of July. Since the Office of Nutrition had selected the dates of 2-3 October 1990 for the 1<sup>st</sup> Annual INNE Convocation, limited hotel options existed that met the necessary criteria of size of group, cost of sleeping and meeting rooms, access to Metro, availability on chosen dates. Only the Holiday Inn Capitol could accommodate the meeting. Plans for the convocation were made by the Office of Nutrition in order to synchronize with a proposed meeting on Nutribusiness.

The program content was modified several times through communications between the secretariat and S&T/N. The original emphasis was on program success in Africa, but as the meeting date approached the theme became broader. Mr. C. Payne Lucas, President of AFRICARE, was selected by S&T/N to give the keynote talk on the first day. After multiple telephone calls he was persuaded to agree to address the current situation in Africa from the political and economic standpoint. Other aspects of the program dealt with nutrition topics. The final program is included as Appendix 11.

Personalized invitations were sent to 59 implementors and 85 AID staff members. Several of the latter were sent out within days of the meeting which disrupted other pre-meeting activities. Each implementing organization was requested to submit written material to be included in the meeting packets. This described their nutrition efforts, with particular emphasis on programs in Africa. Special guests were invited to display the low-cost solar cooker marketed by Solar Box Cookers, International, and to describe its usefulness for improving the nutritive value of food and also pasteurization of drinking water.

The INNE meeting will be held within the first few days of the next fiscal year. Appropriate follow-up will occur during the first quarter of FY91.

## **General Cooperative Agreement Activities**

### **Monitoring and Tracking Requests for Information**

Responding to information requests is one of the secretariat's most important functions. During fiscal year 1990, it made significant strides to improve its delivery. To that end, the secretariat installed new database software that enables the secretariat to determine:

- which publications need more promotion
- which publications elicit the greatest interest
- which regions may need more attention (as indicated by a region's paucity of requests for information in spite of documented vitamin A deficiency or nutritional anemia prevalence)
- which correspondents are most interested in IVACG, INACG, or INPF and therefore could be encouraged to participate in meetings and events
- where further coordination of publications distribution may be beneficial

All of the secretariat's IVACG, INACG, and INPF request files were entered into the database. As part of the new tracking system, the publications order form and information sheet were revised.

### Request Categories

#### **IVACG**

The secretariat responded to 425 individual requests during the year for publications and other information about vitamin A. Some requests involved personal interviews. Among those were Hubert H. Humphrey Fellow, Dr. Miguel Flores, who discussed vitamin A deficiency in Costa Rica; Dr. Janice Rankins of Florida State University, who spoke about Senegal's use of solar dryers for vitamin A-rich food; and Dr. Judith McGuire of the World Bank, who described the bank's proposed micronutrient project.

#### **INACG**

The INACG Secretariat responded to 266 individual requests during the year for publications and other information about nutritional anemia. Many of the requests were in response to the press release circulated by the secretariat regarding *Guidelines for the Control of Maternal Nutritional Anemia*.

## **Combined**

The secretariat provided Dr. Helen Guthrie with IVACG and INACG publications for use during the Consortium of Asian Schools of Public Health workshop in Singapore. The workshop's purpose was to encourage more integration of nutrition education into public health curricula. Participants included representatives from Asian ministries of health and schools of public health.

The secretariat sent information to China with Dr. Y.H. Yang for his colleagues and other secretariat contacts. The secretariat also fulfilled bulk order requests, including one from Vietnamese colleagues. Special effort was made to provide general career guidance, and assistance with vitamin A and nutritional anemia information to foreign and domestic graduate students.

## **Sources of Requests**

The largest percentage of solicitations came from developing countries. The secretariat responded with IVACG and INACG publications as well as with information and referrals to assist in undertaking field programs to combat vitamin A deficiency and nutritional anemia. The IVACG Regional Representatives for Africa also provided IVACG information in their regions upon request.

## **Reporting Requirements**

Reports for the first, second, third, and fourth quarters of fiscal year 1990 as well as meeting minutes and trip reports were submitted to the Project Officer, Ms. Carolyn Coleman, S&T/N. A significant amount of time was spent by the Project Director in discussing and reviewing proposed modifications to the scope of work under Cooperative Agreement No. DAN-5115-A-00-7114-00. A five-year budget detailed by quarter was required. The difficulty arose from the fact that budget figures for the first 2½ years were actual expenses (tracked on three different accounting systems) and the remaining 2½ years were projected expenses, broken down by quarter.

Requests from program officers for reports on financial and program accomplishment detail were frequently received by the secretariat. Pipeline analysis was performed at least twice during the year.

## **FY91 Workplans and Budgets**

Individual program workplans for FY91 and separate and combined budgets as submitted to S&T/N are shown in Appendix 12.

## Financial Report

### Summary of Direct Expenses for Fiscal Year 1990 Cooperative Agreement No. DAN-5115-A-00-7114-00

FY90 Yearly Totals	Vitamin A	Anemia	Sustain	INPF	INNE	Total
Direct Labor	81,966	30,016	28,122	4,145	4,723	148,972
Fringe Benefits	16,517	5,613	1,562	902	0	24,594
Consultants	7,075	2,025	0	0	295	9,395
Publications	3,098	(158)	2,384	13	0	5,338
Editorial & Support Svc	2,606	2,194	4,292	654	1,193	10,939
Travel & Per Diem	36,383	50	3,317	12,800	0	52,550
Supplies	3,427	846	280	94	281	4,929
Equip Purchase	0	0	0	0	0	0
Office Rent	12,440	4,522	2,259	2,052	0	21,272
Fiscal Administration	12,142	4,002	824	853	0	17,821
Communications	32,241	3,724	3,073	1,267	647	40,951
Meeting room Rent	812	0	0	1,411	1,098	3,322
<b>Total direct</b>	<b>208,707</b>	<b>52,835</b>	<b>46,112</b>	<b>24,192</b>	<b>8,236</b>	<b>340,082</b>
Indirect (12%)	25,045	6,340	5,533	2,903	988	40,810
<b>Total amount</b>	<b>233,752</b>	<b>59,176</b>	<b>51,645</b>	<b>27,095</b>	<b>9,225</b>	<b>380,892</b>

**Status of Cooperative Agreement Financial Standing at End of FY 90**

**Historical Perspective  
 Additions to Obligated Amount from Modifications  
 to the Cooperative Agreement**

	Orig CA Amount	Mod #1 Added	Mod #2 Added	Mod #3 Added	Mod #4 Added	Amount Obligated	Cost Sharing	Total Est Amount
Date	10/1/87	8/30/88	8/23/89	11/14/89	7/25/90			
Amount	1,181,938	229,000	60,000	60,000	565,000	2,095,938	1,400,000	4,594,640

**Financial Information by Program**

	IVACG	INACG	SUSTAIN	INPF	INNE	Total
Tot AID Amt	1,468,175	572,823	405,097	616,000	44,220	3,194,640
Cost Sharing	700,000	270,000	493,412	24,903	0	1,400,000
Total Est. Amt	2,168,175	842,823	898,509	640,913	44,220	4,594,640
<b>Present Expenses Relative to Totals</b>						
Total AID Amt	1,468,175	572,823	405,097	616,000	44,220	3,194,640
Amt Obligated	1,072,991	429,000	493,412	85,535	15,000	2,095,938
Spent to date	801,173	221,285	493,412	27,079	9,225	1,552,191
% of Obligated	74.7	51.6	100	31.6	61.5	74.0
Tot NF Amt	700,000	270,000	405,097	24,903	0	1,400,000
Contrib to date	418,134	274,552	405,097	9,519	946	1,108,247
% of Total	59.7	101.7	100.0	38.22	0	79.1

## List of Appendices

1. National Symposium and XIII IVACG Meeting Agenda and List of Participants
2. Cover and Table of Contents, Summary of National Symposium and XIII IVACG Meeting
3. News Release: Summary of The National Symposium and XIII IVACG Meeting Mailing List
4. Call For Abstracts XIV IVACG Meeting
5. IVACG Releases Statement on Role of Vitamin A in Child Health and Survival, and Mailing List
6. INACG Advisory Committee Meeting Minutes and Recommendations
7. INACG Releases Guidelines to Help Anemic Mothers and List of Publications
8. XII INACG Meeting Agenda with Objectives
9. Project Sustain Final Report
10. INPF Steering Committee Agenda and Minutes
11. INNE Convocation Final Agenda
12. Workplans and Budgets for FY90

# Appendix 1

**National Symposium and XIII IVACG Meeting**  
Kathmandu, Nepal  
5-10 November 1989

---

**Saturday, 4 November 1989: Registration for National Symposium and XIII IVACG Meeting**

1300-1700 Lobby, Bluestar Hotel

**Sunday, 5 November 1989: National Symposium**

0845-0930 Transportation from the Bluestar Hotel to the Royal Academy Hall

0930-0945 Seating at the Royal Academy Hall

1030-1200 **Inauguration by Her Majesty, Queen Aiswarya Rajya Laxmi Shah**

Dr. R.P. Pokhrel, Co-Chairperson, Local Committee for National Symposium and XIII IVACG Meeting; Executive Director, Nepal Eye Hospital; Secretary General, Nepal Netra Jyoti Sangh

Mrs. Sushila Thapa, Minister of Health, Nepal

Dr. Norge W. Jerome, Director, Office of Nutrition, Bureau for Science and Technology, U.S. Agency for International Development

Dr. Abraham Horwitz, IVACG Chairman

Mr. Kelly Kammerer, U.S. Agency for International Development, Mission to Nepal

General Rabi Shamsheer J.B. Rana, Chairman, Nepal Netra Jyoti Sangh

Dr. Aung Myat, World Health Organization, Nepal

Dr. Lay Maung, UNICEF, Nepal

Dr. Carl Kupfer, National Eye Institute, National Institutes of Health, USA

1200-1400 Transportation to the Bluestar Hotel and lunch break

1315-1400 **Registration for National Symposium and XIII IVACG Meeting**, Bluestar Hotel

**National Symposium: Overview and Update of the Global Vitamin A Problem**

1400-1415 Opening remarks, Bluestar Hotel

Co-chairperson: Dr. R.P. Pokhrel

Co-chairperson: Dr. Abraham Horwitz

1415-1445 Global Dimensions of Vitamin A Deficiency  
Dr. Demissie Habte

1445-1515 Newer Aspects of Vitamin A Metabolism  
Dr. James Olson

- 1515-1530 Questions
- 1530-1600 Break
- 1600-1630 Newer Aspects of Assessment of Vitamin A Nutriture  
Dr. Alfred Sommer
- 1630-1700 Intervention Strategies and Long-term Solutions in the Prevention and Control of Vitamin A Deficiency  
Dr. Barbara A. Underwood
- 1700-1730 Questions and announcements

**Evening Program**

- 1800-1830 Transportation from the Bluestar Hotel to the Royal Academy Hall
- 1900-2000 Cultural Presentation at the Royal Academy Hall
- 2000-2030 Reception at the Royal Academy Hall  
Sponsored by the Local Committee for the National Symposium and XIII IVACG Meeting
- 2030-2130 Buffet Dinner at the Royal Academy Hall
- 2130-2200 Transportation to hotels

---

**Monday, 6 November 1989: National Symposium: Vitamin A Deficiency and Prevention in Nepal: Building a National Strategy**

- 0900-0915 Opening Remarks  
Dr. Ram Prasad Pokhrel
- Session 1 Defining the Public Health Importance of Vitamin A Deficiency**  
0915-1045 Chairperson: Dr. Harka Bahadur Gurung
- 0915-0930 The WHO Prevention of Blindness Survey  
Dr. Om K. Malla
- 0930-0945 The Tribhuvan University Xerophthalmia Survey  
Prof. Madan P. Upadhyay
- Vitamin A Status and Intake in Nepal: Update 1989
- 0945-0955 Vitamin A Deficiency in Southeast Nepal  
Dr. Sachet P. Shrestha
- 0955-1005 Xerophthalmia in Sarlahi District (East-Central Tarai): Preliminary Data  
Dr. Subarna K. Khatri
- 1005-1015 Vitamin A Status in the Central Tarai: Preliminary Data  
Dr. Bhagbat P. Nepal

- 1015-1025 The Jumla Xerophthalmia Survey (Mountains)  
Mr. Eric Starbuck
- 1025-1035 Dietary Influence on Vitamin A Intake Among Mothers and Children of the Hills/Mountains of Nepal  
Dr. Madhav Gautam
- 1035-1050 Discussion and Summary
- 1050-1110 Break
- Session 2 Vitamin A Intervention Strategies for Nepal**  
1110-1225 Chairperson: Dr. T.N. Uppreti
- 1110-1120 Vitamin A Deficiency Control Through Education  
Mr. Dhruv Shrestha
- 1120-1130 Nutrition Behavior: A Study in Chitwan  
Dr. Shashi M. Shrestha
- 1130-1140 Vitamin A Nutrition and Public Health Education  
Dr. Shambhoo P. Lakhey and Dr. K.P. Adhikari
- 1140-1150 Carotene Content of Some Prominent Food Plants of Nepal  
Mr. Yogesh Vaidya
- 1150-1200 Potential for Fortification: A Consultant Feasibility Study  
Mr. Elliot Marseille
- 1200-1210 Control of Vitamin A Deficiency and Xerophthalmia within the Context of Nutrition Intervention Strategy  
Dr. Sudip K. Bhattra
- 1210-1225 Discussion and Summary
- 1225-1400 Lunch
- Session 3 Reports of Vitamin A Programs in Nepal**  
1400-1505 Chairperson: Professor R.P. Pokhrel
- 1400-1410 SEVA: Vitamin A Deficiency Prevention Through Primary Eye Care Volunteers  
Dr. Ram Prasad Koirala
- 1410-1420 United Kingdom Save the Children Fund: Vitamin A Deficiency and Its Prevention in Surkhet (Hills)  
Dr. Terry Matthews
- 1420-1430 Helen Keller International: Integration of Vitamin A Distribution Within a Rehabilitation Program  
Mr. Joel Harary
- 1430-1440 Freedom From Hunger Foundation: A Vitamin A Kitchen Gardens Program  
Mr. Govinda Chitrakar
- 1440-1450 UNICEF: Vitamin A Support Program in Nepal  
Dr. Lay Maung

1450-1505 Discussion and Summary

**Session 4 Vitamin A Research Agenda in Nepal**

**1510-1645** Chairperson: Dr. M.R. Pandey

Double-masked, Community Trial to Assess Efficacy of Vitamin A in Reducing Childhood Mortality in Nepal (The Nepal Nutrition Intervention Project - Sarlahi: "NNIPS")

1510-1520 Goals, Design, and Method of NNIPS  
Mr. Sharada Ram Shrestha

1520-1530 Quality Control Procedures of NNIPS  
Mr. Uddhab Khadka

1530-1540 Treatment Group Comparability at Baseline: Preliminary Findings  
Dr. Keith West

1540-1600 Break

Cost-Effectiveness of Different Practical Approaches to Preventing Vitamin A Deficiency (Nepal Vitamin A Child Survival Project)

1600-1615 Program Design and Basic Findings  
Dr. Gopal P. Pokhrel

1615-1630 Vitamin A Deficiency Control Interventions and Their Implementation  
Dr. Chet R. Pant

1630-1645 Summary and Discussion

**1645-1700 Closing Remarks**  
Dr. M.R. Pandey

---

**Tuesday, 7 November 1989: IVACG Meeting, Bluestar Hotel**

0815-0830 Opening of IVACG Meeting  
Dr. Abraham Horwitz, IVACG Chairman

Dr. Norge W. Jerome, Director, Office of Nutrition, Bureau for Science and Technology, U.S. Agency for International Development

**Session 1 Vitamin A in Morbidity and Mortality of Young Children**

Chairperson: Dr. Abraham Horwitz

0830-0900 Historical Perspective  
Dr. Alfred Sommer

0900-0930 Current Perspective  
Dr. Ranjit Chandra

0930-1000 Effect of Periodic High Dose on Morbidity and Mortality in Preschool Indian Children  
Dr. K. Vijayaraghavan

1000-1030 Effect on Morbidity of a Continuous Modest Improved Intake of Vitamin A in Indian Children  
Dr. Laxmi Rahmathullah

1030-1045 Discussion

1045-1115 Break

**Session 2 Vitamin A in Morbidity and Mortality of Young Children: Africa**

Chairperson: Dr. Florentino Solon

(The following will be 10 minute presentations with 5 minute discussions.)

1115-1130 VAST Design and Logistic Issues: The Methodology of the Ghana Vitamin A Supplementation Trial on Childhood Mortality  
Dr. David Ross

1130-1145 Vitamin A Supplementation of Asymptomatic Children, Effects on Morbidity and Mortality in Sudan  
Dr. Kamal Ahmed Mohamed and Dr. Alawia El Amin

1145-1200 A Controlled Trial of Vitamin A on Mortality in Ethiopia  
Dr. Hagos Beyene

1200-1330 Lunch

**Session 3 Vitamin A in Morbidity and Mortality of Young Children: Asia**

Chairperson: Dr. Vinodini Reddy

(The following will be 10 minute presentations with 5 minute discussions.)

1330-1345 The Impact of High-Dose Vitamin A on Morbidity Due to Measles Associated Pneumonia: A Double-Blind Randomized Controlled Trial in Philippines  
Dr. Marilla G. Lucero

1345-1400 The Effect of Vitamin A Prophylaxis on Morbidity and Mortality Among Children in Urban Slums in Bombay  
Dr. Gopa Kothari

1400-1415 The Impact of Mega Vitamin A Dosing with and without Anthelmintic Therapy on the Vitamin A and Morbidity Profile of Underprivileged School Boys in Baroda India  
Dr. Tara Gopaldas

1415-1430 Mild Vitamin A Deficiency and Risk of Respiratory Infection and Diarrhea in Preschool and School Children in Northeast Thailand  
Dr. Martin Bloem

1430-1445 The Impact of Vitamin A Intervention on Preschool Child and Infant Mortality in Indonesia  
Dr. Muhilal

1445-1500 Effect of Single Dose VAC on Breastmilk and Morbidity in Mothers of Low Socio-Economic Status in Bangladesh  
Dr. S.K. Roy

1500-1530 Break

1530-1545 Immune Status in Children with Mild Vitamin A Deficiency in Indonesia  
Dr. Richard Semba

1545-1600 Immune Status of Children with Mild Vitamin A Deficiency in India  
Dr. P. Bhaskaram

1600-1645 Summary and Programmatic Implications  
Dr. Jori Rohde

Discussant:  
Dr. Saroj Pachauri

1645-1745 **Poster Session A: Morbidity and Mortality Projects**  
(set up poster sessions 1300-1330, break down poster sessions 1745-1815)

Optional presentations for projects discussed earlier in the day  
(See poster session schedule for list of presenters)

Vitamin A Deficiency in Acute Febrile Malaria Infection in Children  
Dr. Olivier Amedee-Manesme

Impact of Oral Vitamin A Supplementation on the Morbidity of Diarrheal and Acute Respiratory Diseases in Breast-fed Bangladeshi Children  
Dr. P.K. Bardhan

Investigation of the Therapeutic Efficacy of Vitamin A for Childhood Diarrhea  
Dr. Beth Henning

Assessing the Impact of Vitamin A Supplementation on the Incidence and Duration of Episodes of Morbidity Among Children Aged 6 to 47 Months  
Dr. Chris Kjolhede

A Survey on the Prevalence of Vitamin A Deficiency in Children of the Slums of Karachi  
Dr. Ayesha Molla

1900-2100 IVACG Reception, Bluestar Hotel

---

---

**Wednesday, 8 November 1989: IVACG Meeting, Bluestar Hotel**

**Session 4 New Assessment Techniques**

Chairperson: Dr. Olivier Amedee-Manesme

0830-0900 Transfer Technique versus the Non-Transfer Technique for Conjunctival Impression Cytology  
Dr. Olivier Amedee-Manesme

(The following will be 10 minute presentations with 5 minute discussions)

- 0900-0920 Disc Applicator for Assessing Vitamin A Status by Conjunctival Impression Cytology  
Dr. Deborah Keenum
- 0920-0940 Use of the Impression Cytology Method with Transfer During a Prevalence Survey on Vitamin A Deficiency in Malawi in 1988: Interest of the Method and Relations with Morbidity and Energy Nutrient Malnutrition  
Dr. Alain Jean Escoute
- 0940-1000 Vitamin A Deficiency Field Screening by Conjunctival Imprint Cytology: A Study of Technology Transfer  
Dr. Evangeline Olivar-Santos
- 1000-1030 Break
- 1030-1045 Assessment of Marginal Vitamin A Deficiency in Thai School Children by Impression Cytology, Dark Adaptometry and Serum Retinol  
Dr. Emorn Udomkesmalee
- 1045-1100 Conjunctival Impression Cytology: Comparison to Biochemical Measures and Response to Therapy  
Dr. Chris Kjolhede
- 1100-1115 Rapid Appraisal of Community Vitamin A Status Through School Children In Zambia: A Comparison of Assessment Approaches  
Dr. David Mwandu
- 1115-1130 Biochemical Assessment of Vitamin A Deficiency: Serum Distribution Curves Relative to the RDR Test Before and 30 Days After High Dose Supplementation  
Dr. Hernando Flores
- 1130-1145 New Methods for the Assessment of Vitamin A Status  
Dr. James Olson
- 1145-1215 Discussion
- 1215-1400 Lunch
- Session 5 Strategic Considerations for Applied Programs**  
Chairperson: Dr. Benny A. Kodyat
- 1400-1430 Management of Community Based Intervention Programs  
Mr. R.D. Thulasraj
- 1430-1445 Practical Experience in the Use of the Calibrated Plastic Dispensers in the Field  
Mr. Raheem Rahmathullah
- 1445-1515 Tolerance of Preschoolers to Two Dosage Strengths of Vitamin A Preparation  
Dr. Rodolfo Florentino
- 1515-1530 Under What Conditions are Vitamin A Deficiency Control Programs Competitive with Other Child Survival Strategies? Experience in Indonesia  
Dr. Robert Tilden
- 1530-1600 Break

- 1600-1630 Control of Vitamin A Deficiency and Xerophthalmia in Vietnam  
Dr. Ha Huy Khoi
- 1630-1645 Update on the Experiences and Applications of *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A*  
Dr. Luthfor Ahmed
- 1645-1700 Horticultural Approach: The FAO Vitamin A Regional Network  
Ms. Teresa Calderon
- 1700-1715 Home Gardens as a Practical Measure to Combat Vitamin A Deficiency  
Dr. Y.H. Yang
- 1715-1745 Discussion of Future Directions for Intervention Programs
- 1745-1915 **Poster Session B: New Assessment Techniques**  
(set up poster sessions 1330-1400, break down poster sessions 1915-1945)
- Optional posters for studies described earlier in the day  
(See poster session schedule for list of presenters)
- Detection of Vitamin A Deficiency by Ocular Impression Cytology  
Dr. Tahmeed Ahmed
- Loss of Vitamin A from Green Leafy Vegetables in Traditional Cooking Methods Among the Poor Families in Bangladesh  
Dr. M. Mujibur Rahman
- Family Food Production as a Nutrition Intervention Strategy: Some Lessons from the Pacific Islands  
Mr. Paul Sommers
- Vitamin A and Proteins in Tear Fluid  
Dr. Eric J. Van Agtmaal
- Adaptation of Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A*  
Mrs. Kala Ranasamy
- 
- 

**Thursday, 9 November 1989: IVACG Meeting, Bluestar Hotel**

**Session 6 Country Reports**

Chairperson: Dr. Alawia El Amin

0900-0910 Thailand

Dr. Sakorn Dhanamitta

- 0910-0920 Bangladesh  
Ms. Flora Sibanda
- 0920-0930 India  
Dr. Vinodini Reddy
- 0930-0940 Indonesia  
Dr. Benny A. Kodyat
- 0940-0950 Philippines  
Dr. Manuel G. Roxas
- 0950-1000 African Regional Report for French-speaking West Africa  
Dr. Joseph Diallo
- 1000-1010 African Regional Report for Northeastern Africa, Ghana, and Nigeria  
Dr. Demissie Habte
- 1010-1020 African Regional Report for South and Central Africa  
Dr. Moses Chirambo
- 1020-1050 Break
- 1050-1100 Brazil  
Dr. Hernando Flores
- 1100-1110 Myanmar  
Dr. Moe Moe Sunn
- 1110-1120 Western Pacific Islands  
Dr. Michelle Puryear or Dr. Keith West
- 1120-1230 **Poster Session C: Country Reports**  
(set up poster sessions 0830-0900, break down poster sessions 1230-1300)  
(See poster session schedule for list of presenters)
- 1230-1400 Lunch
- Session 7 Agency Reports**  
Chairperson: Mr. Anish Barua
- 1400-1410 Food and Agricultural Organization of the United Nations (FAO)  
Ms. Teresa Calderon
- 1410-1420 United Nations Childrens Fund (UNICEF)  
Dr. V. Ramalingaswami
- 1420-1430 World Health Organization  
Dr. Graeme A. Clugston
- 1430-1440 U.S. Agency for International Development  
Dr. Norge W. Jerome
- 1440-1450 National Eye Institute, National Institutes of Health, USA  
Dr. Barbara A. Underwood

- 1450-1500 International Development Research Center (IDRC)  
Ms. Jenny Cervinkas
- 1500-1510 Ford Foundation  
Dr. Saroj Pachauri
- 1510-1630 **Poster Session D: Agencies and Nongovernmental Organizations**  
(set up poster sessions 1330-1400, break down poster sessions 1630-1700)
- Optional posters for agency and nongovernmental organization representatives  
(See poster session schedule for list of presenters)
- Vitamin A Deficiency in Micronesia: Magnitude and Risk Factors  
Dr. Michélie Lloyd Puryear
- Vitamin A Delivery Through an Inhalative Route  
Dr. H.K. Biesalski
- Rice Powder Oral Rehydration Solution (ORS) and Food For Children with Diarrhea  
Ms. M.E. Krantz
- 1800-1930 Vitamin A Technical Assistance Program of Helen Keller International Reception, Bluestar Hotel
- 
- 

**Friday, 10 November 1989: IVACG Meeting, Bluestar Hotel**

**Session 8 Nongovernmental Organization Reports**  
Chairperson: Ms. Susan Eastman

- 0900-0910 Task Force SIGHT AND LIFE  
Dr. John Gmunder
- 0910-0920 Helen Keller International: Vitamin A Technical Assistance Program  
Ms. Susan Eastman
- 0920-0930 Catholic Relief Services  
Mr. Richard Renas
- 0930-0940 Nepal Netra Jyoti Sangh  
Dr. R.P. Pokhrel
- 0940-0950 Cristoffel Blindenmission  
Dr. Allen Foster
- 0950-1000 Royal Commonwealth Society for the Blind  
Dr. Gopa Kothari
- 1000-1010 International Eye Foundation  
Dr. Larry Schwab

1010-1025 **Official XIII IVACG Meeting Photograph Session**

1025-1045 **Break**

1045-1050 **IVACG Secretariat Report**  
Dr. Timothy A. Morck

1050-1100 **Closing Remarks**  
Dr. Abraham Horwitz, IVACG Chairperson

**Lunch**

**Departure for Site Visits**

**INTERNATIONAL PARTICIPANTS NATIONAL SYMPOSIUM AND XIII IVACG MEETING  
KATHMANDU, NEPAL  
5-10 NOVEMBER 1989**

Dr. V.M. Adhikari  
Marketing Director  
Vitamins & Chemicals  
Roche Products Ltd.  
28, Pt.M.M. Malviya Road  
Bombay-400034  
INDIA

Mr. Mir Mahboob All  
Project Coordinator  
Helen Keller International  
P.O. Box 6066  
Gulshan  
Dhaka-1212  
BANGLADESH

Ms. Dev K. Agarwal  
New E-10  
Jodpur Colony  
Banaras Hindu University  
Varanasi 221 005  
INDIA

Dr. Olivier Amedee-Manesme  
INSERM U 56  
78 Av. du General Leclerc  
Hospital de Bicetre  
Bicetre 94270  
FRANCE

Dr. Luthfor Ahmed  
Institute of Nutrition and Food Science  
University of Dhaka  
Dhaka-1000  
BANGLADESH

Dr. Iqbal Anwar  
CSP,K, World Vision of Bangladesh  
House No. 27, Road No. 16  
Dhanmondi R/A  
Dhaka  
BANGLADESH

Dr. Tahmeed Ahmed  
Medical Officer, Clinical Research Centre  
International Centre for Diarrhoeal  
Disease Research, Bangladesh  
G.P.O. Box 128  
Dhaka-1000  
BANGLADESH

Ms. Angelina Ballart  
Tanzanian Food and Nutrition Centre  
P.O. Box 977  
Dar Es Salaam  
UNITED REPUBLIC OF TANZANIA

Ms. Mary Ahungu  
Agricultural Officer  
Ministry of Agriculture  
& Livestock Development  
P.O. Box 2066  
Dar Es Salaam  
TANZANIA

Dr. P. K. Bardhan  
Senior Medical Officer  
International Centre for Diarrhoeal  
Disease Research, Bangladesh  
G.P.O. Box 128  
Dhaka-1000  
BANGLADESH

Dr. Wondu Alemayeu  
Dept. of Ophthalmology  
Addis Ababa University  
P.O. Box 1176  
Addis Ababa  
ETHIOPIA

Mr. Anish Barua  
Senior Program Officer  
Swiss Development Corporation (SDC)  
Embassy of Switzerland  
House B31, Road 18, Banani  
Dhaka-1213  
BANGLADESH

Mr. Wilfried Baudoin  
Horticulturist  
Agriculture Production Division, C760  
FAO  
Via delle Terme di Caracalla  
00158 Rome  
ITALY

Ms. Umme Munsura Begum  
Coordinator  
Helen Keller International  
Gulshan P. O. Box 6066  
Dhaka-1212  
BANGLADESH

Dr. Hagos Beyene  
Assistant Professor  
Department of Pediatrics and Child Health  
Ethio-Swedish Pediatrics Hospital  
Addis Ababa University  
P. O. Box 1768  
Addis Ababa  
ETHIOPIA

Dr. (Mrs.) Paddidri Bhaskaram  
National Institute of Nutrition (ICMR)  
Jamal-Osmania P.O.  
Hyderabad 500007  
INDIA

Dr. H.K. Biesalski  
Institut für Physiologische Chemie  
Johannes Gutenberg-Universität Mainz  
Postfach 3980  
D 6500 Mainz  
FEDERAL REPUBLIC OF GERMANY

Dr. Martin W. Bloem  
Country-Director  
Helen Keller International  
Gulshan P. O. Box 6066  
Dhaka-1212  
BANGLADESH

Ms. Teresa Calderon  
FAO Nutrition Officer  
Via delle Terme di Caracalla  
00100 Rome  
ITALY

Dr. C. Carlier  
INSERM U 56  
78 av. du General Leclerc  
Hospital de Bicetre  
Bicetre 94270  
FRANCE

Ms. Jenny Cervinkas  
Program Officer, Health Sciences Division  
IDRC  
P.O. Box 8500  
250 Albert Street  
Ottawa  
CANADA K1G 3H9

Dr. G.S. Chakravarty  
Assistant Commissioner, M.C.H.  
Ministry of Health & Govt. of India  
Nirman Bhavan, New Delhi 110011  
INDIA

Dr. Narayana Iyer Chandrasekharan  
Professor of Clinical Pathology  
School of Medical Sciences  
University Sains Malaysia  
16150 Kota Bharu  
Kelantan  
MALAYSIA

Dr. Moses C. Chirambo  
RCSB Eye Care Consultant/IVACG  
Regional Representative  
P.O. Box 30858  
Lilongwe 3  
MALAWI

Ms. Nipaporn Churnrungrroj  
Project Nurse, Catholic Relief Services  
33/7 Soi Langsuan  
Ploenchit Road  
Bangkok 10330  
THAILAND

Dr. Graeme A. Clugston  
Nutrition Unit  
World Health Organization  
Avenue Appia  
1211 Geneva 27  
SWITZERLAND

Dr. Dilip Kumar Das  
CINI-Child In Need Institute  
VIII - Daulatpur, PO. PAILAN  
Vis - Joka, Dist. 24 Purganas  
West Bengal, Pin. 743510  
INDIA

Ms. Usha Dongre  
Health Coordinator of Delhi Project  
PLAN International India  
J-27, South Extension Part II  
New Delhi 110 049  
INDIA

Dr. Sakorn Dhanamitta  
Institute of Nutrition  
Mahidol University at Salaya  
Nakhon Chaisri  
Nakhon Pathom 73110  
THAILAND

Ms. Susan J. Eastman  
Vitamin A Director  
Helen Keller International  
15 W. Sixteenth Street  
New York, NY 10011  
USA

Pr. Joseph S. Diallo  
IVACG Regional Representative for Africa  
BP 6191  
Dakar-Etoile  
SENEGAL

Ms. Naomi Esau  
Adventist Development and Relief Agency  
Director, Karachi Adventist Hospital  
Child Survival Project--Rural Sindh  
Box 7289  
Karachi-3  
PAKISTAN

Dr. Michael Dibley  
Morvita Project  
Clinical Epidemiology & Biostatistics Unit  
Dr. Sardjito General Hospital  
P.O. Box 236  
Yogyakarta KP55001  
INDONESIA

Dr. Alain Jean Escoute  
c/o French Embassy  
P. O. Box 30054  
Lilongwe 3  
MALAWI

Dr. Greet Dijkman  
Ophthalmologist  
University Hospital  
Department of Ophthalmology  
Rijnsburgerweg 10  
Leiden, Holland  
THE NETHERLANDS

Dr. Rodolfo F. Florentino  
Director, Food and Nutrition Research Institute  
Pedro Gil Street, Manila 1000  
P. O. Box EA-467  
Ermita, Manila  
PHILIPPINES

Ms. Mary Dirac  
Child Survival Grant Officer  
CARE/Headquarters  
660 First Avenue  
New York, NY 10016  
USA

Dr. Hernando Flores  
Biochemist  
Rua Mamanguape, 555 - Apto. 555/502  
Edifício Lioz  
Boa Viagem  
CEP 51.020 Recife - PE  
BRAZIL

Ms. Nicola Dollimore  
Ghana VAST  
BP 57, Po  
BURKINA FASO

Dr. Allen Foster  
Medical Consultant to CBM  
Senior Lecturer Prev. Ophthalmology  
International Centre for Eye Health  
Institute of Ophthalmology  
27-29 Cayton Street  
London EC1V 9EJ  
UNITED KINGDOM

Mr. Gabriel/Daniel  
Pharmaceutical Specialist  
Africare  
440 R Street, N.W.  
Washington, DC 20001  
USA

Mr. Jonathan Gorstein  
Technical Officer, Nutrition Unit  
World Health Organization  
Avenue Appia  
1211 Geneva 27  
SWITZERLAND

Mr. Robert Gern  
Monitoring and Evaluation Specialist  
Helen Keller International  
15 W. Sixteenth Street  
New York, NY 10011  
USA

Dr. Provat Kr. Goswami  
Health Training Coordinator  
Catholic Relief Services - USCC  
P.O. Box 3534  
New Delhi-110 024  
INDIA

Mr. Terrence Gillen  
National Eye Institute/NIH  
Building 31, Room 6A-27  
9000 Rockville Pike  
Bethesda, MD 20205  
USA

Dr. J. Michael Gurney  
Regional Nutrition Adviser  
World Health Organization  
Regional Office for South-East Asia  
Indraprastha Estate  
New Delhi-110002  
INDIA

Dr. Anna Giuliano  
Human Nutrition Research Center  
Tufts University  
Bioavailability Laboratory  
711 Washington Street  
Boston, MA 02111  
USA

Dr. Demissie Habte  
Ethio-Swedish Children's Hospital  
Department of Pediatrics & Child Health  
Addis Ababa University  
P. O. Box 1176  
Addis Ababa  
ETHIOPIA

Dr. John O. Gmunder  
Director, Task Force Sight & Life  
F.Hoffmann-LaRoche Ltd.  
P. O. Box 2116  
CH-4002 Basel  
SWITZERLAND

Ms. Nancy J. Haselow  
VITAP Manager (Technical Assistance)  
Helen Keller International  
15 W. Sixteenth Street  
New York, NY 10011  
USA

Ms. Abeba Gobeze  
Deputy Director  
International Science and Technology  
Institute, Inc. (ISTI)  
1601 North Kent Street, Suite 1014  
Arlington, VA 22209  
USA

Dr. Guillermo Herrera  
Faculty Lecturer, Department of Nutrition  
Harvard School of Public Health  
665 Huntington Avenue  
Boston, Massachusetts 02115  
USA

Dr. Tara Gopaldas  
Department of Foods and Nutrition  
Faculty of Home Science  
M.S. University  
Baroda 390002  
INDIA

Dr. Abraham Horwitz  
Director Emeritus  
Pan American Health Organization  
525 23rd Street, N.W.  
Room 1012  
Washington, DC 20037  
USA

Dr. Enamul Hoque  
Project Director (Coop Diversification  
Programs)  
Dept. of Agriculture Extension  
Khamarbari  
Dhaka-1215  
BANGLADESH

Ms. Ann E. Hudacek  
Coordinator, ICEPO/Addis Ababa University  
c/o UNICEF  
P.O. Box 1169  
Addis Ababa  
ETHIOPIA

Ms. Jean Humphrey  
ICEPO  
Wilmer Ophthalmological Institute  
Johns Hopkins Hospital  
600 North Wolfe Street, Room 120  
Baltimore, MD 21205  
USA

Dr. E. O. Idusogie  
Regional Food Policy and Nutrition Officer  
FAO Regional Office for Africa  
P. O. Box 1628  
Accra  
GHANA

Ms. Suzanne Janzen  
Associate Program Officer  
Program for Appropriate Technology  
in Health (PATH)  
4 Nickerson Street  
Seattle, WA 98117  
USA

Dr. Norge W. Jerome  
Director, Office of Nutrition  
Agency for International Development  
Bureau for Science and Technology  
State Annex-18, Room 411  
Washington, DC 20523-1808  
USA

Professor Gordon J. Johnson  
International Centre for Eye Health  
27-29 Cayton Street  
London EC1V 9EJ  
UNITED KINGDOM

Dr. Yongyout Kachondham  
Institute of Nutrition  
Mahidol University at Salaya  
Phutamonthon 4, Nakornchaisri  
Nakompathom 73170  
THAILAND

Dr. Darwin Karyadi  
Ministry of Health  
Nutrition Research and Development Centre  
Jalan Mayasela 33  
Bogor  
INDONESIA

Mr. Gokaran Prasad Katiyar  
12 G.F. Reader's Flat  
Jodhpur Colony  
Banaras Hindu University  
Varanasi 221 005  
INDIA

Ms. Joanne Katz  
ICEPO  
Wilmer Ophthalmological Institute, Room 120  
Johns Hopkins Hospital  
600 North Wolfe Street  
Baltimore, MD 21205  
USA

Ms. Deborah Keenum  
ICEPO  
Wilmer Ophthalmological Institute  
The Johns Hopkins School of Hygiene & Public  
Health  
600 North Wolfe Street  
Baltimore, MD 21205  
USA

Prof. Ha Huy Khoi  
Deputy Director  
Institute of Nutrition  
48 Tang Bat Ho St.  
Hanoi  
VIETNAM

Professor P.K. Khosla  
Director and Chief of R.P. Center  
for Ophthalmic Sciences, AIIMS  
Ansari Nagar  
New Delhi 110029  
INDIA

Dr. Wilson K. Kisubi  
Director, Evaluation and Research Division  
African Medical & Research Foundation  
(AMREF)  
P.O. Box 30125, Wilson Airport  
Nairobi  
KENYA

Dr. Jim Lepkowski  
Senior Study Director  
Survey Research Center  
Institute of Social Research  
University of Michigan  
P.O. Box 1248  
Ann Arbor, MI 48106-1248  
USA

Dr. Chris Kjolhede  
Department of International Health  
Johns Hopkins University  
615 North Wolfe Street  
Baltimore, MD 21205  
USA

Ms. Laurie Lindsay, R.D.  
IVACG Secretariat  
ILSI-Nutrition Foundation  
1126 16th Street  
Washington, D.C. 20036  
USA

Mr. Rolph D.W. Klemm  
Country Director  
Helen Keller International  
Room S-367, Third Floor  
PICC Secretariat Bldg.  
CCP Complex, Roxas Blvd.  
Manila  
PHILIPPINES

Dr. Tetevi Dodji Logovi  
Country Director/VITAP Consultant  
Helen Keller International in Niger  
B.P. 11728  
Niamey  
NIGER

Dr. Pak Benny A. Kodyat  
Director of Community Nutrition  
Ministry of Health  
Jl. Pondok Hijau V/13  
Jakarta 12310  
INDONESIA

Dr. Michelle Lloyd-Puryear  
Truk State Hospital  
Truk State Department of Health  
Caller Box PPP599  
Saipan Moen Truk  
CAROLINE ISLANDS, FSM 96942

Dr. Gopa Kothari  
Project Director, Xerophthalmia  
Project - Bombay Slums  
Kusum-Kunj  
3rd Floor, 10th Road  
Khar Bombay - 400052  
INDIA

Dr. Marilla Lucero  
Senior Science Research Specialist  
Research Institute for Tropical Medicine  
Alabang, Muntinlupa  
Metro Manila  
PHILIPPINES

Dr. Carl Kupfer  
Director, National Eye Institute  
Building 31 NIH  
9000 Rockville Pike  
Bethesda, MD 20502  
USA

Dr. Hoang Thi Luy  
Head, Department of Ophthalmology  
Dien Bien Phu Hospital  
280 Dien Bien Phu Street Q3  
Ho Chi Minh City  
VIETNAM

Dr. Julian Lambert  
Chief, Nutrition Section  
UNICEF House  
73 Lodi Estate  
New Delhi 110003  
INDIA

Ms. Lucie C. Malaba  
Nutrition Biochemistry Researcher  
c/o Institute of Nutrition Research  
University of Oslo  
P.O. Box 1046  
Blindern  
0316 Oslo 3  
NORWAY

Dr. Melanie Marlett  
PPC/PDPR Room 3894-C  
Agency for International Development  
Washington, DC 20523  
USA

Dr. Jose Martines  
Medical Officer  
Diarrhoeal Diseases Control Programme  
World Health Organization  
Avenue Appia  
1211 Geneva 27  
SWITZERLAND

Dr. A.S.A. Masud  
Project Manager, Child Survival Project  
World Vision of Bangladesh  
House No. 27, Road No. 16  
Dhanmondi R/A  
Dhaka  
BANGLADESH

Dr. Donald S. McLaren  
International Center for Eye Health  
Institute of Ophthalmology  
University of London  
27-29 Cayton Street  
London, EC1V9EJ  
UNITED KINGDOM

Dr. Alawia ElAmin  
Deputy Director, Nutrition Department  
Ministry of Health  
P. O. Box 303  
Khartoum  
REPUBLIC of SUDAN

Dr. Aminul Islam Sheikh Mohammad  
Public Health Officer  
Save the Children (USA)  
Community Development Foundation  
P.O. 421, House 33A, Road 9A  
New Dhanmondi, Dhaka  
BANGLADESH

Mr. Baquer Mohammad  
Assistant Project Officer  
UNICEF  
P.O. Box 58  
Dhanmondi, Dhaka  
BANGLADESH

Dr. Kamal Ahmed Mohamed  
Director  
Ministry of Health  
Nutrition Department  
P.O. Box 303  
Khartoum  
SUDAN

Mr. Madan Mohan  
Ministry of Health  
CI/10 Ansari Nagar  
AIIMS Campus  
New Delhi 110029  
INDIA

Dr. Ayesha Majid Molla  
Assistant Professor  
Department of Pathology  
The Aga Khan University Hospital  
Stadium Road  
P. O. Box 3500  
Karachi 5  
PAKISTAN

Dr. Timothy Morck  
IVACG Secretariat  
ILSI-Nutrition Foundation  
1126 16th Street, N.W.  
Washington, DC 20036  
USA

Dr. Muhilal  
Head of Nutrition Biochemistry Lab.  
Ministry of Health  
Nutrition and Research Development Centre  
Komplek Gizi Jalan Dr. Sumeru, Bogor  
INDONESIA

Dr. David Mwandu  
Nutritionist - Scientific Officer  
Tropical Diseases Research Centre  
P. O. Box 71769  
Ndola  
ZAMBIA

Dr. Moise Nagiel  
Associate Director, Monitoring & Evaluation  
Project Concern International  
P.O. Box 85232  
San Diego, CA 92138  
USA

Dr. Andre-Dominique Negrel  
Ophthalmologist  
Program for the Prevention of Blindness  
CDS/PBL, Room 6118  
World Health Organization  
Avenue Appia  
1211 Geneva 27  
SWITZERLAND

Dr. Penelope Nestel  
HIID Representative, Sudan  
c/o HPN, USAID  
P.O. Box 699  
Khartoum  
SUDAN

Prof. Nguen Trong Nhan  
Director National Institute  
of Ophthalmology, Hanoi  
85 Ba Trieu St.  
Hanoi  
VIETNAM

Dr. Evangeline Olivar-Santos  
Institute of Ophthalmology  
University of the Philippines, Manila  
Philippine General Hospital CPD., Taft Avenue  
Manila  
PHILIPPINES

Dr. James A. Olson  
Professor  
Department of Biochemistry & Biophysics  
Iowa State University  
Ames, Iowa 50011  
USA

Dr. (Mrs.) Saroj Pachauri  
Program Officer  
The Ford Foundation  
55 Lodi Estate  
New Delhi 110003  
INDIA

Ms. Anne Palmer  
HKI Grant Manager, Rovita  
Helen Keller International  
Bina Mulla Bldg. - 9th Floor  
Jl. H.R. Rasuna Said, Kav. 10  
Kuningan  
Jakarta 12950  
INDONESIA

Dr. Ramachandra Pararajasegaram  
Regional Advisor  
Prevention of Blindness  
World Health Organization  
Ring Road  
New Delhi 110 002  
INDIA

Mr. Robert Pratt  
International Science and Technology  
Institute, Inc. (ISTI)  
1129 20th Street, N.W., Suite 800  
Washington, DC 20036  
USA

Dr. Muhammad Mujibur Rahman  
Senior Research Officer  
Laboratory Science Division  
International Centre for Diarrhoeal  
Disease Research, Bangladesh  
G.P.O. Box 128  
Dhaka-1000  
BANGLADESH

Mr. Raheem Rahmathullah  
Aravind Eye Hospital  
Aravind Children's Hospital  
28 Kamarajar Street  
Madurai 625 020  
INDIA

Dr. Vijayalaxmi Rahmathullah  
Director, Child Development Service  
Royal Commonwealth Society for the Blind  
Aravind Children's Hospital  
Madurai 625 020  
INDIA

Ms. Anne Raite  
Deputy Director  
Vitamin A Technical Assistance Program  
Helen Keller International  
15 W. Sixteenth Street  
New York, NY 10011  
USA

Dr. Vulimiri Ramalingaswami  
Special Advisor to Executive Director  
UNICEF  
3 United Nations Plaza  
New York, NY 10017  
USA

Mrs. Kala Ranasamy  
Aravind Eye Hospital  
28 Kamarajar Street  
Madurai Tamil Nadu  
INDIA

Dr. Vinodini Reddy  
Senior Deputy Director  
National Institute of Nutrition  
Jamal Osmania  
Hyderabad 500007  
INDIA

Mr. Richard W. Renas  
Primary Health Care Projects Officer  
Catholic Relief Services - USCC  
33/7 Soi Langsuan  
Ploenchit Road  
Bangkok 10330  
THAILAND

Dr. Jon Rohde  
Senior Advisor  
UNICEF House  
73 Lodi Estate  
New Delhi 110003  
INDIA

Mr. David Rosen  
VITAP Manager (Monitoring and Evaluation)  
Helen Keller International  
15 W. Sixteenth Street  
New York, NY 10011  
USA

Dr. David Ross  
(Ghana Vast)  
BP 57  
Po  
BURKINA FASO

Dr. Manuel G. Roxas  
Undersecretary for Public Health Services  
Department of Health  
San Lazaro Compound  
Rozal Avenue, Ste. Cruz  
Manila  
PHILIPPINES

Dr. Prodosh Kumar Roy  
Assistant Health Program Coordinator  
World Vision of Bangladesh  
House No. 27, Road No. 16  
Dhanmondi R/A, Dhaka  
BANGLADESH

Dr. Swapan Kumar Roy  
Associate Scientist  
International Centre for Diarrhoeal  
Disease Research, Bangladesh  
G.P.O. Box 128  
Dhaka-1000  
BANGLADESH

Mr. Jitendra W. Salpekar  
Marketing Manager, BASF India Limited  
Maybaker House  
Sudam Kalu Ahire Marg  
Bombay 400 025  
INDIA

Dr. Larry Schwab  
Ophthalmologist  
International Eye Foundation  
7801 Norfolk Avenue  
Bethesda, MD 20814  
USA

Dr. Richard Semba  
Instructor of Ophthalmology  
ICEPO  
Wilmer Ophthalmological Institute  
The Johns Hopkins Hospital  
600 North Wolfe Street, Room 120  
Baltimore, MD 21205  
USA

Ms. Flora S. Sibanda  
Health Programme Officer  
UNICEF  
A.P.O. Box 58  
Dhaka  
BANGLADESH

Dr. Kenneth L. Simpson  
Professor, Food Science Research Center  
University of Rhode Island  
530 Liberty Lane  
West Kingston, RI 02892  
USA

Dr. Florentino Solon  
Executive Director  
Nutrition Centre of the Philippines  
P. O. Box 653  
Makati, Metro Manila  
PHILIPPINES

Mr. Ravilla D. Thulasiraj  
Administrator  
Aravind Eye Hospital  
1, Anna Nagar  
Madurai-625 020  
INDIA

Dr. Alfred Sommer  
Professor, ICEPO  
Wilmer Ophthalmological Institute  
Room 120  
Johns Hopkins Hospital  
600 North Wolfe Street  
Baltimore, MD 21205  
USA

Dr. James Tielsch  
Assistant Professor Ophthalmology and  
Epidemiology  
Wilmer Institute, Room 120  
Johns Hopkins Hospital  
600 North Wolfe Street  
Baltimore, MD 21205  
USA

Mr. Paul Sommers  
Regional Project Officer  
UNICEF  
c/o UNDP Private Mail Bag  
Suva  
FIJI

Dr. Robert Tilden  
Research Investigator  
Department of Population and Int'l. Health  
University of Michigan  
School of Public Health  
Ann Arbor, MI 48109

Ms. Joan M. Sullivan  
9210 Farnsworth Court  
Potomac, MD 20854  
USA

Also: c/o The Summit Hotel (P) Ltd.  
Kupondole Height  
Lalitpur  
P. O. Box 1406  
Kathmandu  
NEPAL

Dr. Moe Moe Sunn  
Nutrition Research Division  
Department of Medical Research  
No. 5, Ziwaka Road  
Dagon P.O.  
Yangon  
MYANMAR (BURMA)

Dr. Nguyen Quang Trung  
Assistant UNICEF Officer  
UNICEF - Hanoi  
72 Ly Thuong Kieb St.  
Hanoi  
VIETNAM

Dr. Asmira-Sukatun Sutarto  
Ministry of Health  
Jl. Percetakan Negara 23-A  
Jakarta Pusat  
INDONESIA

Dr. Emom Udomkesmalee  
Institute of Nutrition  
Mahidol University at Salaya  
P. O. Box 31, Talingchan  
Bangkok 10170  
THAILAND

Mr. Claver R. Temalihwa  
Tanzania Food and Nutrition Centre  
P. O. Box 977  
Dar Es Salaam  
TANZANIA

Dr. Barbara A. Underwood  
Assistant Director for International Programs  
National Eye Institute/NIH  
Building 31, Room 6A-17  
9000 Rockville Pike  
Bethesda, MD 20892  
USA

Dr. Eric J. van Agtmaal  
The Netherlands Ophthalmic Research  
Institute  
Department of Experimental Ophthalmology  
P.O. Box 12141  
1100 AC Amsterdam  
THE NETHERLANDS

Dr. G. Venkataswamy  
Director  
Aravind Eye Hospital  
Madurai, Tamilnadu 625 020  
INDIA

Dr. Kamasamudram Vijayaraghavan  
Assistant Director  
National Institute of Nutrition  
Jamal Osmania  
Hyderabad 500007  
INDIA

Ms. Ellen Villate  
Vitamin A Coordinator, Helen Keller  
International  
Room F-365, 3rd Floor  
Secretariat Building  
PICC, CCP Complex  
Roxas Boulevard  
Manila  
PHILIPPINES

Dr. Sheila Vir  
Project Officer  
Nutrition Section  
UNICEF House  
73 Lodi Estate  
New Delhi 110003  
INDIA

Dr. Clive E. West  
Department of Human Nutrition  
Wageningen Agricultural University  
P.O. Box 8129  
6700 EV Wageningen  
THE NETHERLANDS

Dr. Keith West  
DCPO  
Wilmer Institute, Room 120  
Johns Hopkins School of Medicine  
600 North Wolfe Street  
Baltimore, MD 21205  
USA

Also: c/o Nepal Netra Jyoti Sangh  
Box 335  
Nepal Eye Hospital Complex  
Tripureswor, Kathmandu  
NEPAL

Dr. Maria Diener West  
Johns Hopkins University  
Wilmer Ophthalmological Institute  
550 North Broadway, 9th Floor  
Baltimore, MD 21205  
USA

Also: c/o Nepal Netra Jyoti Sangh  
Box 335  
Nepal Eye Hospital Complex  
Tripureswor, Kathmandu  
NEPAL

Mr. Steve Wilbur  
Country Director  
Helen Keller International  
Bina Mulia Bldg. - 9th Floor  
Jl. H.R. Rasuna Said, Kav. 10  
Kuningan  
Jakarta 12950  
INDONESIA

Dr. Y. H. Yang  
Coordinator  
Seeds for Peace Project  
500 University Avenue, #918  
Honolulu  
Hawaii 96826  
USA

**LOCAL PARTICIPANTS NATIONAL SYMPOSIUM AND XIII IVACG MEETING  
KATHMANDU, NEPAL  
5-10 NOVEMBER 1989**

J.R. Acharya  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Arnold Boulter  
Nepal Eye Hospital  
P.O. Box 335  
Nepalgunj  
NEPAL

Keshab Prasad Adhikari  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Divakar Chand  
Member Secretary  
SSNCC, P.O. Box 2948  
Seva Mandhir, Lainchaur  
Kathmandu  
NEPAL

Ramesh Kant Adhikari  
Department of Pediatrics  
Institute of Medicine  
T. University  
Maharajgunj, Kathmandu  
NEPAL

B.D. Chataut  
Policy, Planning, Monitoring  
and Supervision Division  
Ministry of Health  
Teku, Kathmandu  
NEPAL

Thomas Baks  
Swiss Red Cross Society  
C/O SATA, Jawalakhel  
Kathmandu  
NEPAL

Govinda Chitrakar  
P.O. Box 3008  
Kathmandu  
NEPAL

Mahindra Ranjan Baral  
Kanti Children's Hospital  
P.O. Box 2668  
Kathmandu  
NEPAL

Stephanie Cox  
Peace Corps  
GPO 613  
Kathmandu  
NEPAL

S.K. Bhattarai  
21/750  
Lainchaur, Kathmandu  
NEPAL

Filippo Curtale  
Vitamin A Child Survival Project  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Shyam Prasad Bhattarai  
Chief MPDTD  
Ministry Of Health  
Teku, Kathmandu  
NEPAL

Penny Dawson  
Peace Corps  
GPO 613  
Kathmandu  
NEPAL

Hridaya Raj Devkota  
Plan International Nepal  
P.O. Box 1670, Kathmandu  
NEPAL

Narendra J. Gurung  
UNICEF  
P.O. Box 1187  
Kathmandu  
NEPAL

Hemang Dixit  
Health Coordinator  
P.O. Box 1670  
Sundgara, Kathmandu  
NEPAL

Joel Harary  
P.O. Box 3255  
Kathmandu  
NEPAL

Bruno Ferrino  
DISVI-MOLISV  
Jai Bageswori  
Kathmandu  
NEPAL

Joel Hardy  
Save the Children Fund/UK  
G.P.O. Box 992  
Kathmandu  
NEPAL

Rina Gill  
Communication and Information Officer  
UNICEF  
P.O. Box 1187  
Kathmandu  
NEPAL

Stuart Harris  
Institute of Medicine

Albrecht Hennig  
LAHAN/NEPAL  
c/o United Mission to Nepal  
P.O. Box 126  
Kathmandu  
NEPAL

Gauri K.C.  
Member Secretary  
HSCC, P.O. Box 2948  
Seva Mandhir, Lainchaur  
Kathmandu  
NEPAL

Beth Henning  
P.O. Box 1535  
Kathmandu  
NEPAL

Madhav Gautam  
Agricultural Projects Services Center  
(APROSC)  
G.P.O. 1440  
Kathmandu  
NEPAL

Mr. Raymond Janssen  
c/o UNICEF  
P.O. Box 1187  
Kathmandu  
NEPAL

Nicole Grasset  
SEVA Foundation  
P.O. Box 780  
Kathmandu  
NEPAL

Joselyn Jenkins  
Vitamin A Child Survival Project  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Harka Bahadur Gurung  
New Era  
Maharajgunj  
Kathmandu  
NEPAL

P.C.D. Karmacharya  
Cha 2 459  
Nil Saraswati Magar  
Lazimpat, Kathmandu  
NEPAL

Jeanette Kesselman  
UNICEF  
P.O. Box 1187  
Kathmandu  
NEPAL

Steven C. LeClerq  
Nepal Nutrition Intervention Project - Sarlahi  
Nepal Eye Hospital Complex  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Uddhab Khadka  
Nepal Nutrition Intervention Project - Sarlahi  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Keith Leslie  
US SCF Representative  
Maharajgunj  
Kathmandu  
NEPAL

Subarna Kumar Khattry  
Lagankhel, Lalitpur 5  
Kathmandu  
NEPAL

Representative  
Lutheran World Service  
Bhat Bhatini  
NEPAL

Martin Kirkpatrick  
Save the Children Fund/UK  
P.O. Box 992  
Kathmandu  
NEPAL

Romesh Madan  
BASF India, Ltd.  
1401-2 Blue Bird Building  
P.O. Box 1481  
Tripureswor, Kathmandu  
NEPAL

Ram Prasad Koirala  
Lumbini Eye Hospital  
Bhairahawa  
c/o SEVA Foundation  
P.O. Box 780  
Kathmandu  
NEPAL

Om K. Malla  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Miriam E. Krantz  
United Mission to Nepal  
P.O. Box 126  
Kathmandu  
NEPAL

Elliot Marseille  
SEVA Foundation  
P.O. Box 780  
Kathmandu  
NEPAL

Shambhoo Prasad Lakhey  
Prevention and Control of Blindness Project  
P.O. Box 108  
Tripureswor, Kathmandu  
NEPAL

Terence Keith Matthews  
Save the Children Fund/UK  
P.O. Box 992  
Kathmandu  
NEPAL

Deepeek Lama  
P.O. Box 2389  
Kathmandu  
NEPAL

Lay Maung  
UNICEF, UN Building  
P.O. Box 1187  
Pulchowk, Kathmandu  
NEPAL

Aung Myat  
WHO Representative to Nepal  
P.O. Box 108  
Kathmandu  
NEPAL

Bhagavat P. Nepal  
Nepal Eye Hospital  
P.O. Box 335  
Kathmandu  
NEPAL

Representative  
Nepal Red Cross Society  
Tahachal, Kathmandu  
NEPAL

Promod Oberoi  
Executive Director  
Bottlers Nepal, Ltd.  
P.O. Box 2253  
Balaju, Kathmandu  
NEPAL

Juan Ortiz  
Dhankuta SCF Project  
P.O. Box 992  
Kathmandu  
NEPAL

Mrigendra Raj Pandey  
P.O. Box 2587  
Thapathali, Kathmandu  
NEPAL

Chet Raj Pant  
Vitamin A Child Survival Project  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Gopal Prasad Pokharel  
Vitamin A Child Survival Project  
King Mahendra Memorial Eye Hospital  
Bharatpur, Chitwan  
NEPAL

Ram Prasad Pokhrel  
Executive Director  
Nepal Netra Jyoti Sangh  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Elizabeth K. Pradhan  
Nepal Nutrition Intervention Project - Sarlahi  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Y.M.S. Pradhan  
Ministry of Health  
Ramshahapath, Kathmandu  
NEPAL

L. N. Prasad  
Nepal Association for the Welfare of the Blind  
P.O. Box 3903  
Tripureswor, Kathmandu  
NEPAL

Rabi S.J.B. Rana  
Nepal Netra Jyoti Sangh  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

T. Rana  
Nutrition Food Programme  
Balmandir, Naxal  
c/o SSNCC  
P.O. Box 2948  
Kathmandu  
NEPAL

Sanduk Ruit  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Anna Schmitz  
Vitamin A Child Survival Project  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Puspa Sharma  
Kanti Children's Hospital  
P.O. Box 2668, Kathmandu  
NEPAL

Shambhoo Shimkhada  
Treasurer  
SSNCC, P.O. Box 2948  
Seva Mandhir, Lainchaur  
Kathmandu  
NEPAL

Yukihiro Shiroishi  
UNICEF  
P.O. Box 1187  
Kathmandu  
NEPAL

Dhruba Shrestha  
Curriculum Development Center  
Tribhuvan University  
Kirtipur, Kathmandu  
NEPAL

Sachet P. Shrestha  
United Mission to Nepal  
P.O. Box 126  
Thapathali, Kathmandu  
NEPAL

Sharadram Shrestha  
Nepal Nutrition Intervention Project - Sarlahi  
Nepal Eye Hospital  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Shashi M. Shrestha  
National Program Officer JNSP  
P.O. Box 3147  
Kathmandu  
NEPAL

Eric Starbuck  
John Snow International  
P.O. Box 1600  
Patan Dhoka, Lalitpur  
NEPAL

Hildegard A. Storey  
German Volunteer Services  
P.O. Box 442  
Kathmandu  
NEPAL

Representative  
Swedish Red Cross Society  
Kathmandu  
NEPAL

Madan P. Upadhaya  
Teaching Hospital  
Tribhuvan University  
Maharajgunj, Kathmandu  
NEPAL

T.N. Upreti  
Nepal Netra Jyoti Sangh  
P.O. Box 335  
Tripureswor, Kathmandu  
NEPAL

Yogesh Vaidya  
Central Food Research Laboratory  
Nutrition Research and Development Division  
Babar Mahal, Kathmandu  
NEPAL

Karin Wiering  
German Volunteer Service  
P.O. Box 442  
Kathmandu  
NEPAL

Corrinne Colins-Yager  
P.O. Box 613  
Kathmandu  
NEPAL

## Appendix 2



**National Symposium  
and  
XIII IVACG Meeting**

Kathmandu, Nepal  
5-10 November 1989

International Vitamin A Consultative Group (IVACG)<sup>®</sup>

## Table of Contents

Introduction .....	5
<b>NATIONAL SYMPOSIUM</b>	
Overview and Update of the Global Vitamin A Problem .....	7
Vitamin A Deficiency and Prevention in Nepal: Building the National Strategy	
Session 1 Defining the Public Health Importance of Vitamin A Deficiency ...	11
Session 2 Vitamin A Intervention Strategies and Programs .....	12
Session 3 Vitamin A Research Agenda in Nepal .....	14
<b>XIII IVACG MEETING</b>	
Session 1 Vitamin A in Morbidity and Mortality of Young Children Completed Field Studies .....	20
Session 2 Vitamin A in Morbidity and Mortality of Young Children: Africa ...	23
Session 3 Vitamin A in Morbidity and Mortality of Young Children: Asia ....	24
Session 4 New Assessment Techniques .....	28
Session 5 Strategic Considerations for Applied Programs .....	32
Session 6 Country Reports .....	36
Session 7 Agency Reports .....	41
Session 8 Nongovernmental Organization Reports .....	44
Closing Remarks .....	47
Acknowledgements .....	52
<b>Program</b> .....	55
<b>Abstracts</b> .....	69
<b>Participants</b>	
Local .....	127
International .....	133

## Appendix 3



International  
Vitamin A  
Consultative  
Group

Chairman  
Dr. Abraham Horwitz, PAHO/WHO

Secretary  
Dr. Frances R. Davidson, USAID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 Sixteenth St., N.W.  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-3617

**NEW FROM IVACG: SUMMARY OF THE  
NATIONAL SYMPOSIUM AND  
XIII IVACG MEETING**

**For Immediate Release**

**Contact: Laurie Lindsay, R.D.  
(202) 659-9024**

*Washington, D.C.* -- The National Symposium and XIII International Vitamin A Consultative Group (IVACG)<sup>®</sup> Meeting was heralded as a landmark meeting, with reports presented that carry implications for the well-being of children worldwide. A complete summary of the meeting, including abstracts of the presentations, is now available from the IVACG Secretariat.

Policy makers, programmers, and scientists in health, nutrition, biochemistry, agriculture, horticulture, and development were among the 270 participants who gathered in Kathmandu, Nepal, from 33 countries for the deliberations. Reports from the meeting, which took place 5-10 November, represent the culmination of efforts over an extended period of time and the collaboration of many individuals and international, bilateral, and nongovernmental institutions.

The theme of the meeting was an update on studies relating vitamin A nutriture to childhood morbidity and mortality. The meeting gave additional emphasis to newer techniques for assessing marginal or subclinical vitamin A deficiency. Representatives from eight countries and the regions of Africa presented reports on national and regional vitamin A status and intervention programs.

The government of Nepal and the Nepal Prevention of Blindness Program (Nepal Netra Jyoti Sangh) co-hosted the meeting. Following inauguration ceremonies presided over by the Queen of Nepal, the meeting opened with two days devoted to review of the Nepalese vitamin A situation and intervention programs.

Most data presented at the meeting confirmed previous reports that where vitamin A deficiency constitutes a significant public health problem, intervention with vitamin A reduces childhood mortality. Evidence supporting this was presented from one study in India involving over 15,000 children in a masked placebo-controlled clinical trial.

- more -

Researchers in Madurai, India used a low-dose vitamin A supplement equivalent to the amount of vitamin A available from food consumed at the recommended daily intake of 350  $\mu\text{g}$  RE, or approximately 1000 IU. Half the children received the low-dose supplement weekly and the other half received a vitamin E-containing placebo control. Results from this study showed a reduction in mortality by nearly 60% among those children receiving the low-dose vitamin A supplement. Preliminary analysis of morbidity data leaves uncertain its link to mortality. The implications of this study are that maximum effects on mortality may be best achieved by modestly improving the daily intake of vitamin A sources.

After six months, preliminary data from an ongoing study in Sudan using the high-dose capsule (200,000 IU) and a placebo control are not yet showing significant differences in morbidity or mortality. Additional masked placebo-controlled trials are in progress in Ghana, Philippines, Ethiopia, and other countries, but results are not yet available. Previous studies in Thailand, Indonesia, and elsewhere in India support an effect of vitamin A in reducing mortality and morbidity among marginally deficient children.

Meeting participants also examined newer methodologies for assessing marginal or subclinical vitamin A inadequacy, including conjunctival impression cytology, relative dose response test, distribution curves for serum retinol, and dietary assessment of vitamin A intake. These newer methodologies show considerable promise but require additional verification of their reliability and their field applicability in detecting marginal vitamin A status. A consensus emerged at the meeting that a combination of two or more of these methodologies would offer the greatest reliability.

Country reports from Vietnam, Micronesia, and Myanmar identified vitamin A deficiency as a significant national public health problem. These reports, and ones from other parts of the world where the problem was unassessed previously, suggest a wide occurrence of inadequate vitamin A nutriture that may have health consequences in addition to blindness. These reports drew attention to the critical need for surveys of populations heretofore unassessed to provide an accurate picture of vitamin A deficiencies worldwide and to plan and implement appropriate intervention strategies.

Early in the meeting it was pointed out that vitamin A deficiency is a syndrome of deprivation involving social, economic, and ecologic factors. Sustainable long-term solutions must embrace the broader community context of the problem and adapt vitamin A intervention programs accordingly.

Contributions from numerous organizations provided support for participants for the National Symposium and XIII IVACG Meeting. The IVACG Steering Committee and the IVACG Secretariat planned and organized the IVACG meeting through a cooperative agreement between the Office of Nutrition, Bureau for Science and Technology, U.S. Agency for International Development and The Nutrition Foundation, Inc. The meeting summary is available from the IVACG Secretariat, The Nutrition Foundation, 1126 Sixteenth Street, N.W., Washington, D.C. 20036 USA.

Other recent releases in the IVACG series of guidelines and monographs are

- ▶ *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A*
- ▶ *Methodologies for Monitoring and Evaluating Vitamin A Deficiency Intervention Programs*

Single copies of these and other IVACG publications are available free of charge to developing countries and for \$3.50 (US) to developed countries. Order copies from the IVACG Secretariat. Please make checks payable to IVACG in US dollars.

The International Vitamin A Consultative Group was established in 1975 to guide international activities aimed at reducing vitamin A deficiency in the world.

# # #

The following newsletters and organizations received copies of summary information from the XIII IVACG Meeting.

*Eye Care Newsletter* (NAPB, Zimbabwe)  
*Eye to Eye* (IEF)  
*Hamari Aankhen* (National Survey for Prevention of Blindness, India)  
*Salud Ocular Comunitaria* (Nat'l. Inst. Ophth., MOH, Peru)  
*Health Unlimited Newsletter* (UK)  
*World Pediatrics and Child Care* (Int'l Acad. Ped. Transdisciplinary Ed., UK)  
*Medicine Digest* (UK)  
*Women's International Public Health Network News* (Naomi Baumslag)  
*ARI News* (AHRTAG)  
*Epidemiological Bulletin* (PAHO)  
*Glimpse* (ICDDR,B)  
*ITIR Newsletter* (Intermed. Tech. Info. Ring, Wageningen, Netherlands)  
*Cajanus* (CFNI, Jamaica)  
*American Journal of Medicine*  
*American Journal of Public Health*  
*The American Journal of Clinical Nutrition*  
*Clinical Pediatrics*  
*European Journal of Clinical Nutrition*  
*The FASEB Journal*  
*Journal of the American Dietetic Association*  
*Journal of the American College of Nutrition*  
*Journal of Nutrition*  
*Journal of Pediatrics*  
*The Lancet*  
*Medical World News*  
*New England Journal of Medicine*  
*Nutrition Week*  
*Pediatric News*  
*Journal for Nutrition Education*  
2000 (MEDEX Group, University of Hawaii)  
*Action for Children* (UNICEF)  
*Africa Recovery* (DPI, UN in NY)  
*Appropriate Technology for Health Newsletter* (WHO)  
*AP-Tech Newsletter* (Approp. Tech. Devel. Assoc., India)  
*Asian Women and Children* (Press Found. of Asia, Manila)  
*Assignment Children* (UNICEF)  
*Children in the Tropics* (Centre Int'l de l'Enfance, Paris)  
*The Coordinator's Notebook* (UNICEF)

*Development Education Exchange Papers* (Freedom from Hunger Campaign, FAO)  
*Fiona Plus* (Christian Med. Assoc. of India)  
*Footsteps to Health* (The Tear Fund, UK)  
*HAI News* (Health Action Int'l Network, Int'l Org. of Consumer's Unions, Malaysia)  
*Health Action* (Catholic Hosp. Assoc. of India)  
*Health for the Millions* (Voluntary Health Assoc. of India)  
*Health News and Views* (Family Health Div., MOH, Botswana)  
*Health Policy and Planning* (Oxford Univ. Press)  
*Health and Popular Education* (Santiago, Chile)  
*IBFAN Africa News* (Kenya)  
*IDRC Reports*  
*International Dateline* (Population Institute Communication Center, UN)  
*International Health News* (NCIH, Washington)  
*MCH News* (Pacific Basin Maternal-Child Health Resource Center, Guam)  
*Mustaqbil* (UNICEF, Pakistan)  
*Nutrition News* (NIN, Hyderabad, India)  
*Redes* (WK Kellogg Foundation, Peru)  
*Watota Wa Africa* (UNICEF Regional Office for East, Central and Southern Africa)  
*Work in Progress* (UNU, Tokyo)

## IVACG RELEASES STATEMENT ON ROLE OF VITAMIN A IN CHILD HEALTH AND SURVIVAL

### Mailing List

Dr. Luis Octavio Angel  
Director  
Instituto de Nutricion  
de Centro America y Panama

Mr. Arne Arneson  
Director General  
Norwegian Agency for International  
Development

Dr. Ken V. Bailey  
World Health Organization  
Regional Office for Africa

Dr. William Carmichael  
Executive Vice President  
The Ford Foundation

Ms. Jenny Cervinkas  
Program Officer, Health Sciences Division  
IDRC

Dr. Moses C. Chirambo  
IVACG Regional Representative for Africa

Dr. Graeme A. Clugston  
Nutrition Unit  
World Health Organization

DANIDA  
Head of Division  
Danida, D III  
Ministry of Foreign Affairs

Dr. Carlos Daza  
Coordinator, Food and Nutrition Programs  
PAHO/WHO

Pr. Joseph S. Diallo  
IVACG Regional Representative for Africa

Dr. Jean M. Dricot  
UNICEF - Hanoi

Ms. Stacy Girdner  
Senior Overseas Recruiter  
World Vision

Dr. John O. Gmunder  
Secretary, Task Force SIGHT AND LIFE  
F. Hoffmann-LaRoche Ltd.

Dr. James P. Grant  
Executive Director  
UNICEF

Dr. J. Peter Greaves  
Senior Advisor (Micronutrients)  
UNICEF

Ms. Marcia Griffiths  
Manoff International

Ms. Dawn Hansen  
The Rotary Foundation  
Rotary International

Professor J.G.A.J. Hautvast  
Secretary-General  
The Netherlands Nutrition Foundation

Dr. Yngve Hofvander  
International Child Health Unit  
Department of Pediatrics, Uppsala University

Dr. Dietrich Hornig  
Vitamins and Fine Chemical Research Dept.  
F. Hoffmann-LaRoche and Co., Ltd.

**Mr. Alan Johns**  
Director  
Royal Commonwealth Society for the Blind

**Mr. Philip Johnston**  
Executive Director  
CARE/Headquarters

**Dr. Festo Kavishe**  
Acting Director  
Tanzanian Food and Nutrition Centre

**Ms. Barbara Kelly**  
Senior Administrator  
Health & Population Division  
Overseas Development Agency

**Dr. U. Ko Ko**  
Regional Director, World Health Organization  
WHO-Southeast Asia Regional Office

**Dr. Rolf Korte**  
Deutsche Gesellschaft für Technische  
Zusammenarbeit (GTZ)

**Dr. Paul Lunven**  
Director of Food and Nutrition Policy Division  
FAO

**Mr. Mark Lukas**  
Executive Administrator  
Lions Clubs International

**Mr. Michael McDonald**  
Country Representative Thailand  
Catholic Relief Services

**Dr. Val MacMurray**  
Executive Director  
Thrasher Research Fund

**Dr. Jose Martines**  
Diarrhoeal Diseases Control Programme  
World Health Organization

**Dr. Gerhard D. Muller**  
BASF AG

**Dr. A. M. Ndiaye**  
Director  
O.R.A.N.A.

**Mr. John Palmer III**  
Executive Director  
Helen Keller International

**Dr. Kenneth H. Phillips**  
Executive Director  
Foster Parents Plan, Inc.

**Dr. Alberto Pradilla**  
Nutrition Unit  
World Health Organization

**Dr. Pawlos Quana'a**  
Head, Department of Ophthalmology  
Faculty of Medicine  
Addis Ababa University

**Dr. Stephen Simon**  
Director, Health Sector  
Social and Human Resources  
Development Division  
Canadian International Development Agency

**Dr. Karl Smith**  
Director, Maternal and Child Health  
Health Sciences Division  
IDRC

**Dr. Noel W. Solomons**  
CeSSIAM

101

**Dr. Bjorn Thylefors**  
**Program Manager**  
**Program for the Prevention of Blindness**  
**World Health Organization**

**Dr. Maarten Van Dulleman**  
**Foundation Medical Committee**  
**The Netherlands - Vietnam (MCNV)**

**Sir John Wilson**  
**IMPACT**

**Dr. Richard Wilson**  
**Director, Health Sciences Division**  
**International Development Research Center**

## Appendix 4



International  
Vitamin A  
Consultative  
Group

Chairman  
Dr. Abraham Horwitz, PAHO/WHO

Secretary  
Dr. Frances R. Davidson, USAID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 Sixteenth St., N.W.  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-3617

**CALL FOR ABSTRACTS  
XIV IVACG MEETING**

For Release After 15 August 1990  
Contact: Laurie Lindsay, R.D.  
(202) 659-9024

*Washington, D.C.* -- Ecuador will be the site of the XIV International Vitamin A Consultative Group (IVACG) Meeting in June 1991. The theme of the meeting is community-based interventions. The program includes brief presentations of selected research reports on this topic and new research findings related to the effect of vitamin A status on morbidity and mortality and assessment of vitamin A status. If you would like to submit a paper for presentation, please prepare your abstract as described below.

Type double spaced in black ink on a single page with one-inch margins on all sides. Begin with the title in capital letters, followed by a period. Continue with the name(s), address(es), and affiliation(s) of the author(s), followed by a period. Underline the name of the person who would make the presentation. Begin the presentation description on a new line indented three spaces. Proofread your abstract for accuracy. All abstracts must be camera-ready for inclusion in the meeting summary.

On a separate page, provide your address and telephone, telex, cable, and facsimile numbers where you can be reached between January and March 1991. Also, please indicate if you will bring copies of your paper to the meeting for distribution if your paper is selected for presentation.

Mail both pages to: Laurie Lindsay, R.D., IVACG Secretariat, The Nutrition Foundation, Inc., 1126 Sixteenth Street, N.W., Washington, D.C. 20036, USA. Your response must be postmarked by 15 November 1990. The IVACG Steering Committee will evaluate and select abstracts for presentation. If your paper is selected for presentation, a full paper will be requested by 15 April 1991.

The International Vitamin A Consultative Group was established in 1975 to guide international activities aimed at reducing vitamin A deficiency in the world. Through its international meetings, IVACG provides a forum to foster the interchange of ideas, the presentation of new research findings and survey data, and discussion of action programs.

# # #

081390

## Appendix 5



International  
Vitamin A  
Consultative  
Group

Chairman  
Dr. Abraham Horwitz, PAHO/WHO

Secretary  
Dr. Frances R. Davidson, USAID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 Sixteenth St., N.W.  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-3617

**IVACG RELEASES STATEMENT  
ON ROLE OF VITAMIN A IN  
CHILD HEALTH AND SURVIVAL**

For Release After 14 June 1990  
Contact: Laurie Lindsay, R.D.  
(202) 659-9024

*Washington, D.C.* -- The XIII International Vitamin A Consultative Group (IVACG) Meeting in November 1989 reviewed the evidence available to date on the relationship of vitamin A depletion and deficiency to childhood morbidity and mortality. Results from completed studies as well as preliminary findings of others underway were presented and discussed by experts from several disciplines. The IVACG Steering Committee realized the need for an interim statement summarizing the weight of evidence available because results from several large, randomized masked trials are unlikely to be available for one to two years. The following statement represents the steering committee's careful consideration of the available evidence.

- ▶ *An adequate vitamin A status prevents nutritional blindness and contributes significantly to child health and survival.*
- ▶ *The role of vitamin A in preventing nutritional blindness is well documented. Evidence is accumulating that it also reduces mortality. The mechanism(s) by which it has this effect is unclear.*
- ▶ *The impact of improved vitamin A nutrition will vary with the severity of vitamin A deficiency and the contributions of other ecological factors.*
- ▶ *It is therefore imperative to improve the diet and raise the level of vitamin A nutrition where a current intake is inadequate.*

The IVACG Steering Committee hopes that this statement will be useful in the process of formulating country and regional policies and programs to control and combat vitamin A deficiency.

The International Vitamin A Consultative Group was established in 1975 to guide international activities aimed at reducing vitamin A deficiency in the world.

###

The Nutrition Foundation, Inc., is a division of the  
International Life Sciences Institute—Nutrition Foundation

7-1

## IVACG RELEASES STATEMENT ON ROLE OF VITAMIN A IN CHILD HEALTH AND SURVIVAL

### Mailing List for Publications and Institutions

2000

*Action for Children*  
*Africa Health*  
*Africa Recovery*  
*AIN Nutrition Notes*  
*Alternatives*  
*American Journal of Clinical Nutrition*  
*American Journal of Medicine*  
*American Journal of Public Health*  
*Appropriate Health Resources and Technologies*  
*Action Group*  
*Appropriate Technology for Health Newsletter*  
*AP-Tech Newsletter*  
*ARi News*  
*The Ark*  
*Asian Women & Children*  
*Assignment Children*  
*Breastfeeding Bulletin*  
*Bulletin du GERM*  
*By the Year 1990*  
*Cajanus*  
*CAREC Surveillance Report*  
*CENTERPOINT*  
*Child Survival Action News*  
*Children in the Tropics*  
*Clinical Pediatrics*  
*Community Eye Health*  
*CONTACT*  
*Cooperation South*  
*The Coordinator's Notebook*  
*Decade Watch*  
*Development Communications Report*  
*Development Education Exchange Papers*  
*Dialogue on Diarrhoea*  
*Diarrhea Control Newsletter*  
*EPI Newsletter*  
*Epidemiological Bulletin*  
*European Journal of Clinical Nutrition*  
*Eye Care Newsletter*  
*Eye to Eye*  
*FASEB Journal*  
*Fiona Plus*  
*Footsteps to Health*  
*Garden to Kitchen Newsletter*  
*Gardens for Development*  
*Glimpse*  
*HAI News*  
*Hamari Aankhen*  
*Health Action*  
*Health and Popular Education*  
*Health for the Millions*  
*Health News and Views*  
*Health News Highlights*  
*Health Policy and Planning*  
*Health Unlimited Newsletter*

*HOPE News*  
*IAPB Newsletter*  
*IBFAN Africa News*  
*IDRC Reports*  
*ILSI News*  
*International AG-Sieve*  
*International Child Health Foundation Newsletter*  
*International Dateline*  
*International Health News*  
*ITIR Newsletter*  
*Journal for Nutrition Education*  
*Journal of Nutrition*  
*Journal of Pediatrics*  
*Journal of the American College of Nutrition*  
*Journal of the American Dietetic Association*  
*The Lancet*  
*Lifeline*  
*MCH News*  
*Medical World News*  
*Medicine Digest*  
*MotherCare Matters*  
*Mothers and Children*  
*Mustaqbil*  
*The National Institute of Nutrition (Vietnam)*  
*NCP Bulletin*  
*New England Journal of Medicine*  
*Nutrition News*  
*Nutrition Today*  
*Nutrition Week*  
*ORBIS UPDATE*  
*ORT Newsletter*  
*Outlook*  
*PAHO Publications*  
*Pediatric News*  
*Program for Appropriate Technology in Health (PATH)*  
*Rational Health Campaign Newsletter*  
*Redes*  
*Salud Ocular Comunitaria Bulletin*  
*SCN News*  
*TDR Newsletter*  
*TIBS News*  
*TROPICAL DOCTOR*  
*VITA News*  
*VITAL News*  
*The Vitamin A + Sieve*  
*Vitamin A Newsnotes*  
*Watoto Wa Africa*  
*Women's International Public Health Network News*  
*Work in Progress*  
*World Development Forum*  
*World Health Forum*  
*World Immunization News*  
*World Pediatrics and Child Care*  
*Xerophthalmia Club Bulletin*

## Appendix 6



International

Nutritional Anemia

Consultative

Group

Senior Advisor  
Dr. Alberto Pradilla, WHO

Secretary  
Dr. Samuel G. Kahn, AID

The Nutrition Foundation, Inc.  
1126 16th St. NW,  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-8654

**INACG Advisory Committee Meeting Minutes**  
25 January 1989  
ILSI-Nutrition Foundation, Washington, D.C.

Participants:

Dr. Peter Greaves  
Dr. Samuel G. Kahn  
Dr. Fatimah Linda Collier Jackson  
Dr. Norge W. Jerome  
Dr. Timothy A. Morck  
Dr. Alberto Pradilla  
Dr. Richard Theuer  
Dr. Ray Yip  
Ms. Laurie Lindsay, R.D.

Guest:

Dr. Judith McGuire

Dr. Morck opened the meeting at 0915 and welcomed the participants. The participants introduced themselves and cited their interest and experience with iron related work. Dr. Morck turned the meeting over to Dr. Theuer who agreed to serve as acting chairman of the advisory committee. He asked Dr. Morck to review INACG's purpose and organizational structure.

Following this Dr. Theuer invited Dr. Jerome, Director of the Office of Nutrition, to provide an overview of the Office of Nutrition activities and specifically how the nutritional anemia program was positioned within the Agency for International Development (AID). To begin, she asked Dr. Kahn to describe the numerous links that the Office of Nutrition has to other directorates and offices and to the bureaus within AID. Dr. Kahn emphasized that the Office of Nutrition supports the country level health, population, and nutrition staff within each AID Mission and that all Office of Nutrition efforts ultimately should help the regional bureaus and the missions.

Dr. Jerome continued and pointed out that AID has five development objectives. Four of these have direct or indirect program implications for human nutrition. These development goals are realized through nutrition-specific goals and objectives. Three out of four of AID's nutrition objectives are particularly important for INACG:

- ▶ the reduction of micronutrient deficiency diseases including iron deficiency anemia in women of child-bearing age and in children under five years of age
- ▶ improving women's nutritional status, particularly that of women of child-bearing age to improve their productivity, health and well-being and also

to reduce the number of low birth weight babies and to provide reserves for breastfeeding

- ▶ expanding access to high quality, nutritious food at the household level

The objectives of the Office of Nutrition are operational through a three-pronged program addressing child survival, household food security, and nutribusiness. To enable successful long-term development, these programs must couple community-based and community-empowered strategies with upper level multi-sectoral strategies. Nutrition serves as a critical link between agricultural and health approaches to this process.

Dr. Jerome emphasized that nutrition is key to economic development. During the 1990's the Office of Nutrition will seek partnerships with all groups to work for sustainable approaches that make scientific, political, economic, social, developmental, and cultural sense for the individuals, families, and communities concerned. Combatting iron deficiency anemia is one of seven projects resulting from implementation of the Office of Nutrition program. Through this project, INACG's efforts should contribute to AID's development objectives of alleviating hunger, improving primary health care, and reducing deficiencies.

Next Dr. Morck reviewed INACG's past activities beginning with a description of the international meetings and how the sites chosen for these meetings advanced research and programs over the past 13 years. Dr. Kahn noted how INACG facilitates operational programs and brings a variety of specialists together in its meetings. Dr. Jerome advised that country and regional workers need hands-on technical support and assistance. The structure of future INACG meetings should accentuate this in order to have lasting impact.

INACG's workshops and task forces have brought together experts to discuss more focussed topics than the international meetings. INACG's executive committee has responded to problems in the field through convening groups of experts as task forces. Task force deliberations result in monographs that are used internationally as standard references. Additionally, INACG has coordinated and administered two research projects.

The committee members remarked on the need to develop public appeal for iron. The evidence of iron's effect on behavior and development of anemic children could be the basis for arousing public support. Giving more attention to the few successful national programs that have been reported would encourage more attention to iron in the developing world.

The committee members considered the following as key areas for INACG's future work:

- ▶ appropriate interpretation and effective use of assessment methodologies and technologies

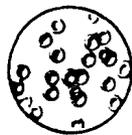
- ▶ baseline data regarding the prevalence of nutritional anemia in order to measure future success
- ▶ functional significance of iron deficiency
- ▶ food components that enhance or inhibit iron absorption
- ▶ fortification particularly as it relates to salt fortified with both iron and iodine
- ▶ compliance with supplementation
- ▶ potential for supplementation with slow-release iron
- ▶ provision of expert assistance
- ▶ sustainable implementation of operational programs with support at the local as well as the governmental level

Dr. McGuire described a proposal on micronutrients that she is preparing for World Bank funding. To carry out the objectives of this initiative, countries may need technical assistance to develop competitive proposals for major World Bank support. The possibility and certain necessary conditions for INACG to act as a technical resource were discussed. The World Bank would also like to see more efficiency through coordination between groups working with iron, vitamin A, and iodine. Dr. McGuire suggested that development of a map of countries which have a significant problem with iron deficiency and promotion of programs that have successfully fought nutritional anemia would increase awareness of the extent of iron deficiency anemia and inspire support for interventions in additional countries.

The committee considered the need for charismatic leadership for INACG and the contribution that several individuals might make to INACG's global success. INACG could also foster regional leadership in combatting nutritional anemia. Focussing INACG efforts on a particular region could allow testing of a range of strategies and could result in significant success stories.

During the remainder of the meeting committee members identified goals they would like to see INACG pursue over a three year period. Steps to achieve these goals were suggested. (See attachment.)

Dr. Theuer closed the meeting at 1615.



INACG

International  
Nutritional Anemia  
Consultative  
Group

Senior Advisor  
Dr. Alberto Pradilla, WHO

Secretary  
Dr. Samuel G. Kahn, AID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 16th St. NW,  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-8654

## Summary of Recommendations from the INACG Advisory Committee

25 January 1990

INACG should communicate the prevalence and severity of nutritional anemia to all levels of society including multilateral and bilateral groups; donor agencies; government officials; regional officials; assistance providers in health, education, and agriculture; community leaders; and ultimately the household unit. A change in perception of iron deficiency anemia must occur from a "benign" condition of fatigue to a "malignant" problem impairing physical, behavioral, and mental development of children; undermining economic productivity through decreased work capacity of adults; and diminishing reproductive capacity and overall health and welfare of women. INACG should provide counsel to allow effective action as a result of this changed perception. Steps for INACG in this process include:

### A. Establish a clearinghouse of information to facilitate the reduction of nutritional anemia

1. Develop guidelines and recommendations applicable to policy decisions and operational programs, e.g.,
  - a. recommend practical field techniques for assessing iron nutrition status
  - b. standardize methods for monitoring compliance with programs and surveying progress towards the goal of substantial reduction of iron deficiency anemia in target populations
  - c. identify strategies and approaches that address social, cultural, ecologic, and ethnic barriers to successful reduction of nutritional anemia particularly in women and children
  - d. succinctly define considerations leading to selection of food vehicles appropriate for iron fortification
2. Solicit information from governmental and nongovernmental agencies, UN agencies, and institutions regarding past and present activities related to nutritional anemia

### B. Increase the awareness of the prevalence and severity of iron deficiency anemia including identifying population groups at risk of suffering impairment in mental and physical productivity

1. Publicize field programs that aggressively combat iron deficiency anemia to share successes and learn innovative approaches to overcome impediments to success
2. Publish a monograph regarding the relationship of anemia to mental and behavioral development and use it as an opportunity to increase awareness of the short and long-term effects of iron deficiency anemia
3. Develop promotional resources to facilitate increased awareness and communication regarding nutritional anemia, e.g., brochures and videotapes in several languages

4. Designate representatives and/or an expert panel to increase visibility of INACG activities and enhance communication worldwide regarding nutritional anemia
  5. Provide a forum for networking between policy makers, programmers, researchers, and educators concerned with nutritional anemia
  6. Foster environment for fertile thinking and generating support for novel solutions to the problem of nutritional anemia
    - a. encourage industrial development of slow-release iron supplements to decrease the transient unpleasant side effects of iron supplementation
    - b. encourage industrial development and use of chemical forms of bioavailable iron that are less reactive in foods than those forms currently in common use
    - c. increase understanding of the practical potential of salt fortified with both iron and iodine and stimulate action to bring this technology into the public domain
- C. Better define the conceptual and organizational nature of INACG in light of the need for identifiable experts to facilitate development of operational programs by countries and donor groups**
1. Develop a database that is international in scope and includes individuals, agencies, and organizations interested in iron-related issues
- D. Increase the INACG funding base to permit expansion into areas mentioned above including a substantial social marketing scheme to promote implementation of these recommendations**

**List of Participants**  
**INACG Advisory Committee Meeting**  
25 January 1990  
9:00 a.m. to 4:00 p.m.  
ILSI-Nutrition Foundation  
Conference Room A, Suite 300

Dr. J. Peter Greaves  
Senior Program Officer  
UNICEF  
Program Division  
3 United Nations Plaza  
H8F  
New York, NY 10017  
USA

Dr. Fatimah Linda Collier Jackson  
Associate Professor  
Department of Anthropology  
1350 Turlington Hall  
University of Florida  
Gainesville, FL 32611  
USA

Dr. Norge W. Jerome  
Director, Office of Nutrition  
Agency for International Development  
Bureau for Science and Technology  
State Annex 18  
Room 411  
Washington, DC 20523-1808  
USA

Dr. Samuel G. Kahn  
Senior Nutrition Advisor  
Office of Nutrition  
Agency for International Development  
Bureau for Science and Technology  
State Annex 18  
Room 411  
Washington, DC 20523-1808  
USA

Laurie Lindsay, R.D.  
INACG Secretariat  
ILSI-Nutrition Foundation  
1126 16th Street, N.W., Suite 111  
Washington, DC 20036  
USA

Dr. Timothy A. Morck  
INACG Secretariat  
ILSI-Nutrition Foundation  
1126 16th Street, N.W., Suite 111  
Washington, DC 20036  
USA

Dr. Alberto Pradilla  
Chief, Nutrition Unit  
World Health Organization  
Avenue Appia  
1211 Geneva 27  
SWITZERLAND

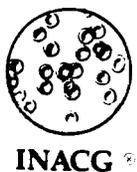
Dr. Richard Theuer  
Vice President, Research and  
Development  
Beech-Nut Nutrition Corporation  
P.O. Box 127  
Fort Washington, PA 19034  
USA

Dr. Ray Yip  
Medical Epidemiologist  
Division of Nutrition  
Center for Chronic Disease Prevention  
and Health Promotion  
Mail Stop A-41  
Centers for Disease Control  
Atlanta, GA 30333  
USA

Guest:

Dr. Judith S. McGuire  
Nutrition Advisor  
The World Bank  
1818 H Street, N.W.  
Washington, DC 20433  
USA

## **Appendix 7**



International  
Nutritional Anemia  
Consultative  
Group

Senior Advisor  
Dr. Alberto Pradilla, WHO

Secretary  
Dr. Samuel G. Kahn, AID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 16th St. N.W.  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-3617

**INACG RELEASES GUIDELINES  
TO HELP ANEMIC MOTHERS**

For Immediate Release

Contact: Laurie Lindsay, R.D.  
(202) 659-9024

Washington, D.C. -- While an estimated 30% of the world's population is anemic, the condition afflicts pregnant women most. Worldwide 50% of them risk more complicated deliveries and low birth weight babies due to anemia. Half of these women suffer from a lack of bioavailable iron in their diets. The latest publication from the International Nutritional Anemia Consultative Group (INACG)\* summarizes what can be done now about this problem.

*Guidelines for the Control of Maternal Nutritional Anemia* uses a straightforward approach to describe the consequences of iron and folate deficiency for mother and newborn and to specify the considerations for short-range and long-range interventions. Highlighted information in the text emphasizes the benefits of preventing iron and folate deficiencies, the schedule of iron supplementation for pregnant women, and the elements for successful iron supplementation programs.

Printed on heavy card stock, this six-page brochure is a valuable overview of the topic for policy makers, planners, and practitioners. A suggested reading list directs readers to several important references for further study.

Single copies of *Guidelines for the Control of Maternal Nutritional Anemia* and other INACG publications are available free of charge to developing countries and for \$3.50 (US) to developed countries. Order copies from the INACG Secretariat, The Nutrition Foundation, Inc., 1126 Sixteenth Street, N.W., Washington, D.C. 20036, USA. Please make checks payable to INACG in US dollars. French and Spanish editions will be available soon as well.

A task force developed these guidelines as the outcome of an INACG workshop sponsored in conjunction with the U.S. Agency for International Development and the World Health Organization. Members of the INACG task force were Dr. Thomas Bothwell, Dr. Peter Dallman, Dr. Rodolfo Florentino, and Dr. Fatimah Linda Collier Jackson.

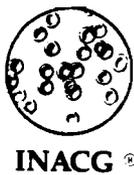
The International Nutritional Anemia Consultative Group was established in 1977 to guide international activities aimed at reducing iron deficiency anemia in the world.

# # #

**The INACG Secretariat sent news releases to the following newsletters and organizations.**

<i>Africa Health</i>	<i>AP-Tech Newsletter</i>
<i>Health Unlimited Newsletter</i>	<i>Asian Women and Children</i>
<i>World Pediatrics and Child Care</i>	<i>Assignment Children</i>
<i>Medicine Digest</i>	<i>Children in the Tropics</i>
<i>Women's International Public Health Network</i>	<i>The Coordinator's Notebook</i>
<i>News</i>	<i>Development Education Exchange Papers</i>
<i>American Journal of Medicine</i>	<i>Fiona Plus</i>
<i>American Journal of Public Health</i>	<i>Footsteps to Health</i>
<i>The American Journal of Clinical Nutrition</i>	<i>HAI News</i>
<i>Cajanus</i>	<i>Health Action</i>
<i>Clinical Pediatrics</i>	<i>Health for the Millions</i>
<i>European Journal of Clinical Nutrition</i>	<i>Health News and Views</i>
<i>The FASEB Journal</i>	<i>Health Policy and Planning</i>
<i>Journal of the American Dietetic Association</i>	<i>Health and Popular Education</i>
<i>Journal of the American College of Nutrition</i>	<i>IBFAN Africa News</i>
<i>Journal of Nutrition</i>	<i>IDRC Reports</i>
<i>Journal of Pediatrics</i>	<i>International Dateline</i>
<i>The Lancet</i>	<i>International Health News</i>
<i>Medical World News</i>	<i>MCH News</i>
<i>New England Journal of Medicine</i>	<i>Mustaqbil</i>
<i>Nutrition Week</i>	<i>Nutrition News</i>
<i>Pediatric News</i>	<i>Redes</i>
<i>Journal for Nutrition Education</i>	<i>TDR Newsletter</i>
<i>2000</i>	<i>TIBS News</i>
<i>Action for Children</i>	<i>Watota Wa Africa</i>
<i>Africa Recovery</i>	<i>Work in Progress</i>
<i>Appropriate Technology for Health</i>	
<i>Newsletter</i>	

## Appendix 8



International  
Nutritional Anemia  
Consultative  
Group

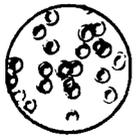
Senior Advisor  
Dr. Alberto Pradilla, WHO

Secretary  
Dr. Samuel G. Kahn, AID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 16th St. N.W.  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-3617

## XII INACG Meeting

- Title:** **Combatting Iron Deficiency Anemia Through Food Fortification Technology**
- Sponsor:** International Nutritional Anemia Consultative Group (INACG)
- Date:** 5,6,7 December 1990
- Site:** Pan American Health Organization (PAHO), Washington, DC
- Objective:** To provide practical and relevant expert guidance to policy makers and program implementors regarding
- immediate applications of existing operational iron fortification systems
  - opportunities for iron fortification that are not yet operational
  - marketing iron fortification with other intervention strategies to combat iron deficiency anemia
  - identification of critical steps in determining the suitability of fortification to meet local needs
- Presenters:** Experts in areas related to iron deficiency anemia, representatives of industry and governments concerned with successful fortification programs, marketing specialists with understanding of LDC food programming
- Other participants:** Representatives of international agencies, food and chemical industries, national ministries, non-governmental organizations
- Product:** The conference will produce a document that will outline action plans for developing iron fortification systems.



INACG

International  
Nutritional Anemia  
Consultative  
Group

Senior Advisor  
Dr. Alberto Pradilla, WHO

Secretary  
Dr. Samuel G. Kahn, AID

Secretariat:  
The Nutrition Foundation, Inc.  
1126 16th St. N.W.  
Washington, D.C. 20036  
Cable: NUTRITION WASHINGTONDC  
Telex: 6814107 "NUFOUND"  
Phone: (202) 659-9024  
Facsimile: (202) 659-3617

## (Tentative Agenda)

### Opening Session

Welcome and introduction

Opening remarks

Objectives of the conference

### Session 1 The Problem

The Magnitude and Consequences of Iron Deficiency Anemia

### Session 2 Current Effective Iron Fortification Systems

Overview of Iron Fortification

Wheat Flour and Cereal-Based Foods

Infant Cereal Products

Infant Formula and Milk Products

### Session 3 Experimental Iron Fortification Systems

Iron-EDTA

Salt Fortification

Rice Fortification

### Session 4 Other Considerations

Food Iron Inhibitors

Safety

### Session 5 Cost Analysis of Iron Fortification (Panel)

Operational Size and Per Capita Cost Estimates

- centralized vs. decentralized
- industrial distribution problems
- start-up costs (phasing)
- quality assurance

**Session 6 Case Study: Chile**

**Session 7 Marketing Issues (Panel)**

- Food Behavior and Population Acceptance
- Pricing and Marketing Strategies
- Policy

**Session 8 Working Groups**

Instructions to working groups:

- Develop Action Plans for Different Iron Fortification Systems
- Include Pathways for a government to follow, pathways for a company to follow, and pathways for donors to follow
- The result should be a scheme for establishing a country program.

**Session 9 Plenary Session**

Synthesis of panel presentations of Action Plans for Developing Successful Iron Fortification Systems

Identified Actions to be Taken:

Statement of Policy Commitment for Iron Fortification

## Appendix 9

PROJECT SUSTAIN

**FINAL REPORT: SUSTAIN ACTIVITIES DURING 1988 AND 1989**

Submitted to ILSI/NF

From: Irwin Hornstein, Manager PROJECT SUSTAIN

Prepared February 1990

## **Background**

Project SUSTAIN is a voluntary activity of the U.S. private food industry and the U.S. Agency for International Development. It utilizes the scientific knowledge and technical know-how that resides in the U.S. Food Industry to solve food problems in developing countries. This expertise is provided gratis. The project goals are to improve the quality, increase the quantity and lower the cost of locally grown and processed foods.

Project SUSTAIN through a network of U.S. food companies provides (with occasional help from U.S. government agencies and food related organizations) Technical Information, Short Term Consultant Services and Short Term Training.

In response to requests many problems are solved by providing information that exists either in the technical literature or in the "memory" of a company. Short term consultant services are provided when a problem cannot be solved without an on-site visit. Training may take the form of (a) seminars and workshops within a country or a region, (b) bringing technicians to the U.S. to view and discuss ongoing operations involving products similar to those they make at U.S. food companies and (c) arranging short courses at U.S. Universities where technicians from developing countries receive intensive training in food quality assurance and food packaging, areas of key importance in assuring the safety and preservation of processed foods.

Project SUSTAIN also responds to invitations from USAID missions by sending Reconnaissance Teams overseas to provide an assessment of the state of the local food industry. These visits serve to (a) identify major problem areas and provide insights on how industry-wide weaknesses can be remedied; (b) describe how Project SUSTAIN operates and how it can help and (c) initiate a Project SUSTAIN country program by providing ad hoc advice and by generating on the spot requests for Technical Assistance.

In addition, SUSTAIN NOTES, a quarterly newsletter that addresses the needs of food processors in developing countries, is provided gratis to approximately 1500 recipients in more than 50 countries.

In December 1987, under an umbrella cooperative agreement, Project SUSTAIN operations were transferred to ILSI-Nutrition Foundation. The Office of Nutrition is now in the process of expanding its activities to include a "Nutribusiness" program. As a result, Project SUSTAIN activities will be broadened. The "new" Project SUSTAIN will not be housed at ILSI-NF. This final report details Project SUSTAIN activities during 1988 and 1989.

## **1988**

Reconnaissance Visits initiated country programs in Yemen, Pakistan and Honduras.

## Yemen

Project SUSTAIN was invited by USAID/Sana'a to send a Reconnaissance team to Yemen. The team visited Yemen Jan 11-19, 1988. Team members included Dr. John Nelson, Vice-President Research & Development, McCormick and Co.; Mr. John White (ret'd), Vice-President, Kraft, Inc., and the Manager, Project SUSTAIN.

Visits were made to plants in Sana'a, Taiz and Hodeidah. The visits revealed a new and relatively small food processing industry that was modern by any standard, automated, and competitively managed (generally by expatriates).

The team advised USAID that - (a) Yemen can become a leader in food processing for the entire region. Private sector food processors have ample funds to purchase equipment. As a result an industry is developing that is state-of-the-art. (b) The industry is unique in that virtually all raw materials are imported. Understandably, the government is interested in tying processing to agricultural development. However, government must have a transitional plan for shifting from imports of raw materials to the use of indigenous raw materials. There is a danger that clamping down on imports prematurely will hinder industry development. One example: A company was licensed to purchase a complete pasta manufacturing line. The equipment is on site but idle since the company cannot obtain a government license to import semolina; a wheat flour essential to the production of pasta products. (c) The government should consult with food processors before writing specifications for importing key raw materials such as flour. For example, a single specification for flour may be appropriate for bread but inappropriate for cookies and pastas. (d) Training of Yemeni individuals to assume middle and top management positions is essential. (e) Companies identified a number of specific problems that could be addressed by SUSTAIN these included flavors (process details, equipment, sources); dehydration of vegetables; spices that can be grown in Yemen; specifications for raw materials; plastics for packaging (uses, equipment, sources); establishment of dairy herd; waste disposal; antioxidants (uses, sources) etc. A report giving a detailed description of the Reconnaissance Visit was prepared and distributed.

As a follow-up to the Reconnaissance Visit a workshop has been held and information has been supplied to 18 companies on approximately 45 specific problems. There is every prospect that SUSTAIN will have a continuing program in Yemen since USAID/Sana'a has advised SUSTAIN (Oct 1989) that their proposed new private sector project calls for at least two Project SUSTAIN visits/year for the next 6 years!

## Pakistan

Project SUSTAIN was invited by USAID/Islamabad to send a Reconnaissance team to Pakistan. The purpose to meet with various public and private sector institutions interested in (a) mango production and marketing; and (b) the preservation, processing and marketing of fish, prawns and shrimp. The goal - to develop a plan of action to enhance the utilization of mangos and seafood. The Reconnaissance Visit took place Aug 28-Sept 6, 1988. Team members included Dr. George Pigott, President of Sea Resources Engineering, Inc. and Professor of Food Engineering at the University of Washington; Mr. Marc Olesky, President of Sky Tropical Fruits; and the Manager of Project SUSTAIN. The team was accompanied throughout its stay in Pakistan by Mr. Ahsan Tayyab, USAID/Islamabad and Mr. John Seymour, a private consultant to Pakistan Agricultural projects. All of Mr. Seymour's expenses were covered by a Pakistani food company, Paramount Food Industries Ltd.

The visit was confined to two of Pakistan's 4 provinces; Sind and Punyab. Karachi, where the visit began, is in Sind. During the course of the visit the team met with the directors and staff of numerous government agencies, industrial operations, chambers of commerce and universities.

The team reported to USAID that despite the governments commitment to assist the private sector build-up of exportable horticultural and fishery products, by favorable import and tax policies current technical practices must be improved if a viable export industry is to be established. The problems identified include the following:

### Mangos

- Pakistan mangos have one important advantage they have good flavor. However, most Pakastani groups and shippers think that is all that counts. Unfortunately, the wholesaler and consumer make the decision to buy before they sample the product and almost none of Pakistan's mango exports meet the European and American mango market requirements for color, shelf-life, lack of blemishes, uniform size, etc. Nor do the cartons for shipping mangos meet international standards.

- Agricultural practices are not conducive to good productivity or the production of blemish free fruit.

- Recently published information is not available to researchers. The result, new technologies cannot be tested under local conditions and the results disseminated to growers and shippers.

- No refrigerated transportation appears to be available. Quick cooling of harvested fruit is non-existent.

-Air transportation to international markets is inadequate.

## Fisheries

- The government is exploring the utility of seining natural post larvae and juveniles for transfer to grow-out ponds. The large-scale development of this practice is not feasible because of variability in size between species, variations in supply of larvae, etc.
- The selection of one well-tested shrimp species has a good chance of success. This is being done at one commercial experimental shrimp farm.
- For successful commercialization complete vertical integration is essential. The facility should include (a) closed-cycle hatcheries; (b) on-site feed preparation; (c) on-site or nearby processing facilities; (d) a transportation network for direct shipping to port; (e) good research/lab back-up for disease control, water and fry monitoring and product quality control and (f) a marketing program to ensure timely movement of inventory.

The team recommended that a workshop be held on "Mango Production, Post Harvest Technology and Marketing". The workshop would address the problems identified at the workshop and suggest solutions. Potential attendees were identified, allocation for the workshop proposed, appropriate time recommended, potential Pakistani coordinators identified and SUSTAIN's role spelled out.

It was also recommended that a workshop on Shrimp Aquaculture Technology be held. Practical aspects to be covered would include (a) hatchery techniques, (b) on-site feed manufacture and (c) on-site preparation and freezing of products, etc.

A detailed report on the Reconnaissance visit was prepared and distributed.

Follow-up to the visit included a mango workshop and training course in 1989. Plans have also been made for a fisheries workshop.

## **Honduras**

Project SUSTAIN was invited by USAID/Tegucigalpa to send a Reconnaissance Team to Honduras. The visit was suggested by Henry Fransen, Jr., President of the Northern Honduran-American Chamber of Commerce (Norhamcham). The USAID mission concurred and arranged for our visit. The visit was held Sept 25-Oct 1, 1988. The team consisted of Dr. Ray Frodey, Vice-President (retd) Gerber Products Co., Dr. Lee Harrow, Vice-President, Heinz Co., and the Manager of Project SUSTAIN. The team visited San Pedro Sula and Tegucigalpa and their environs. The visit started in San Pedro Sula where Norhamcham arranged our itinerary. It concluded in Tegucigalpa where The Fundacion Para la Inversion y Desarrollo de Exportaciones (FIDE) made all necessary arrangements.

In San Pedro Sula the team met initially with approximately 65 members of the local food industry and held one-on-one meetings with 15 of the attendees and followed this with 8 plant visits. In Tegucigalpa an initial meeting was attended by 85 members of the local food industry, one-on-one meetings were held with 14 of the attendees and this was followed by 6 plant visits.

The 43 companies made 75 specific requests for technical assistance. These can be grouped into categories such as extending the shelf-life of products, post-harvest handling of fruits and vegetables, training of mid-level technicians, improving quality control procedures, improving plant layout, waste disposal, requirements for exporting food products to the U.S., etc.

Based on discussions with seminar technicians and plant visits. The team concluded that:

- Managers and technicians were inherently capable but many lacked the basic knowledge in terms of processing, plant sanitation, quality control and food safety to produce quality products.
- There was a lack of basic, simple instrumentation to determine bacterial counts, moisture, pH, temperature, etc. Products produced, particularly low acid foods, could be hazardous to health.
- In small/medium companies there was a serious lack of processing equipment essential for the production of safe quality products.
- Lack of foreign exchange kept small/medium companies from buying essential equipment or accessing technical literature.
- There appeared to be an absence of trained maintenance and repair personnel. Expensive equipment stood idle because repairs could not be made locally.
- Companies tended to produce too many products in too little space. Plants were overcrowded, poorly designed, unsafe and unsanitary.

Based on these observations the team recommended:

- That a technical information library be established in a suitable organization. SUSTAIN recommended handbooks, journals and bulletins to be included.
- That used stainless steel equipment be obtained and an equipment pool of tanks, heat exchangers, piping, pumps, etc be established.
- That a series of workshops/services be presented on plant sanitation, packaging, U.S. import regulation, etc.

At the request of NORHAMCHAM and USAID SUSTAIN produced a series of workshops in 1989 based on the 1988 Reconnaissance Team recommendations.

## Workshops

### Belize

As a follow-up to the short course on Food Packaging presented at Clemson University, USAID/Belize requested Project SUSTAIN to arrange a 3 day workshop on Food Packaging. The workshop was co-sponsored by the Belize Institute of Management and USAID. It was presented by LeRoy Doar Dec 19-21. Key topics were: (a) the use of materials, methods and machinery to develop and produce the packages that protect and preserve a product; and (b) how to develop new and innovative packages and maintain product identity. At the conclusion of the seminar Mr. Doar consulted on a one-on-one basis with 3 of the 10 companies represented at the seminar.

### Kenya

A workshop on Product Development was held in Nairobi Oct 17-19, inclusive. The formal sessions were followed by 2 days of one-on-one discussions with workshop attendees. The workshop was sponsored by the Kenyan Association of Manufacturers, the University of Nairobi and the USAID mission. The "Faculty" consisted of Dr. Philip Nelson, head of the Department of Food Science at Purdue University and Mr. John White, Vice-President (retd) Kraft, Inc. Ms Melanie Stettz, Project SUSTAIN travelled to Nairobi prior to the meeting to help finalize workshop arrangements, ensure availability of audio-visual equipment and of literature hand-outs, etc. The workshop provided (a) an overview of the various stages in product development, (b) concept generation, product development management, (c) consumer evaluation procedures, (d) new product requirements, (e) case studies and (f) practical exercises in product development.

### Yemen

A workshop on General Food Processing was held in Taiz Oct 23-27. The faculty consisted of Dr. John Nelson, Vice-President, McCormick & Co.; Mr. Michael Fader, Vice-President (retd) H.J. Heinz, Co. and Mr. John White, Vice-President (retd) Kraft, Inc. (by scheduling the Kenya and Yemen workshops back-to-back John White could ably serve on both faculties at a major saving in transportation costs). The workshop was co-sponsored by the U.S. Ambassador to Yemen, the governor of Taiz and the Director of USAID. Approximately 50 individuals attended the workshop. The workshop topic and sub-topics reflected the needs identified by the Reconnaissance Team earlier in the year. Information was provided on (a) raw material specifications with emphasis on wheat flour, (b) product development, (c) cost reduction, (d) dairy products, (e) fats and oils, (f) cereal processing, (g) safety of products, people and plant facilities, (h) good management practices, (i) quality assurance and (j) product development. White, Fader and Nelson visited plants in their respective areas of expertise (dairy, fats and oils and cereals) and provided ad hoc advise and received requests for future assistance. Recommendations for

follow-up workshops were made.

Evaluation of Food Quality Assurance Short Course given at Maryland University May 31 - June 13, 1987

Dr. Donald V. Schlimme, Professor of Food Science at the University of Maryland and Dr. Daniel McPherson, Vice-President (ret'd) General Mills and member of the SUSTAIN Board of Directors visited several of the students that attended the Quality Assurance Course. Plant visits were made in Belize and Guatemala between Feb 19-23. Five students/plants were visited all of the students interviewed reported some degree of Quality Control application resulting from their participation in the course - ranging from a 30% increase in plant sanitation activities to the adoption of a complete statistical Quality Control program to be utilized in a new plant facility (including hiring a Quality Control Manager). Specific quality control innovation implemented as a consequence of the course included increased attention to chlorinated sanitation procedures, a redesign of the protocol of reporting all quality control tests to management, and the development of new Quality control data forms for monitoring and recording production operations.

In general the participants rated the course as excellent. Without exception the students felt that the most valuable course segment was Statistical Quality Control. A number of suggestions were offered on improving the course these included (a) course materials be sent to the students well in advance of the course, (b) tailor make plant visits to the students immediate interest, (c) conduct plant visits prior to the lecture portion of the course, (d) do not spend time on highly technical testing procedures not applicable to LDC capabilities and (e) make available a list of text books, journals, etc. available in the U.S. that address specific Quality Control concerns of specific commodities.

The evaluation provided inputs to a short course on Packaging that was to be given at Clemson University and indicated that short courses were a useful SUSTAIN "investment".

Food Packaging Short Course

A Food Packaging Short Course was given at Clemson University July 31-Aug 13, 1988.

Food Packaging is one of the major problem areas in food preservation particularly in developing countries. Proper packaging is not simply desirable but essential in minimizing post-harvest food losses. Clemson University is one of the few U.S. universities that has a full-fledged Packaging Science degree program. The University has both the faculty, the experience and the laboratory facilities to present an excellent short course. Project SUSTAIN working with Mr. LeRoy Doar, President of the Omega International Group (a packaging consultant company), a professor

of packaging science at Clemson and with extensive experience in developing countries developed a short course geared to the needs of food processors in developing countries. The course consisted of 3 instructional areas (a) lectures, (b) laboratory experiments and (c) field trips to selected food processing and packaging plants. Topics covered in formal sessions included (a) the role of packaging with food cycle, (b) packaging materials and laboratory experiments, (c) converting processes and techniques (how paper, fiberboard, glass, metal and plastics are converted to final containers), (d) graphic arts and printing laboratory, (e) package Analysis and Testing laboratory, (f) factors to consider in selecting a package and , (g) packaging for the export market. Field trips included visits to a canning facility, a manufacturer of plastic packaging materials, a manufacturer of glass and metal containers, a soft drink manufacturer and a milling operation.

Twelve senior technicians with responsibilities for packaging attended. Participants came from Belize, Dominica, Grenada, Guatemala, Indonesia, Jordan, Mexico, Mouterrate and the Philippines. Student evaluations at the end of the course gave it an excellent rating.

### Consultants

#### Honduras

Fabrica Industrial de Alimentos de Honduras (FIAH) submitted a multiple request for technical assistance. SUSTAIN responded by sending a consultant; Dr. Lee Harrow, recently retired Vice-President and consultant to H.J. Heinz, Co. Prior to his participation in the Honduras Reconnaissance Visit he spent several days at FIAH. He (a) recommended changes in formulation and processing to improve crispness of pickled snow peas, (b) modified processing and materials handling to eliminate mold growth in mayonnaise, (c) developed formulations for salad dressing and pancake syrups, and (d) recommended process and equipment for vinegar production from available fermentation sources.

#### Peru

Project SUSTAIN continued to work closely with Peruvian food producers and processors through USAID/Peru and FDN (Fundacion para el Desarrollo Nacional). The Piura Chamber of Commerce and the San Lorenzo Producers Association requested thru FDN and USAID technical assistance in mango production and marketing. Arrangements were made for Mr. Marc Olesky, President of SKY Tropical Fruits to serve as the consultant. During the period Oct 26-Nov 2 he visited a number of mango plantations in the Piura area and advised growers/producers on improving their agricultural practices and the quality of the fruit. He also participated in a workshop on "Mango Handling for Export" where he discussed marketing of fresh mangos in the U.S. A report summarizing his findings and recommendations was submitted to USAID and growers.

## Training

Bon Appetit, S.A., a processor and exporter of canned foods in San Salvador, requested through the USAID mission training for three of its employees. According to U.S. regulations packers of low acid foods must have a certified supervisor on hand during processing. Project SUSTAIN shared costs with Bon Appetit by providing transportation for the production manager and two plant shift operators to attend a "Better Process Control" short course May 2-6. Bon Appetit provided tuition and per diem. The course certified by FDA was given in Spanish at the University at Puerto Rico. The course was successfully completed and resulted in appropriate certification for the three participants.

## SUSTAIN NOTES

Four Issues of SUSTAIN NOTES were published in 1988.

- "Microbiological Hazards and Controls in Food Processing" - by Virginia N. Scott, Associate Director of the Microbiology Division of the National Food Processors Association.
- "Cleaning and Sanitizing: THE core of a Plant Sanitation Program" - by Dora May Coleman, a senior microbiologist with the Pillsbury Company.
- "Inventory Control/Reduction" - by Harry J. Tetlow, Director Logistics Operations, Campbell Soup Company
- "Design, Construction and Procedural Guidelines For Interrupting the Foodborne Infection Chain in Food Processing Preparation and Handling" by Lee S. Harrow, Vice-President Technical Development, H.J. Heinz Co.

Each issue was sent to approximately 1400 recipients associated with the food industry in 50 countries.

## Requests

Requests for Technical Assistance were received from over 120 companies and organizations almost a threefold increase over 1987. Requests were received from the following 22 countries.

Barbados	Jordan
Belize	Kenya
Costa Rica	Nigeria
Dominica	Pakistan
Egypt	Peru
El Salvador	Philippines
Ghana	Sri Lanka
Guatemala	Thailand
Honduras	Uganda
India	Yemen
Indonesia	Zimbabwe

In response to these request the following forty U.S. food companies and food related organizations provided information,

short-term consultants and/or training.

American Association of Cereal Chemists  
American Institute of Baking  
American Soybean Association  
Bar Export/Import  
Campbell Soup Company  
Campobello-Gramling Cannery  
Clemson University  
Colorado State University  
Crown Cork and Seal Company  
Cryovac Division/W.R. Grace  
CPC International  
Del Agra Corporation  
Edlong Flavors, Inc.  
Estee Corporation  
Flowers Industries  
General Mills, Inc.  
Gerber Products Company  
Grocery Manufacturing of America, Inc.  
Hershey Foods Corporation  
H.J. Heinz Company  
International Flavors and Fragrances  
Intsoy, University of Illinois  
Kraft, Inc.  
McCormick and Company  
National Food Processors Association  
Omega International Group  
Pacific Rim Produce Marketers, Inc.  
Pan American Engineering and Equipment Company  
Pennwalt  
Pepsico  
Pillsbury Company  
Post Harvest Institute for Perishables,  
University of Idaho  
Purdue University  
Rich Products Corporation  
Schotland Business Research, Inc.  
Staley Industrial Products  
Sterling Anthony, Inc.  
U.S. Department of Agriculture  
U.S. Food and Drug Administration  
Wise Potato Chips Division/Borden

1989

Reconnaissance Visits

Reconnaissance Visits were made to Swaziland, The Eastern Caribbean and Bolivia.

Swaziland

Project SUSTAIN was invited by USAID/Mbabane to send a reconnaissance team to explore three issues (a) the use and marketing of sprouted sorghum as a weaning food additive; (b) the use of blended flours to improve nutrition; and (c) the potential for expanding the food processing industry in Swaziland with the primary goal of producing more jobs. In addition the team's conclusions and recommendations were to serve as resource material for the mission's Country Development Strategy Study (CDSS).

The reconnaissance visit was made February 13-18, 1989. The team members included Dr. Arnold Denton, Vice President, Campbell Soup Co; Dr. John Nelson, Vice-President, McCormick and Co; and the Manager Project SUSTAIN.

The team met with USAID personnel; State and Central government officials; representatives of the private food industry; companies promoting foreign investments, and UNICEF personnel concerned with the weaning food project. Plant visits were made to the producer of the weaning food additive; various food processors ranging from Mom and Pop operations to the third largest employer of labor in the country. Visits were also made to training centers, Swaziland University; an Agricultural Research Center; and rural food stores.

The conclusions reached and the Recommendations made to USAID are as follows:

The Weaning Food Additive

The Swaziland National Nutrition Council's (NNC) weaning improvement project is funded by UNICEF and USAID. One facet of the project is to produce and market a milled germinated sorghum (malt) to be added to the corn porridge used by mothers in Swaziland as the weaning food (the malt enzymes by decreasing the viscosity of the porridge produce non-diluted high caloric density product that can be readily swallowed by small children).

The team concluded that (a) the product was not completely formulated and (b) a number of issues required clarification before a decision could be reached on whether the product had commercial viability.

Project SUSTAIN also agreed to (a) look at ways to produce an

appropriate additive; (b) determine the level of enzyme activity in the current product; (c) identify purified enzymes and their cost; (d) provide UNICEF/USAID with information concerning similar studies in Nigeria and Tanzania and (e) if requested, provide a consultant(s) to help in setting up protocols for producing and distributing the additive.

Subsequent to the visit the American Maize Co. carried out the analytical and cost studies; SUSTAIN provided information on ongoing studies and a consultant team was sent to Swaziland.

### Composite Flours

Meetings with the individuals at the University of Swaziland concerned with blended or composite flours indicated that the project had not reached the point where an assessment of viability could be made. The team provided ad hoc advice and SUSTAIN subsequently sent considerable literature on composite flours to the researchers.

### The Potential for Increasing Agricultural Productivity and Expanding Food Processing

Based on discussions and observations the team concluded that (a) producing for the local market limits growth since the potential market (700,000 population) is too small. Large operations could only exist if they produce for export; (b) there is no food processing industry to build upon; (c) there is a lack of skilled labor and management; (d) the Republic of South Africa (RSA) dominates the Swazi economy. Swazi produced items must compete against name brands and sophisticated products; (e) wealth is measured in terms of cattle owned. As a result the land is overgrazed and poorly utilized; (f) over half the land is Swazi National Land. This land supports 40,000 small-scale farmers on homesteads that average 3 hectares. These farms produce only 4% of the GDP. The more fertile land is in the hands of the King and in private hands.

Accepting the reality of these constraints. The team strongly endorsed USAID's emphasis on small scale agricultural production and agricultural business as evidenced by a new \$1,000,000 Commercial Agricultural and Marketing Project (CAMP). SUSTAIN offered to assist in monitoring the business aspects of this project by having a member of the Project SUSTAIN Board of Directors participate in CAMP reviews.

The team recommended that USAID (a) encourage and support existing efforts to teach entrepreneurial skills; (b) encourage the development of an export vegetable canning industry by inviting companies such as Campbell Soup or Heinz to establish vegetable processing operations that would purchase vegetables from small scale farmers under contract; (c) identify budding food processing businesses that could benefit from increased funds and training. The team found that several small industries are developing e.g.

honey production, poultry raising, fish farming, solar drying of vegetables, jam, jelly and sauce production, etc.

A comprehensive report was prepared and distributed.

### Eastern Caribbean

Project SUSTAIN was invited to send a Reconnaissance Team to several of the Eastern Caribbean countries. The invitation was made by the Small Enterprise Assistance Project (SEAP) of the Caribbean Association of Industry and Commerce (CAIC). The SEAP project is funded by AID's Regional Development Office/Caribbean and operates under the aegis of CAIC. Based on SEAP's knowledge of agro-business activities in the 7 countries of the region, visits were scheduled for Barbados, Dominica, St. Lucia and Grenada.

The visit was made May 2-11, 1989. The team members included Mr. John White, Consultant and Vice-President (ret'd) Kraft; and Michael G. Fader, Consultant and Vice-President (ret'd) H.J. Heinz Co. The project manager accompanied the team to Barbados but not to the other islands.

The anticipated outputs of the visit included: (a) suggestions for local, inter-island product diversification; (b) identification of candidates for specific training/development and (c) identification of workshop topics for upgrading food processing in the region.

The team visited 7 food processing establishments in Barbados; 6 organizations in Dominica; 3 associations and 4 processing units in St. Lucia and 1 cooperative and 5 food processors in Grenada.

The products produced by the various companies included meats (fresh, refrigerated, frozen, canned and smoked); fruit (fresh, drinks, juices); processed banana products; mixed feeds; dairy products and margarine; condiments; sauces; coffee; jams and marmalade; soy products; spices; herbal teas; essential oils; processed poultry; candies and sea moss. The plant visits revealed a wide range of technical sophistication. Plants ranged from small, crowded and unsanitary to modern operations.

The meetings with the owners, managers and technicians of the 26 companies visited produced 47 requests for technical assistance. In some instances ad hoc advice was offered. In all instances follow-up information was or is being supplied.

A summary of the needs identified by companies included: (a) Data on production of vegetable ice-cream; (b) information on 40% fat margarine; imitation cheese flavors; (c) information on packaging materials (corrugated boxes, films, microwaveable plastics, bottle closures, materials for packaging fresh produce); (d) information on dairy products (nutriment types, lactose treated, aseptically packaged); (e) training; (f) equipment (onion

peelers, fillers for spice and tea, pasta dryers; distillery equipment for essential oils, etc.); (g) information on soy foods, tofu processing, use of methocel for firming sausages; (h) information on all phases of poultry processing; (i) information on technical service bulletins, magazines, catalogs, etc; (j) mango processing; (k) used equipment suppliers; (l) general information on packaging services; (m) information on packaging services; (n) preparation of shelf-stable juices and (o) mayonnaise formulations.

At a final debriefing with CAIC and USAID the following conclusions and recommendations were offered:

1. The export inter-island situation could be summarized as follows; difficult to start, difficult to maintain and often discouraged to protect local manufacturers.
2. A major frustration is packaging. Sources of packaging equipment and materials and uses of these materials were frequently asked questions. A workshop on Packaging would be useful.
3. There is a major technical information gap. Island food companies, particularly small ones are keenly aware that they are generally unaware of technical developments. It would be useful if some of the Associations visited could receive free copies of major food trade journals. Project SUSTAIN agreed to determine if journals could be made available.
4. There is a universal need for obtaining the names of suppliers of good used and rebuilt equipment. SUSTAIN agreed to supply information.
5. All companies visited were eager to export but in a sense didn't know how to start. It would be useful for SEAP to identify importers and furnish the information to businesses throughout the islands. SEAP was given a listing of all the major manufacturing and trade associations in the U.S.
6. Workshops would be useful training tools. Based on the teams observations workshops in the following areas were recommended: packaging; sanitation; Quality Control; plant design and layout; and planning and marketing.

Project SUSTAIN agreed to explore the possibility of follow-on workshops with SEAP.

A comprehensive report on the Reconnaissance Visit was prepared and distributed.

### Bolivia

USAID has the task of creating viable crop alternatives to the

illicit production of coca. USAID's efforts are concentrated on upgrading industry and increasing the export of farm products including value added fruits and vegetables.

USAID/Bolivia invited SUSTAIN to send a Reconnaissance Team to explore how Project SUSTAIN could assist the mission in carrying out its program. The visit took place Aug 20 - Sept. 1, 1989. Team members included Mr. Michael G. Fader, Consultant and Vice-President (ret'd) H.J. Heinz Co., Mr. Joachim W. Staackmann, Manager Technology Transfer, Kraft, Inc. and the Manager of Project SUSTAIN. USAID arranged for the team to meet at group meetings and one-on-one visits with appropriate AID personnel, representatives of other donor programs, various food oriented organizations and with members of the food industry. Plant visits were also arranged. Meetings and plant visits were made in La Paz, Cochabamba and Santa Cruz. In all 48 visits were held plus debriefings at USAID.

The team met with national and regional organizations and associations that represented practically all agricultural sectors (dairy, fruits, vegetables, poultry, beef, coffee, etc.) and visited a broad spectrum of food processing plants. Virtually all the agribusiness groups emphasized Bolivia's urgent need to (a) increase exports (b) establish joint ventures and (c) produce quality products. Plant visits produced a broad range of requests primarily concerned with (a) packaging (modified atmosphere packaging, aseptic packaging, packaging equipment, failure of packaging materials, etc.); (b) soybeans (processing into protein and oil, antioxidants and packaging); (c) meat and poultry (processing, refrigeration, sanitation, waste water disposal); (d) Dairy Products (lactose removal, preservation, management of dairy herds); (e) grain storage; (f) FDA regulations; (g) good manufacturing practices; etc.

The 48 visits and interviews generated 79 requests for technical assistance. The team provided ad-hoc advise and SUSTAIN subsequently answered (or is in the process of responding) to the requests.

The team presented its conclusions and recommendations at a final debriefing attended by the USAID director and key staff. In terms of the objective of replacing coca with alternative crops and value added fruits and vegetables there are serious problems - (a) the population in the money economy is simply too small to support crop alternatives to coca. Logically, Bolivia must have viable exports to replace coca. But to export you need at a minimum (i) reasonably large quantities of uniform quality products that can be marketed, (ii) prices that are competitive and at a Bolivian cost that allows acceptable profit margins and (iii) reliable, internationally competitive delivery and service.

The team attempted to evaluate some of the proposed alternative crops (fresh and processed) in terms of the 3 prerequisites - there were major pitfalls e.g.

- Many items (coffee, citrus, macadamia, cacao, coconuts, cattle, etc) need 3-5 years for the first cash crop to materialize.

- There is a transport problem. Therefore, many items (citrus, fruits, vegetables, milk, cattle poultry) must be processed (concentrated, spray-dried, frozen, sterilized/packaged, etc.) to allow for shipment to market.

- To justify investment in reasonably large, costly and quality effective processing facilities such as aseptic packaging, spray drying, etc. there must be some assurance of the availability of sufficient quantities of the commodity of good quality and competitive costs. For most of the crops, this cannot be assured.

To help overcome these difficulties the team suggested (a) that tax incentives be provided to attract investment copied from the U.S. or other countries; and (b) the installed manufacturing capacity that is available particularly in government owned facilities be utilized more efficiently.

A comprehensive trip report was prepared and distributed.

### Workshops

#### Honduras

- A 1 1/2 day seminar on Food Packaging was presented by LeRoy Doar in San Pedro Sula. The seminar under the sponsorship of Norhamcham and USAID was followed by one-on-one meetings with 10 companies in San Pedro Sula and 2 in Tegucigalpa. The seminar and consultant visits were made Jan 3-7, 1989. The seminar was attended by 51 people.

- As a follow-up to the January seminar Norhamcham and USAID requested a follow-up Food Packaging workshop that would be devoted to (a) Packaging of perishable products for export to the U.S.; (b) Packaging of jams, jellies and similar products in glass; (c) proper packaging of dairy products, grains and other selected products. LeRoy Doar presented the workshop Aug 2-5 in San Pedro Sula. Forty-one people attended. He stayed on in San Pedro Sula until Aug 11. From Aug 5-11 he consulted with 5 companies, lectured at the University of Honduras, and met with the Honduran Agricultural Research Foundation. As a result of the 2 visits to Honduras he arranged for several Honduran principals to visit U.S. suppliers of packaging machinery and materials. A letter of understanding was arranged between the University of Honduras and Clemson University to embark on joint programs. Mr. Doar is continuing to send information on packaging to food companies in Honduras.

- A workshop on "Requirements for Export to the U.S." was held in San Pedro Sula March 13-18, 1989. The workshop was sponsored by USAID and Norhamcham. The faculty consisted of LeRoy Gomez, The Chief of the Denver District of the Food and Drug Administration and John Slavics a former Pillsbury Director of Quality Assurance and now with AT International. The 30 attendees included plant managers and several government representatives from the Ministries of Health and Economics. Topics covered included the responsibilities of the FDA, legal requirements for exporting to the U.S., restrictions on the use of pesticides and colors in foods, the role of USDA and the U.S. customs service, the importance of product specifications, sanitation requirements, etc. Coming on the heels of the Chilean grape episode, the workshop gave special sharpness and immediacy to "Requirements for Export".

- A workshop on Food Dehydration was held in San Pedro Sula Sept 11-15, 1989. The workshop was sponsored by USAID and Norhamcham. The workshop was organized and presented by Ms. DeAnna DeLong, Consultant in Consumer and Industrial Dehydration and Mr. Leon Cooper, International Manager for Energy Associates International. Topics covered during the 3 formal days of the workshop included; Basic Dehydration Principles, pre-treatment of fruits and vegetables; maintaining plant cleanliness and safety; dehydrated food products presently being sold in the U.S.; construction of small-scale dryers and the types of dryers available commercially. Following the workshop, 2 days were set aside for providing technical assistance on a one-on-one basis. The President of Norhamcham reported taht the workshop was an "enormous success". The 28 participants and Norhamcham requested a follow-up workshop that would concentrate on specific foods.

### Pakistan

As a follow-up to the Pakistan Reconnaissance Visit a workshop on Mango Production and Marketing was held in Multan Pakistan Feb 27 - Mar 1, 1989. The workshop was sponsored by USAID/Pakistan and the Government of Pakistan. SUSTAIN provided the 2 key faculty members Marc Olesky, President of Sky Tropical Fruit and John Seymour, President of J & B Seymour Consultants. Olesky discussed (a) agricultural and management practices (disease control, pruning techniques, etc.); (b) desirable characteristics of mango varieties; and (c) mango packaging practices for the international market. Seymour reviewed postharvest practices to maintain quality and extend shelf-life with an emphasis on pre-cooling of fruit after harvest and refrigerated transport.

USAID/Pakistan on reporting on the success of the workshop included the following in its message: "It was the first time both the private and public sector have participated in such a workshop. The workshop was inaugurated by the Provincial Minister of Agriculture/Punjab who was accompanied by the Secretary of

Agriculture who was the prime mover in instigating the workshop. The attendance was approximately 120 participants --- "Three working committees on production, harvesting and cooling; and marketing will implement the workshop recommendations.

### Kenya

A workshop on "Food Processing Sanitation and Waste Disposal" was held Oct 4-6, 1989 in Nairobi. The seminar was sponsored by the Kenyan Association of Manufacturers, the USAID mission, and the University of Nairobi. Mr. Walter Rose of the National Food Processors Association and Dora May Coleman of Pillsbury developed the curriculum in cooperation with KAM and served as the "faculty". Dr. Talash Likimani of the University of Nairobi opened the seminar with an update on current sanitation practices in Kenyan food processing establishments. Presentations were made on food Microbiology, Good Manufacturing Practices, Cleaning and Sanitizing Food Processing Equipment, Environmental Water Conservation and Disposal, Solid Waste Utilization and Disposal and Emerging Technologies in handling Waste Streams.

Attendees included representatives of bakeries, dry milling, spices, sugar, fruits and vegetables, dairy, and infant food operations.

### Training

#### Pakistan

A Project SUSTAIN 2 week training course in Post Harvest Technologies was held for Mango Growers in Multan, Pakistan June 14 - June 30, 1989. This was a follow-up to the USAID/GOP/SUSTAIN workshop. Marc Olesky, President, Sky Tropical Fruits a "faculty" member at the Mango workshop provided the training.

Growers learned and saw what stage to pick mangos to ensure longer shelf-life, how to pack fruit, how to make use of nearby irrigation water or streams to remove field heat from mangos, design of proper cartons for shipment overseas, etc.

In addition arrangements were made with Philippine Internatioal Airlines to provide cargo space for test shipment of manos to Frankfurt. Estimates are the growers can receive about 24 rupees/kilo FOB Karachi in contrast to 6 rupees/kilo in Karachi.

### Consultants

#### Swaziland

As a follow-up to the February Reconnaissance Team Visit two consultants were sent to assist the "weaning food additive project. Ms. Penelope Johnson a marketing expert with McCormick and Co., and Mr. David Gottneid a senior technician with the American Maize Company visited Swaziland April 17 - 21, 1989.

Recommendations made by the team covered the production and marketing of the germinated sorghum additive.

For the Production of the Porridge "Additive" it was recommended that (a) a small controllable malting facility should be established possibly at the Manzini Industrial Training Center. (MITC teaches skills that can produce employment and encourage the establishment of small, local businesses. MITC also has pilot-plant food processing facilities); (b) the facility utilizes raw materials which are locally available and technology/equipment which is appropriate to the locals and (c) technical malting and engineering expertise be obtained (thru SUSTAIN) to help set-up the facility. A protocol was developed outlining the basic steps in the malt production process.

For the Marketing of the additive a protocol was developed for answering the many questions that would affect marketing. Some of the issues included: (a) Determining how the product should be distributed (retail chemicals or clinics); (c) determining the shelf-life of the product; (d) evaluating the final product in a test market; (e) determining who makes the purchasing decisions; (f) determining how current purchasing practices can be changed, etc. etc.

### Philippines

Mr. Manuel Silva President of Pan American Engineering and Equipment Co. served as a consultant to R & M preserves in Cebu City Apr 29 - May 9, 1989. The company produces dried tropical fruit products: A major product is dried mango. The consultant made recommendations involving (a) improvements in drying (b) substitutes for sulfur dioxide in preservation, (c) changes in packaging and (d) improvements in quality assurances. He designed and left specifications for (a) a simple conveyor system, (b) simple slicing equipment (now done by hand); (c) improved drying equipment in particular use of tunnel rather than cabinet dryers, (d) use of a grading system etc. etc.

### Peru

- INTERPRO is an agroindustrial group. The company in association with nearby farmers who own about 500 hectares was setting up an Instant Quick Freeze (IQF) plant for freezing vegetables. Through USAID/Lima the company requested technical assistance in the form of a consultant who could review their field operations and the construction and equipment plans for the new facility.

Dr. Nazmy Elehwany, President Del Agra corporation (a Delaware vegetable freezing operation), visited both the farms and plant July 13-17, 1989. He advised on agricultural practices, post-harvest handling, etc. At the plant construction site he reviewed plans and recommended changes in plant layout and

proposed equipment. In a message to USAID/Peru the President of INTERPRO stated " The Visit of Dr. Elehwany has been very useful to the development of our Agroindustrial Project --- his recommendations have already been incorporated by our suppliers". INTERPRO requested that Dr. Elehwany return when the plant was completed.

Dr. Elehwany returned to Peru on Jan 28, 1990. Because of SUSTAIN's funding constraints INTERPRO is paying for Elehwany's air transportation as well as per diem.

- At the request of USAID/Peru Harold Mannion, President of ATMA International an importer of fruits and vegetables visited Peru Aug 6-11. He advised several companies including, INTERPRO on the marketing of fruits and vegetables in the U.S. and the requirements for creating successful food exporting enterprises. He also presented a one day seminar to a group of about forty people.

- Selva Industries growers and processors of Paprika requested technical assistance through USAID/Peru. The problem: Color degradation during processing. Mr. Edward Baro Company Manager technical development for the Gilroy Division, McCormick and Co. served as a Project SUSTAIN consultant September 3-8, 1989. His conclusion: the drying procedure, sun-drying followed by oven-drying was the culprit. Sun drying does not lower the moisture content of paprika to the point where it can be ground. The oven drying stage overheated the product and resulted in color degradation. Mr. Baro pointed out that if paprika was for export, there would be too many insect fragments and other sanitation problems. He recommended/designed a dryer that could be built in Peru. Since USAID is interested in promoting paprika production for export Mr. Baro also made 2 presentations to potential paprika growers describing (a) the paprika market, (b) who produces it and(c) quality characteristics needed for export.

### Training

As a follow-up to the Caribbean Reconnaissance Visit SEAP requested training for Mr. John Hackett, Managing director and owner of Future Products Ltd., Trinidad. The company produces frozen fruits and vegetables and has established a good local market. Mr. Hackett has had no formal training in food processing and SEAP requested that SUSTAIN explore the possibility of in-plant training at a similar operation to cover postharvest handling, inventory control, quality control, packaging and distribution.

The Campbell Soup Co. (through Dr. Denton) arranged for Mr. Hackett to receive two weeks of in-plant training at Campbell's de Mexico in Celaya, Mexico. Mr. Hackett's training began on Nov 26, 1989. Mr. Hackett's reaction to his experience - he reported that he was very well treated - " The supervisory staff at Campbell's went out of their way to ensure that whatever information at their

disposal was made available to me --- the program was quite intensive and covered the widest spectrum of their overall operation --- I believe small processors in underdeveloped countries do not have a clue as to processing to given standards and specifications --- now that I am more aware, there are a number of inadequacies that I know exist at our plant that I would like to correct at the earliest opportunity ---".

#### SUSTAIN NOTES

Three Issues of SUSTAIN NOTES were published in 1989.

- Warehouse Sanitation and Pest Control - by Austin F. Kraft, Quality Maintenance Manager for Hershey Chocolate USA.

- Guidelines for the Purchase of Equipment for the Food Processing Industry - by Manuel Silva, President of Pan American Engineering and Equipment Co.

- Practical Sensory Evaluation - by Marianne H. Gillette, Manager Product Evaluation, McCormick & Co.

Each issue was sent to approximately 1500 recipients associated with the food industry in 50 countries.

#### Requests

Approximately 165 requests for technical assistance were received from companies and organizations in the following 26 countries:

Barbados	Jamaica
Belize	Kenya
Bolivia	Nigeria
Brazil	Pakistan
Costa Rica	Panama
Dominica	Peru
Egypt	Philippines
Ecuador	Sri Lanka
Grenada	St. Lucia
Guatemala	Trinidad
Haiti	Uganda
Honduras	Yemen
Indonesia	Zimbabwe

In response to these requests the following 40 U.S. companies and organizations have provided information, short term consultants and/or training.

American Institute of Baking  
American Maize Products Co.  
ATMA International  
Beatrice Co.  
Campbell Soup Co.

Croyovac Division/W.R. Grace  
DelAgra Corporation  
Dixie Canning Co.  
Energy Associates Internatioal  
Food Packaging Machinery and Supplies Association  
Food Packaging Machinery and Supplies Association  
FoodPak Tech., Inc.  
General Food Corp.  
General Mills, Inc.  
Gerber Prodcuts Co.  
Global Quality Trading, Inc.  
Grocery Manufacturers Association  
Hershey Food Corporation  
H.J. Heinz, Co.  
Intsoy, University of Illinois  
J & B SEYMOUR CONSULTANTS  
Kraft, Inc.  
McCormick and Company  
National Coffee Processors Association  
National Food Processors Association  
Omega International Group  
Pan American Engineering and Equipment Company  
Pepsico  
Pickle Packers International  
Pillsbury Co.  
Post Harvest Institute for Perishables, Univ. of Idaho  
Sea Resources Engineering  
Sky Tropical Fruit, Inc.  
Star-Kist Foods, Inc.  
Texas A & M  
U.S. Customs Service  
U.S. Department of Agriculture  
U.S. Food and Drug Administration  
U.S. Department of Health and Human Services  
University of Missouri at Columbia, Missouri  
University of Rhode Island

#### Unfinished Business

##### (1) SUSTAIN NOTES

(a) Editing and Printing of Vol 3 issue 4 (1989-Winter Issue) of SUSTAIN NOTES "Aseptic Packaging: An Answer to Third World Exports of Food Products - by M. G. Fader is on hold.

(b) We also have on hand Vol 4 issue 1 Anti-Microbial Agents by J. L. Vetter.

(c) We have a committment from Walter Rose (National Food Processors Association) to write an article on Wastewater Treatment and Solid Waste Disposal. He has been asked to delay writing the article.

(2) 1989 Annual Report

The report has been written. The American Association of Cereal Chemists has prepared the article for printing. They have been asked to put it on hold.

(3) Workshops

Four workshops are in various stages of development. One each in Honduras, Barbados, Yemen and Pakistan.

Honduras

A second dehydration workshop was requested for February. We explained that the funding situation called for a delay. A second inquiry was received on January 16. A response is required.

Barbados

The Caribbean Association of Industry and Commerce has requested a seminar "Purchasing Technology and Graphics" to be given in the spring of 1990. Some clarification of the scope and content of the workshop is required. A response is required.

Yemen

We were advised that USAID Sana'a in its CDSS will include SUSTAIN for 2 visits per year over the next 6 years - beginning in late 1990. We replied that we would be delighted to cooperate, but asked if funding for workshops could be shared. USAID/Sana'a replied that funding could not be shared at this time either by USAID or the Yemen companies. However, they presented a list of the workshops desired by the food companies. A response is required.

Pakistan

We are trying to agree on a suitable date for a fisheries workshop. The matter of funding has not been brought up.

(4) Consultants

Bolivia

We had arranged to send an expert to serve as a slaughterhouse consultant to Dillmann S.R.L. We subsequently advised the mission and Dillmann that one or the other would be required to provide travel. Dillmann agreed to fund the travel. Dillmann has requested that the consultant arrival date be postponed.

(5) Reconnaissance Visits

Nigeria

SUSTAIN had made a committment to send a Reconnaissance Team to Nigeria in February 1990. We have advised USAID that the visit must be delayed.

Discussions have also been held with Bangladesh, Morocco, Dominican Republic, Indonesia and Jordan but no firm commitments have been made.

(6) Joint Ventures

Bolivia

We have on an informal basis suggested two organizations that are interested in exploring possibilities for joint ventures in citrus, smoked trout, sesame and corn. no commitments have been made but USAID keeps us informed of progress.

## Appendix 10

# ***INTERNATIONAL NUTRITION PLANNERS FORUM***

---

## **Steering Committee Meeting June 16-17, 1990**

Hyatt Regency Crystal City  
2799 Jefferson Davis Highway  
Arlington, VA 22202

Prince William Room

9:00 a.m. to 5:00 p.m.

Chairman, Professor Mamdouh K. Gabr

### *Provisional Agenda*

- I. Welcome and Introductions - Dr. Norge W. Jerome
  - A. Introduction of steering committee members and guests
  - B. Introduction of INPF Secretariat staff
- II. Approval of Provisional Agenda - Professor Gabr, INPF Chairman
- III. Presentation of the AID Office of Nutrition's "*Vision for the 1990's and beyond*"  
- Dr. Norge W. Jerome
- IV. Update on INPF activities since the last Steering Committee Meeting
  - A. Follow-up to the 5th INPF International Conference, Seoul, Korea  
- Dr. Mark Lediard, AED
    1. Preparation and publication of the proceedings
    2. Translations
    3. Distribution, to date, and inventory remaining
    4. Plans for future use of the document
  - B. Panel presentation at NCIH Meeting, June 19, 1990
  - C. Presentation at the AID State-of-the-art (SOTA) Course, July 8-21, 1990
- V. Presentation on the American Public Health Association Clearinghouse on Infant Feeding and Maternal Nutrition  
- Ms. Gayle Gibbons and Ms. Virginia Yee

- VI. Discussion relevant to the invitation extended to the INPF Steering Committee to meet with Mr. Richard Bissell, the new AID Assistant Administrator, Bureau for Science and Technology, AID. Meeting is scheduled for **Monday, June 19, 1990 at 4:00 pm at the Department of State - Dr. Norge W. Jerome**
  
  - VII. Discussion of the 6th INPF International Conference - 1991
    - Professor Gabr and steering committee members
      - A. Topic selection
      - B. Site selection
      - C. Date selection
      - D. Program Development
        - 1. Major themes for sessions
        - 2. Identification of possible session chairpersons
        - 3. Develop list of potential speakers on selected themes
        - 4. Format (platform presentations, roundtable discussions, breakout groups, poster presentations, etc.)
      - E. Form the proceedings should take, mechanisms for distribution (for example: through workshops, as curriculum material instead of simply written manuscripts)
      - F. Desirability of visit to site where an example of program on the conference theme is in operation
- 
- VIII. Discussion of WHO/FAO co-sponsored World Nutrition Conference - 1992
  - Dr. Norge W. Jerome
    - A. Discussion of possible role that INPF might play in planning, suggesting names of speakers, or sponsoring a key speaker at one of the sessions
- 
- IX. New directions for INPF
  - A. Discussion of organizational structure, including membership, role of the steering committee, terms of office of officers, name (INPF vs. INFDC)
  - B. Relationship with international, regional, and other nutrition organizations
  - C. Need for communication of INPF activities (newsletter, news releases, etc.)
- 
- X. Next Meeting plans
- 
- XI. Adjournment



## **INTERNATIONAL NUTRITION PLANNERS FORUM**

### **Steering Committee Meeting**

June 16-17, 1990

Washington, DC

#### **Minutes**

Participants: (see attached list of participants)

#### **I. Welcome and Introductions**

The meeting was opened by Professor Mamdouh Gabr, Chairman, at 9:15 am. He introduced Dr. Norge W. Jerome, Director of the Office of Nutrition, Agency for International Development who welcomed the group. Dr. Jerome indicated that the International Nutrition Planners Forum is becoming better organized with the establishment of a secretariat with the Nutrition Foundation, Inc. She expressed appreciation to Dr. Jose Mora and LTS for assistance with past meetings. Meeting participants introduced themselves and gave brief comments about their relation to the INPF. Dr. Jerome turned the meeting back to the chairman. The provisional agenda for the meeting was approved without comment.

#### **II. Presentation of the AID Office of Nutrition's "Vision for the 1990's and Beyond"**

Professor Gabr asked Dr. Jerome to provide the context within which the INPF operates as part of the mission of the Office of Nutrition. Dr. Jerome stressed that her objectives in nutrition fit well with the agency's overall development goals of broad based economic growth, reducing world hunger, democratization, developing human potential, and strengthening links with the private sector and with universities. With emphasis on child survival and household food security, these programs are food-oriented as well as "nutrition-oriented" and are community-based and -empowered. Dr. Jerome stated that input from INPF is critical to help ensure that the Office of Nutrition is addressing the appropriate needs in the developing world. The INPF can further provide a voice to ensure that developing country interests are considered in programs sponsored by other major development agencies and organizations of the United Nations.

Following a general discussion of nutrition concerns throughout the developing world, Professor Gabr summarized by underscoring the group's support for INPF objectives and the Office of Nutrition's commitment to operational programs. In order to achieve success, networking is essential both within the nutrition

community and with other disciplines. Partnerships must be established (with, for example, economics, education, health, agriculture, social mobilization, and others). The operational approach is encouraged, but the details of implementation will be specific to each country. Nutrition must be kept as a separate unit in order to be effective in coordinating these efforts. The INPF can help establish these partnerships. One way to do this is by highlighting successes of this multidisciplinary approach, as had been done in the last INPF conference.

### **III. Update on INPF Activities since last steering committee meeting**

Dr. Mark Lediard, Academy for Educational Development, reported on INPF activities since the last steering committee meeting in Seoul, Korea in August, 1989. The proceedings of the 5th International INPF Conference on *Crucial Elements of Successful Community Nutrition Programs* have now been published in English (3,000 copies), French (800 copies), and Spanish (500 copies). Copies have been distributed to all meeting participants and to relevant AID staff in Washington and at the regional and country level. Strategies for further dissemination of the findings of the conference were discussed at length. "Blanket" mailing to lists of names is one way to distribute information on a large scale. However, with limited copies and the important nature of the information contained in the document, alternate schemes were selected.

#### **CONCLUSIONS:**

1. The secretariat will arrange to have the "Conclusions and Recommendations" section reprinted and bound in a cover similar to the original. This will be suitable for widespread distribution by mail, and should be sent to policy makers, program workers, and also media contact people. It will be sent out with a cover letter from Dr. Jerome to identify its origin. Recipients of the summary will be encouraged to write for the full report if interested in further detail.
2. The full report will be reserved for either those who specifically request a copy or for distribution within the context of educational presentations to groups (such as the NCIH panel presentation and the upcoming AID State-of-the-Art (SOTA) workshop for HPN officers). This gives an opportunity for integrating the findings into ongoing learning, rather than serving a passive function.

#### **ACTION:**

Steering committee members are requested to send mailing lists of people in their regions that should receive the summary. Examples are the SLAN mailing list, other nutrition, agriculture, education or health society membership lists, NGO's and PVO's, government officials in countries within your region. Please try to be as accurate and current as possible to minimize costly mailing errors. If other than English version is to be sent, please indicate.

#### **IV. Presentation on the American Public Health Association's Clearinghouse on Infant Feeding and Maternal Nutrition**

Ms. Gayle Gibbons and Ms. Virginia Yee from the APHA Clearinghouse on Infant Feeding and Maternal Nutrition presented an overview of the nature of their organization with particular relevance to how developing country workers could utilize their services. As a repository of nutrition and related health information, the clearinghouse serves as both a resource to people requesting information and a vehicle for increasing exposure of work done in developing countries to other interested parties. With links now being forged with regional information centers, distribution of clearinghouse materials is being facilitated at the country level.

#### **V. Planning for the 6<sup>th</sup> International INPF Conference**

For much of the time on both days the steering committee discussed the 6<sup>th</sup> International INPF Conference. Based on the success of the last conference, the group decided to select a topic that could be related to one of the six crucial elements for successful community nutrition programs. The following conclusions were reached.

#### ***CONCLUSIONS:***

- Title/theme:** *Effective Nutrition Communication for Behavioral Change*
- Site:** Bangkok, Thailand (meeting site); A site visit to an ongoing nutrition communication program in Northeast Thailand might be arranged for 14 September, following the formal program.
- Date:** 10 - 13 September, 1991 (Preceding Asian Congress of Nutrition)
- Audience:** Around 30-35 (40 max) participants who will be country nutrition workers, policy makers and communication experts; Include key AID mission personnel; host country observers will be invited to learn from the sessions, and possibly a limited number of outside non-participatory observers.
- Presenters:** Given the size of the group and the nature of the topic, it is anticipated that most of the invitees will also participate as presenters, moderators, or discussants. The majority of presentations should be given by developing country workers who are knowledgeable about the assigned topic. **Steering committee members will be asked to assist in identifying such**

**individuals once topics are finalized.**

**Format:** There will be a general overview emphasizing methodological advances in communicating nutrition messages to change human behavior, allowing adequate "free" and "directed" discussion time. Case studies of successful programs will be presented. Examples will be drawn from developed country experiences attempting to reduce intake of specific food components, as well as from developing countries where encouraging an increased intake of certain nutrient-rich foods is more pressing. An expert discussant will be asked to draw themes back to the general methods presented earlier. In this way principles presented in the overview can be linked to the case studies.

**Sessions:** Each session will have a chairman to introduce the topics and the speakers. The chairman would have the prerogative of allowing observers to comment at the end of the session, time permitting. A session moderator will direct the discussion following the presentations. There will also be rapporteurs for each session who will have responsibility for capturing the essence of the discussion, and working with the overall conference rapporteur to reach conclusions from the sessions. These reports will form the basis for the ensuing publication.

**Poster Session:**  
(and other media) The planning committee may decide to schedule a session when examples of communication materials or programs could be displayed. This would offer greater opportunity for sharing specific details that might otherwise be brushed over in an oral presentation in the interest of time. Nevertheless, such a session may prove to be of major value to participants in terms of tangible ideas taken away from the meeting.

### ***ACTION:***

The secretariat will develop a more detailed program in consultation with the Academy for Educational Development. This will be circulated to steering committee members for approval.

## **VI. New Directions for INPF**

With the formation of a secretariat to provide continuity and support to INPF, the issue of incorporating as an independent, non-profit organization was put on hold.

Most of the advantages such organizational identity would confer will still be available under the present arrangement of sustaining support provided by AID through a cooperative agreement with the Nutrition Foundation, Inc. The issue of establishing liaison with other international organizations, and the best way to approach this, received considerable discussion.

### ***CONCLUSIONS:***

The INPF will indicate to the International Union of Nutritional Sciences its desire to become affiliated with the IUNS. Because of common interests and shared commitment to promote recognition of developing country nutritionists, there is justification for participation in and communication about each others activities. Similar liaison with the ACC/SCN of the UN with the specific objective of providing developing country input into program development for the joint WHO/FAO International Conference on Nutrition in 1992 was also recommended.

### ***ACTION:***

The secretariat will send a letter to the council of the IUNS expressing the wishes of the steering committee. At their fall meeting, this request should be addressed by the IUNS council who should respond back to INPF regarding what type of affiliation is possible under their statutes. Dr. Morck will inquire from the ACC/SCN secretariat the proper procedure for establishing relations with that group. If appropriate, a letter will be drafted by the INPF secretariat over Professor Gabr's signature and sent through the specified channels.

Strategies for effectively communicating INPF activities were reviewed. One possibility would be to publish an INPF newsletter, but to achieve an even wider distribution, submitting articles to already existing publications with established mailing lists may be more efficient.

### ***CONCLUSION:***

There is need to conduct a review of existing publications with respect to whether they are meeting the communication needs of middle-level nutrition workers in developing countries. Specifically, is there a justifiable need to start a separate newsletter devoted to providing a forum for sharing practical information that may not otherwise be published in scientific or other journals?

### ***ACTION:***

A task force was appointed to review this matter and report back to the steering committee at the next meeting. The co-chairs are Dr. W. A. Patterson and Dr. J. Ariza. Mrs. Tagwireyi was asked to provide input on the situation in the African region with which she is familiar. A meeting of the co-chairs with the secretariat was scheduled to be held within the following two days.

## **VII. Other items discussed**

The INPF Steering Committee and guests received an invitation to meet with the new Assistant Administrator, Bureau for Science and Technology at the U. S. Agency for International Development. Dr. Jerome briefed the group about Mr. Richard Bissell, and described his strong interest in learning firsthand the situation in developing countries from foreign visitors. The secretariat will make logistical arrangements to provide transportation to and from the State Department building for this meeting.

Members of the group that were serving on the NCIH panel presentation met after the meeting to discuss the format to be followed.

## **VIII. Next Meeting**

Professor Gabr invited the steering committee members to come to Cairo, Egypt, for the next steering committee meeting. Mid-January 1991 was determined to be the best time to allow finalization of conference plans.

### ***ACTION:***

The secretariat will make arrangements, with help from Professor Gabr's staff, for a January, 1991 meeting in Cairo.

## **XI. Adjournment**

The chairman, after thanking everyone for their helpful participation, adjourned the meeting at 1250 hrs on 17 June 1990.

# **INTERNATIONAL NUTRITION PLANNERS FORUM**

## **Steering Committee Meeting**

June 16-17, 1990

Washington, DC

### List of Participants

#### ***Steering Committee Members***

#### ***Affiliation***

Professor Mamdouh K. Gabr,  
Chairman

Professor of Pediatrics, Cairo  
University  
Secretary General, Arab Council for  
Childhood and Development  
Cairo, Egypt

Dr. Jaime E. Ariza

President, Latin American Society of  
Nutrition (SLAN)  
Director, Graduate Nutrition Programs  
University of Puerto Rico  
San Juan, Puerto Rico

Dr. Adeline Wynante Patterson

Director, Caribbean Food and Nutrition  
Institute, University of the West Indies  
Kingston, Jamaica

Dr. Aree Valyasevi

Professor and Institute Consultant  
Institute of Nutrition  
Mahidol University at Salaya  
Nakorn Pathom, Thailand

Dr. Norge W. Jerome

Director, Office of Nutrition  
Bureau for Science and Technology  
Agency for International Development  
Washington, DC, USA

***Invited Observers***

Mrs. Julia Tagwireyi

Director, National Nutrition Program  
Ministry of Health  
Harare, Zimbabwe

Professor J.E. Dutra de Oliveira

President, International Union of  
Nutritional Sciences (IUNS)  
Professor, Clinical Department of  
Medical Nutrition, Faculty of Medicine  
University of Sao Paulo  
Ribeirão Preto, Brazil

***Guests***

Dr. Mark Lediard

Vice President for Nutrition and  
Population  
Academy for Educational  
Development  
Washington, DC, USA

Ms. Gayle Gibbons  
Ms. Virginia Yee

American Public Health Association  
Clearinghouse on Infant Feeding and  
Maternal Nutrition  
Washington, DC, USA

***INPF Secretariat Staff***

Dr. Timothy A. Morck  
Ms. Laurie Lindsay, R.D.

INPF/INACG/IVACG Secretariat  
Nutrition Foundation, Inc.  
Washington, DC, USA

12

## Appendix 11



## OFFICE OF NUTRITION IMPLEMENTORS CONVOCATION

### FIRST ANNUAL INTERNATIONAL NUTRITION NETWORK EXCHANGE

2-3 October 1990

Columbia North Room, Holiday Inn Capitol, 500 C Street, S.W., Washington, D.C.

### Program

#### Tuesday, 2 October

- |      |      |  |
|------|------|--|
|      | 1115 | <b><i>The Nutrition Agenda in African Development</i></b><br>Session Chair<br>Ms. Hope Sukin<br>Africa Bureau  |
| 0830 |      | <b>Registration*</b>   |
| 0900 |      | <b>Introductory Remarks</b><br>Dr. Timothy A. Morck<br>The Nutrition Foundation, Inc.  |
| 0905 |      | <b>Opening Remarks</b><br>Dr. Ralph W. Cummings<br>Acting Agency Director<br>for Food and Agriculture<br>Bureau for Science and Technology<br>Agency for International<br>Development                            |
| 0910 |      | <b>Welcome</b><br>Dr. Richard Bissell<br>Assistant Administrator<br>Bureau for Science and Technology  |
| 0915 |      | <b>Convocation Overview</b><br>Dr. Norge W. Jerome<br>Director, Office of Nutrition<br>Bureau for Science and Technology   |
| 0935 |      | <b>Introduction of the Keynote Address</b><br>Ms. Carolyn I. Coleman<br>Policy Analyst, Office of Nutrition<br>Bureau for Science and Technology   |
| 0945 |      | <b>Keynote Address</b><br>Mr. C. Payne Lucas<br>Director, AFRICARE   |
| 1045 |      | <b>Break</b>   |
|      | 1115 | <b><i>The Nutrition Agenda in African Development</i></b><br>Session Chair<br>Ms. Hope Sukin<br>Africa Bureau  |
|      |      | Dr. C. Gary Merritt<br>Chief, Africa Technical Resources<br>Africa Bureau  |
|      |      | Dr. Anita Mackie<br>Senior Public Health Officer<br>Africa Bureau  |
|      | 1230 | <b>Lunch*</b><br><b><i>Partnership with Universities</i></b><br>Dr. Curtis R. Jackson<br>Office of Research and University<br>Relations<br>Bureau for Science and Technology                                     |
|      | 1400 | <b><i>Sustaining Nutrition Programs</i></b><br><b><i>(Special emphasis on Africa)</i></b><br>Session Chair<br>Ms. Carolyn I. Coleman<br>Policy Analyst, Office of Nutrition<br>Bureau for Science and Technology |
|      |      | <b>Private Sector Collaborations</b><br>Mr. Weldon Blanton<br>National Cooperative Business<br>Association   |
|      |      | <b>Collaborating with Other Agencies</b><br>Ms. Susan Eastman<br>Helen Keller International  |

\* For your convenience, a box lunch will be available. Tickets will be sold during the convocation registration for \$10 each.

Tuesday, 2 October (continued)

Human Resource Development  
Ms. Margaret Parlato  
Academy for Educational  
Development

Institution Building  
Dr. Audrey Naylor  
Wellstart

1500 Questions and Discussion

1530 Break

1545 *Tangible Approaches to  
Collaborations, Exchange, and  
Networking*  
Session Chair  
Dr. Frances R. Davidson  
Nutrition Advisor, Office of Nutrition  
Bureau for Science and Technology

Avenues for Communicating Nutrition  
Information  
Ms. Gayle Gibbons  
Clearinghouse on Infant Feeding and  
Maternal Nutrition

Sharing Technology  
Dr. Robert Metcalf  
Solar Box Cookers International

Building New Partnerships  
Mr. Robert G. Pratt  
Vitamin A Field Support Project  
(VITAL)

Discussion: Collaborating Among  
Ourselves and Expanding Our  
Networks

Wednesday, 3 October

0900 *Contractual and Administrative Issues*  
Session Chair  
Dr. Timothy A. Morck  
The Nutrition Foundation, Inc.

Ms. Brenda Colwell  
Program Analyst, Office of Nutrition  
Bureau for Science and Technology

Mr. Gene Westlake  
Office of Financial Management  
Cash Management and Payments  
Division

Mr. Jay M. Bergman  
Chief, Food and Agriculture Branch  
AID/W Projects Division  
Office of Procurement

1000 Discussion

1100 *Recommended Strategies to Improve  
Coordination and Collaboration*  
Dr. Norge W. Jerome  
Director, Office of Nutrition  
Bureau for Science and Technology

Dr. Timothy A. Morck  
The Nutrition Foundation, Inc.

1145 Evaluation

1200 Adjournment

## Appendix 12

**THE NUTRITION FOUNDATION, INC.**

**ANNUAL WORKPLANS FOR FY91**

**1 OCTOBER to 30 SEPTEMBER 1990**

**FOR**

**INTERNATIONAL VITAMIN A CONSULTATIVE GROUP**

**INTERNATIONAL NUTRITIONAL ANEMIA CONSULTATIVE GROUP**

**INTERNATIONAL NUTRITION PLANNERS FORUM**

**INTERNATIONAL NUTRITION NETWORK EXCHANGE**

**COOPERATIVE AGREEMENT**

**DAN-5115-A-00-7114-00**

**International Vitamin A Consultative Group (IVACG)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

<b>Program Objectives for Fiscal Year 1991</b>
--

The Nutrition Foundation, Inc., serving as the IVACG Secretariat, plans to undertake the following activities related to IVACG during this fiscal year:

1. Organize, arrange, convene and support the XIV IVACG Meeting on the theme of "Community Based Interventions", to be held in Quayaquil, Ecuador 17-19 June, 1991. Produce a proceedings of the meeting and distribute.
2. Plan, organize and convene two IVACG Steering Committee meetings.
3. Facilitate the work of the IVACG Regional Representatives for Africa.
4. Complete and publish a document on guidelines for the use of vitamin A in immunization programs.
5. Complete and publish a manual on developing nutrition education communications programs with emphasis on vitamin A.
6. Initiate a task force to publish guidelines for assessment of marginal vitamin A status.
7. Initiate a task force on the effect of food preparation on vitamin A content of meals.
8. Initiate a task force on community level interventions.
9. Co-publish the *Xerophthalmia Club Bulletin*
10. Provide information on vitamin A to teaching scientists, government ministries, and leading researchers.
11. Provide IVACG news to various newsletters and information centers to increase exposure and understanding of the program.
12. Provide annual, quarterly, financial and trip reports as requested in the cooperative agreement.

**International Vitamin A Consultative Group (IVACG)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

**Workplan Activity Links to Cooperative Agreement Program Objectives**

The following objectives stated on pages 30 and 31 of Cooperative Agreement No. DAN-5115-A-00-7114-00, Modification #04, are supported by the IVACG FY91 workplans to be undertaken by The Nutrition Foundation, Inc. Numbers following in parentheses relate to the IVACG objectives itemized on the previous page and described by fiscal year quarters below.

1. Organize and arrange conferences, workshops and other types of meetings. (1,2,6,7,8)
2. Manage the publication of scientific and technical monographs, papers, and reports. (1,4,5,6,9)
3. Arrange for appropriate consultative services for task forces, subcommittees, and working groups. (1-8)
4. Maintain correspondence and liaison with various international organizations (government, private non-governmental, commercial, and agencies in the United Nations system). (1-10)
5. Function as a referral service to state-of-the-art repositories of subject information. (9,11)
6. Encourage and promote policies, planning, research, and operations needed to move the IVACG toward obtaining its objectives. (2,3)
7. Organize and facilitate the advisory functions of IVACG. (2,3)
8. Expand and promote communications between the various organizations engaged in programs to prevent vitamin A deficiency and xerophthalmia in LDC's. (1-11)

**International Vitamin A Consultative Group (IVACG)  
FY91 Work Plan, by Quarters**

The Nutrition Foundation, Inc., serving as the IVACG Secretariat, plans to undertake the following activities related to IVACG during this fiscal year:

**Q1 FY91 (1 Oct - 31 Dec 1990)**

**XIV IVACG Meeting**

Planning for the XIV IVACG Meeting, begun in FY90, will continue this quarter. The site has been selected as Quayaquil, Ecuador, and this quarter the secretariat will establish contact with a local committee in Ecuador. Instructing this committee on type of assistance needed at the local level will enable them to begin contacting in-country resources. Abstracts received during November from individuals wanting to present data at the XIV IVACG Meeting will be the basis for determining the program content.

**Steering Committee**

Availability of steering committee members will be assessed for a January, 1991, meeting. Date and location for the two-day meeting will be established. Letters of invitation will then be sent out, and travel arrangements made for the international representatives. The agenda for the meeting will be compiled in consultation with the steering committee chairperson.

**Task Force on Guidelines for Use of Vitamin A in Immunization Programs**

The status of this manuscript depends on feedback from the meeting of the Global Advisory Group to the WHO Expanded Program on Immunization held during Q4 FY90. Assuming major revisions are not required, comments will be incorporated into the existing draft and the manuscript circulated to a small, select group of reviewers.

**African Regional Representatives**

The secretariat will contact the current IVACG African Regional Representatives and determine their financial needs for the upcoming year. Following appropriate receipt of expense documentation, additional funds will be advanced for the coming year. Necessary letters of invitation for internal use will be sent to the new representative from Ethiopia, Dr. Pawlos Quana'a.

## **Task Force on Communication/Education**

Before the secretariat can proceed with finalizing this manuscript, specific guidance is needed from the IVACG Secretary regarding the intended use, final format, and acceptable writer to conclude the work of the task force. Once received, this document can be moved to the next phase of development, namely, a next draft incorporating all of the comments received from reviewers of the previous document. Actual timeline for completion is contingent on receiving the necessary direction mentioned above.

## **Task Force on Assessment of Marginal Vitamin A Status**

Terms of reference for this task force will be drafted and potential members will be contacted. Dr. James Olson has tentatively agreed to serve as editor/task force chairperson, with the expectation of significance assistance from Dr. Barbara Underwood and the ability of section authors to write their manuscripts independently.

## **Publications**

In collaboration with VITAL, the secretariat will arrange publication of a Spanish translation of *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A*. VITAL has already initiated the translation work, and will provide the IVACG Secretariat with a reviewed translation in format ready to go to the printer. The secretariat will send it to the printer this quarter.

During this quarter, the November issue of the *Xerophthalmia Club Bulletin* will be published and distributed.

## **Administrative**

IVACG information will be included in Q4 FY90 quarterly report, as well as in Annual Report of Cooperative Agreement No. DAN-5115-A-00-7114-00 for FY90.

## **Information Requests**

In the past fiscal year the secretariat responded to more than 360 requests for information. Most of these requests were from developing countries. During this fiscal year the secretariat will continue to provide information regarding vitamin A deficiency and xerophthalmia when this information is requested by government ministries, policy-makers, scientists, and managers of field programs.

A database system has recently been set up to track publication requests to enable evaluation of where the demand for IVACG information is the greatest. Entry of new requests into this system will continue throughout the quarter.

The secretariat will promote information concerning vitamin A deficiency and xerophthalmia and increase liaisons with other organizations through exhibiting at local, national, and international conferences and meetings. Additionally, the secretariat will provide IVACG information to members of the steering committee for their use when travelling on behalf of IVACG. These efforts facilitate the work of private voluntary organizations and nongovernmental organizations in developing countries.

**Q2 FY91 (1 Jan - 31 Mar 1991)**

#### **XIV IVACG Meeting**

At the steering committee meeting in January, the program for the XIV IVACG Meeting will be determined based on abstracts received last quarter. Recommendations will be made for presenters, session topics and chairpersons, and format of the three days (platform sessions, breakout groups, poster sessions, etc.). Individualized invitations will be sent to presenters as well as to individuals and organizations already expressing interest in attending. The secretariat will conduct a site visit during this quarter to finalize hotel meeting and sleeping room arrangements, open a local bank account to attend to financial matters on site, and further establish working relations with the local committee and in-country representatives of donor groups, NGO's and PVO's with an interest in the meeting topic. Trip report will be prepared and submitted to S&T/N.

#### **Steering Committee**

A steering committee meeting will be held in Washington, DC in early January, 1991, to review abstracts submitted for presentation at the XIV IVACG Meeting. The committee will decide program, speakers, format and other details related to the meeting in June. Updates on task force activities will be presented, and priorities for the coming year will be discussed. Also discussed will be the status of the African Regional Representatives. A replacement member for one position on the editorial board of the *Xerophthalmia Club Bulletin* will be identified. Minutes of the steering committee meeting will be prepared and submitted to S&T/N within 10 days following the meeting. Travel and per diem arrangements will be made by the secretariat for the three international travelers. Members of the steering committee are the following:

Dr. Barbara Underwood, Bethesda, MD, IVACG Steering Committee Chairperson  
Dr. Frances Davidson, Washington, DC, IVACG Secretary  
Dr. Alfred Sommer, Baltimore, MD  
Dr. Vinodini Reddy, Hyderabad, India  
Dr. Franz Simmersbach, Rome, Italy  
Dr. Demissie Habte, Dakar, Bangladesh

## **African Regional Representatives**

Discussion at the IVACG Steering Committee meeting will determine course of action that the secretariat is to follow in working with these representatives.

## **Task Force on Guidelines for Use of Vitamin A in Immunization Programs**

Printers bids will be obtained and design of final publication decided. Manuscript will be finalized for the printer, unless major changes become necessary due to summit meeting on vitamin A scheduled by UNICEF and WHO for January, 1991. Need/desirability of translations of this document will be determined, and action initiated if positive decision reached.

## **Task Force on Communication/Education**

Pending satisfactory guidance and writer selection, revised manuscript should be received during this quarter. Internal review by the secretariat and IVACG Secretary will be performed and, when satisfactory, manuscript will be sent to selected other reviewers or directly to the printer. Final design decisions will be made during this process.

## **Task Force on Assessment of Marginal Vitamin A Status**

Chapter drafts will be received from the assigned authors, and forwarded to the editor. Once reviewed internally, copies of all chapters will be circulated to the other writers for critique and to establish uniform style.

## **Task Force on Effect of Food Preparation on Vitamin A Content of Meals**

Terms of reference will be drafted and members of this task force selected in consultation with IVACG Secretary and IVACG Steering Committee Chairperson. Once identified, potential task force members will be invited. Dates for a meeting in early Q3, (possibly April) will be selected for the initial meeting in Washington, DC, and travel arrangements will be made for those requesting this assistance.

## **Task Force on Community Level Vitamin A Programs**

Terms of reference will be drafted and names of potential members discussed with IVACG Secretary and IVACG Steering Committee Chairperson. Invitations will be extended to those selected. Initial meeting will be tentatively scheduled during the time of the XIV IVACG Meeting.

## **Publications**

Translation of *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A* into Spanish will be sent to the printer.

The March issue of the *Xerophthalmia Club Bulletin* will be published and distributed. The new editorial board member will be invited.

## **Administrative**

IVACG information will be included in the Q1 FY91 Quarterly report.

## **Information Requests**

IVACG publications and other related material will be sent to scientists, policy makers, government ministries, and others that request it. Database entry will continue with evaluation of results performed periodically.

<b>Q3 FY91 (1 Apr - 30 Jun 1991)</b>
--------------------------------------

## **XIV IVACG Meeting**

During this quarter, all logistics will be concluded related to confirmation of attendees, speakers, duplication of abstracts for meeting packets, on-site arrangements, receptions, travel and per diem and hotel arrangements, and opening ceremonies. The meeting will be held 17-19 June 1991 in Guayaquil, Ecuador. It is anticipated that IVACG funds will support approximately 20 participants with travel and per diem.

## **Steering Committee**

The steering committee will hold a second meeting in Quayaquil during the time of the XIV IVACG Meeting. Arrangements for this meeting, including location, agenda and meeting packet preparation, will be carried out by the secretariat during this quarter.

## **African Regional Representatives Meeting**

A meeting of the African Regional Representatives with the IVACG Steering Committee will be held during the XIV IVACG Meeting. At this meeting, the representatives will report on their activities carried out on behalf of IVACG and review the effectiveness of the program.

### **Task Force on Guidelines for Use of Vitamin A in Immunization Programs**

Pending satisfactory progress related to comments in Q1, publication of this document should be completed and available for distribution at the XIV IVACG Meeting. Translations of this document will undergo suitable review and arrangements made for printing.

### **Task Force on Communication/Education**

Reviewers comments will be considered in preparation of a final draft to be submitted to the printer during this quarter.

### **Task Force on Assessment of Marginal Vitamin A Status**

Final draft of the manuscript will be prepared following incorporation of comments from other authors. Results of this effort will be presented at the XIV IVACG Meeting as advance notice of impending publication.

### **Task Force on Effect of Food Preparation on Vitamin A Content of Meals**

Following invitations to individuals asked to participate in the work of this task force, a meeting will be scheduled and held in April, 1991, in Washington, DC to discuss the form and content of this important document. Writers will begin their assignments during the remainder of the quarter, with the possibility of meeting during the XIV IVACG Meeting to exchange or review manuscripts.

### **Task Force on Community Level Programs**

Because of the nature of this topic, and it also being the theme for the XIV IVACG Meeting in June, an initial meeting of task force members will be scheduled during the time of the Quayaquil meeting. At this meeting, a chairperson will be appointed and decisions made concerning type of work product, intended audience, and timeline for completion.

### **Publications**

Spanish translation of *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A* will be available for distribution at XIV IVACG Meeting.

A meeting of the *Xerophthalmia Club Bulletin* Editorial Board will be scheduled during XIV IVACG Meeting.

## **Administrative**

IVACG information will be included in the Quarterly Report for Q2 FY91. Appropriate IVACG activity and budgetary information will be included in the FY92 workplans drafted during this quarter.

## **Information Requests**

IVACG publications and other related material will be sent to scientists, policy makers, government ministries, and others that request it. Database entry will continue with evaluation of results performed periodically.

## **News Releases**

Information about publication of *Guidelines for the Use of Vitamin A in Immunization Programs* and Spanish translation of *Guidelines for the Development of a Simplified Dietary Assessment to Identify Groups at Risk for Inadequate Intake of Vitamin A* will be sent to newsletters and other periodicals.

<b>Q4 FY91 (1 Jul - 30 Sep 1991)</b>
--------------------------------------

## **XIV IVACG Meeting**

Meeting summary will be written by the rapporteur in the form of a proceedings of the meeting, including copies of abstracts of presented papers. Other follow-up details (expense reports, trip reports, thank-you notes, financial accounting, etc.) will be completed during this quarter. Once reviewed and edited, the meeting summary will be ready for duplication and distribution.

## **Steering Committee**

Minutes of the steering committee meeting held in Quayaquil will be finalized and submitted to S&T/N. These will require an extension beyond the 10 day requirement due to details associated with the larger XIV IVACG Meeting and logistics of return travel after the meeting.

## **African Regional Representatives**

Minutes of the African Regional Representatives meeting held in Quayaquil will be finalized and submitted to S&T/N. These will require an extension beyond the 10 day requirement due to details associated with the larger XIV IVACG Meeting and logistics of return travel after the meeting.

### **Task Force on Guidelines for Use of Vitamin A in Immunization Programs**

Translations in French and Spanish will go to the printer during this quarter. Distribution of the English version will continue.

### **Task Force on Communication/Education**

News release about this publication will be sent during this quarter, resulting in an expected increase in distribution.

### **Task Force on Assessment of Marginal Vitamin A Status**

Final manuscript will be sent to the printer during this quarter.

### **Task Force on Effect of Food Preparation on Vitamin A Content of Meals**

Chapters will be received from authors, edited and circulated to the other task force members for review. With timely return of reviewed documents, final preparation for printing could be possible.

### **Task Force on Community Level Programs**

Sections will be written by authors and sent to the task force chairperson/editor. Manuscripts will be edited and circulated to members to review.

### **Publications**

The July issue of the *Xerophthalmia Club Bulletin* will be published and distributed during this quarter.

### **Administrative**

IVACG information will be included in the Quarterly Report for Q3 FY91. Appropriate IVACG activity and budgetary information will be included in the FY92 workplans finalized during this quarter. Activities conducted by IVACG during FY91 will be incorporated into the initial draft of the FY91 Annual Report prepared during this quarter.

### **Information Requests**

IVACG publications and other related material will be sent to scientists, policy makers, government ministries, and others that request it. Database entry will continue with evaluation of results performed periodically.

## **News Releases**

Information about the XIV IVACG Meeting will be packaged into a press release and sent to newsletters and periodicals. Conclusions and important findings reported at the meeting will be included, along with information on how to obtain a copy of the proceedings. An announcement about the availability of the communication/education document will also be made.

## IVACG FY91 WORK PLAN, BY QUARTERS

### Q1FY91 (10/1/90-12/31/90)

XIV mtg: abstracts received, compiled for steering committee meeting, contact established w/Ecuador local committee

Steering Com: schedule for Jan, logistics, agenda

African Reg Reps: correspond, complete financial arrangements

Immun: response from EPI GAG, revisions incorporated

Com/Ed: guidance from S&T/N needed, new editor/author identified

Assess Marginal Vit A Status: terms of ref, members selected & invited, determine timetable

Diet Assess: translate into Spanish

Xero Bull: publish Nov issue

Quarterly report

Annual Report FY90

Info requests

### Q2FY91 (1/1/91-3/31/91)

XIV mtg: abstracts review, program decided, invitations sent out, site visit

Steering Com Meeting: abstract review, XIV prog, TF reports, minutes

African Reg Reps: discuss at steer com meeting

Immun: manuscript final form, transl begun

Com/Ed: final text/design, reviewed

Assess Marg: circulate to other authors

Food Prep: terms of ref, members selected & invited

Cmty Level: define terms/members

Diet Assess: translation to printer

Xero Bull: publish February; invite editorial board member

Quarterly report

Info requests

### Q3FY91 (4/1/91-6/30/91)

XIV Meeting: logistics, confirmations, papers rcvd, hold mtg

Steering Com: mtg during XIV, agenda,

African Reg Reps: mtg during XIV, report at XIV

Immun: printed, dist'd @ XIV, transl to printer

Com/Ed: final manuscript to printer

Assess Marg: prepare final, report at XIV

Fd Prep: mtg April, work plan, schedule, writing assignments; report @ XIV

Cmty Level: invite, initial mtg at XIV

Diet Assess: distribute translation

Xero Bull: editorial board mtg @ XIV

Quarterly report

Work Plan: draft FY92

Info requests

News Rel: Immuniz doc published

### Q4FY91 (7/1/91-9/30/91)

XIV Meeting: meeting summary, follow-up thanks/financial, trip report,

Steering Com: minutes

African Reg Reps: minutes

Immun: translations printed & dist'n begun

Com/Ed: Distributed

Assess Marg: to press

Fd Prep: compile, circulate for reviews

Cmty Level: writing

Xero Bull: publish July

Quarterly report

Annual Report FY 91: draft

Work Plan: final FY92

Info requests

News Rel: info on XIV mtg summary, Commun/Ed document published

IVACG Program FY 91 Budget

IVACG	Program Expenses by Quarter, FY 91				Total
	Q1	Q2	Q3	Q4	
Direct Labor	15,392	23,281	26,726	17,856	83,255
Fringe Benefits	2,600	3,856	4,442	3,084	13,982
Consultants		1,000	2,000	2,000	5,000
Publications	1,750	1,750	26,550	20,850	50,900
Editorial & ss			3,150	1,000	4,150
Travel & PD	1,575	15,875	76,975	1,575	96,000
Supplies	300	400	2,600	300	3,600
Equip Purchase	250	250	250	250	1,000
Office Rent	3,300	3,300	3,300	3,300	13,200
Fiscal Admin	4,088	4,088	4,088	4,088	16,352
Communications	5,000	5,000	5,000	5,000	20,000
Meeting room Rent			2,750		2,750
Total direct	34,255	58,800	157,831	59,303	310,189
Indirect (12%)	4,111	7,056	18,940	7,116	37,223
Total amount	38,366	65,856	176,771	66,419	347,412

**International Nutritional Anemia Consultative Group (INACG)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

**Program Objectives for Fiscal Year 1991**

The Nutrition Foundation, Inc., serving as the INACG Secretariat, plans to undertake the following activities related to INACG during this fiscal year:

1. Organize, arrange, convene and support the XII INACG Meeting, "Combatting Iron Deficiency Anemia through Food Fortification Technology", in Washington, DC on 5-7 December, 1990.
2. Support a task force on fortification to write and publish a brochure on iron fortification systems arising from the XII INACG Meeting.
3. Establish a five-member INACG Steering Committee as specified in the cooperative agreement. Organize and hold two steering committee meetings during this fiscal year.
4. Conclude the work begun by the Task Force on the Relationship of Iron Deficiency Anemia to Mental and Behavioral Development by arranging for a writer to produce a shorter, action-oriented brochure based on manuscripts prepared by the task force.
5. Form a task force on FeEDTA and publish a monograph reviewing existing data on the use of FeEDTA (including the combination of Na<sub>2</sub>EDTA plus FeSO<sub>4</sub>) as an acceptable and desirable iron fortificant.
6. Publish Spanish and French translations of *Guidelines for the Control of Maternal Nutritional Anemia*.
7. Continue to support, monitor, and review progress of research project determining the bioavailability of elemental iron in weaning foods
8. Provide information on nutritional anemia to teaching scientists, government ministries, and leading researchers
9. Provide INACG news to various newsletters and information centers to increase exposure and understanding of the program
10. Provide annual, quarterly, financial and trip reports as requested in the cooperative agreement.

**International Nutritional Anemia Consultative Group (INACG)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

<b>Workplan Activity Links to Cooperative Agreement Program Objectives</b>
--

The following objectives stated on pages 32 and 33 of Cooperative Agreement No. DAN-5115-A-00-7114-00, Modification #04, are supported by the INACG FY91 workplans to be undertaken by The Nutrition Foundation, Inc. Numbers following in parentheses relate to the INACG objectives itemized on the previous page and described by fiscal year quarters below.

1. Organize and arrange conferences, workshops and other types of meetings. (1,3,5)
2. Manage the publication of scientific and technical monographs, papers, and reports. (2,4,5,6)
3. Arrange for appropriate consultative services for task forces, subcommittees, and working groups. (1,2,3,4,5)
4. Maintain correspondence and liaison with various international organizations (government, private non-governmental, commercial, and agencies in the United Nations system). (1,2,8,9)
5. Function as a referral service to state-of-the-art repositories of subject information. (9)
6. Encourage and promote policies, planning, research, and operations needed to move the INACG toward obtaining its objectives. (3)
7. Organize and facilitate the advisory functions of INACG. (3)
8. Expand and promote communications between the various organizations engaged in programs to prevent iron deficiency and anemia in LDC's. (1,8,9)

**International Nutritional Anemia Consultative Group (INACG)  
FY91 Work Plan, by Quarters**

**Q1 FY91 (1 Oct - 31 Dec 1990)**

**XII INACG Meeting "Combatting Iron Deficiency Anemia through Food Fortification Technology"**

Plans for this meeting began in FY 90, with the date and location set as 5-7 December, 1990 in Washington, DC. The secretariat, with the INACG Secretary, will determine program theme, session topics, speakers, chairpersons, rapporteurs, and make appropriate meeting site arrangements. The location of the meeting will be at the headquarters of the Pan American Health Organization. The purpose of this meeting will be to produce an action plan for developing national iron fortification systems through partnerships among industry, government, and donor groups. INACG will sponsor travel and per diem expenses for the following meeting participants listed by name and originating city:

Dr. R. Florentino, Manila, Philippines  
Dr. W. Freire, Quito, Ecuador  
Dr. O. Galal, Tuscon, AZ  
Dr. R. Hurrell, Vevey, Switzerland  
Dr. B. Kodyat, Jakarta, Indonesia  
Dr. S. Lynch, Hampton, VA

Dr. T. Maletnlema, Harare, Zimbabwe  
Dr. T. Mannar, Madras, India  
Dr. A. Patterson, Kingston, Jamaica  
Dr. A. Valyasevi, Bangkok, Thailand  
Dr. T. Walter, Santiago, Chile

**Steering Committee**

With changes incorporated in Modification #04 to the cooperative agreement, formation of an INACG Steering Committee was required. According to page 24 of Modification #04 to Cooperative Agreement No. DAN-5115-A-00-7114-00, "Program decisions for INACG are made by a Steering Committee consisting of five members, including the Chairperson or Senior Advisor and Secretary of INACG, and three other members which include one representative from each of the three geographic regions." In consultation with the INACG Secretary, representing S&T/N interests, the secretariat will determine the LDC members to be invited and issue formal invitations to join this important group. Following this, a meeting of the INACG Steering Committee will be scheduled for Q2 FY91 when convenient for all. Based on the responsibility charged to this committee for setting program direction, INACG workplans may be subject to change following this meeting.

**Task Force on Anemia and Mental and Behavioral Development**

Following a review by both technical writers and scientists, the decision was made to abandon publishing the four non-uniform manuscripts obtained from a task force

meeting in 1988. Current publications contain updated information on this topic, and the rewriting necessary to achieve continuity between the earlier manuscripts was not felt to be justified. The secretariat, with concurrence of S&T/N, will now identify a writer who can take the information contained in the previous manuscripts, along with data published since that time, and produce a relatively short, six panel brochure. The style should be upbeat, with a sense of urgency conveyed to promote action after reading it. It will be aimed at influencing policy makers and donor agencies to stop ignoring the serious need to reduce the unacceptably high prevalence of childhood anemia. In this quarter, the writer will be identified and materials relevant for references will be provided.

### **Task Force on Fortification**

The secretariat will work with the INACG Secretary to identify a small group to remain after the XII INACG Meeting to draft a monograph on recommendations for iron fortification systems arising from the preceding conference. This will present the state-of-the-art in iron fortification technology, and describe the decision paths developed during the meeting. This will assist countries develop their own action plans for instituting national iron fortification programs. Writing begins this quarter, with first draft editing taking place.

### **Task Force on EDTA**

A meeting will be held this quarter with Dr. Sean Lynch, Chief, Hematology-Oncology, Medical Service, Veterans Affairs Medical Center, Hampton, VA to discuss plans for a monograph on NaFeEDTA. Discussions will center around desirability of a single-versus multi-authored monograph, chapter headings, and projected timeline for completion. It is believed that most of the work of this task force will be accomplished without need for many meetings.

### **Translations of *Guidelines for the Control of Maternal Nutritional Anemia***

Translations of *Guidelines for the Control of Maternal Nutritional Anemia* into Spanish and French will be final-edited, reviewed by translators, and sent to the printer during this quarter.

### **Monitoring Research Project Determining the Bioavailability of Elemental Iron in Weaning Foods**

In collaboration with Instituto De Nutricion Y Tecnologia De Los Alimentos, the secretariat will continue to support, monitor, and review the progress of a research project in Chile. The project is a three year activity which will determine the bioavailability of elemental iron in weaning foods. Funding is provided by the private sector, with technical assistance provided through the INACG network of experts.

## **Administrative**

INACG information will be included in Q4 FY90 quarterly report, as well as in Annual Report of Cooperative Agreement No. DAN-5115-A-00-7114-00 for FY90.

## **Information Requests**

In the past fiscal year the secretariat responded to more than 240 requests for information. Most of these requests were from developing countries. During this fiscal year the secretariat will continue to provide information regarding nutritional anemia when this information is requested by government ministries, policy-makers, scientists, and managers of field programs.

A database system has recently been set up to track publication requests to enable evaluation of where the demand for INACG information is the greatest. Entry of new requests into this system will continue throughout the quarter.

The secretariat will promote information concerning nutritional anemia and increase liaisons with other organizations through exhibiting at local, national, and international conferences and meetings. Additionally, the secretariat will provide INACG information to members of the Steering Committee for their use when travelling on behalf of INACG. These efforts facilitate the work of private voluntary organizations and nongovernmental organizations in developing countries.

<b>Q2 FY91 (1 Jan - 31 Mar 1991)</b>
--------------------------------------

## **XII INACG Meeting**

A meeting summary of the XII INACG Meeting will be prepared and submitted to S&T/N. Following review and concurrence, distribution will be made to all attendees and invited guests.

## **Steering Committee**

The first meeting of the INACG Steering Committee will be held in Washington, DC during this quarter. All details related to meeting agenda, site, background material, and travel and per diem arrangements will be performed by the secretariat. Minutes of the meeting will be prepared and submitted to S&T/N within ten days of the meeting, and subsequently distributed to steering committee members.

## **Task Force on Mental and Behavioral Development**

First draft of manuscript will be received from the writer and reviewed by the secretariat. Pending successful outcome, it will be sent to three outside reviewers for evaluation and comments. Comments will be integrated into a final draft version.

### **Task Force on Fortification**

Revised draft manuscript will be returned to task force members for review. Comments received will be evaluated, and appropriate ones incorporated into a final manuscript during this quarter.

### **Task Force on EDTA**

Initial draft of manuscript/chapters/sections will be submitted by authors. This draft will be edited before sending it to at least three peer-reviewers. A meeting with Dr. Sean Lynch, task force chairperson, will be held in Washington, DC to determine final printed form.

### **Administrative**

INACG information will be included in the quarterly report covering Q1 FY91.

### **Information Requests**

INACG publications and other related material will be sent to scientists, policy makers, government ministries, and others who request it. Database entry will continue with periodic evaluation of results.

### **News Release**

Recommendations arising from XII INACG Meeting regarding action plans for developing iron fortification systems in developing countries will be included in a press release and sent to distribution list for inclusion in other newsletters.

<b>Q3 FY91 (1 Apr - 30 Jun 1991)</b>
--------------------------------------

### **XII INACG Meeting**

Distribution of meeting summary will continue, with requests expected after notice of the meeting is included in other newsletters and periodicals.

### **Steering Committee**

Work plan revision will be considered based on recommendations of priorities discussed at steering committee meeting. A second steering committee meeting will be planned for Q4, and dates, site, and agenda topics will be selected this quarter.

### **Task Force on Mental and Behavioral Development**

Manuscript will be edited, prepared in final form, and sent to printer. Translations into Spanish and French will be started.

### **Task Force on Fortification**

Final editing of manuscript will be performed before sending it to the printer. Translations into French and Spanish will be started.

### **Task Force on EDTA**

Manuscript will undergo final editing and proofing before being sent to the printer.

### **Administrative**

INACG information will be included in the Quarterly Report for Q2 FY91. Appropriate INACG activity and budgetary information will be included in the FY92 workplans drafted during this quarter.

### **Information Requests**

INACG publications and other related material will be sent to scientists, policy makers, government ministries, and others that request it. Database entry will continue with periodic evaluation of results.

<b>Q4 FY91 (1 Jul - 30 Sep 1991)</b>
--------------------------------------

### **Steering Committee**

Second steering committee meeting will be held in Washington, DC this quarter. All details related to meeting agenda, site, background material, and travel and per diem arrangements will be performed by the secretariat. Minutes of the meeting will be prepared and submitted to S&T/N within ten days of the meeting, and subsequently distributed to steering committee members.

### **Task Force on Mental and Behavioral Development**

Reviewers of translations will be identified and sent final versions of the manuscripts. Following any editing changes, manuscripts will be sent to the printer. The English version will be mailed to everyone on the INACG mailing list, and to those who request it. INACG publications list will be updated, and included with each mailing.

### **Task Force on Fortification**

Monograph will be published during this quarter, and distribution to all INACG mailing list members will begin. Translations will be reviewed for accuracy and maintaining the correct writing tone and style. Final translated manuscripts will be sent to the printer after editing.

### **Task Force on EDTA**

Distribution of the English version to members of INACG mailing list will commence after receiving printed copies.

### **Administrative**

INACG information will be included in the Quarterly Report for Q3 FY91. Appropriate INACG activity and budgetary information will be included in the FY92 workplans finalized during this quarter. Activities conducted by INACG during FY91 will be incorporated into the initial draft of the FY91 Annual Report prepared during this quarter.

### **Information Requests**

INACG publications and other related material will be sent to scientists, policy makers, government ministries, and others that request it. Database entry will continue with periodic evaluation of results.

### **News Release**

Information about recent publications on FeEDTA, Iron Fortification and The Relationship Between Iron Deficiency Anemia to Mental and Behavioral Development will be sent to newsletters and other information distributors for inclusion.

## INACG FY91 WORK PLAN, BY QUARTERS

### Q1FY91 (10/1/90-12/31/90)

XII INACG Meeting: 5-7 Dec. 90, invite, all details

Steering Com: invite, schedule mtg

Mental Behav. Devel.: identify writer, shorter format, write

MNA: print translations

Fortification: meet after XII to write manuscript

EDTA TF: writer(s) selected, determine plan

Monitor research project

Annual Report FY90

Quarterly report

Info requests

### Q2FY91 (1/1/91-3/31/91)

XII mtg: minutes duplicate, distribute, follow-up

S-Com: mtg Jan 7, minutes

MBD: manuscript review

MNA: translation distribution

Fortification: circulate/revise draft

EDTA: writing, manuscript(s) circulate to reviewers

Monitor research project

Quarterly report

Info requests

News rel: MNA translations, XII recommendations

### Q3FY91 (4/1/91-6/30/91)

MBD: print, begin translations

Fortification: final prep, to press

EDTA: final prep

Work Plan: draft FY92

Quarterly report

Info requests

### Q4FY91 (7/1/91-9/30/91)

Steering Com: mtg

MBD: distrib Eng, print translations

Fortification: publish, distribute

EDTA: publish, distribute

Annual Report FY 91: draft

Work Plan: final FY92

Quarterly report

Info requests

News rel: fortification, EDTA, MBD

INACG Program FY 91 Budget

INACG	Program Expenses by Quarter, FY 91				Total
	Q1	Q2	Q3	Q4	
Direct Labor	18,988	11,726	9,396	9,871	49,981
Fringe Benefits	3,114	1,984	1,633	1,711	8,442
Consultants	2,000				2,000
Publications	3,000	8,000		5,000	16,000
Editorial & ss	1,250	250	250	250	2,000
Travel & PD	25,512	9,500		9,500	44,512
Supplies	1,225	275	275	275	2,050
Equip Purchase	150	150	150	150	600
Office Rent	1,475	1,475	1,475	1,475	5,900
Fiscal Admin	1,390	1,390	1,390	1,390	5,560
Communications	1,850				1,850
Meeting room Rent	1,500				1,500
Total direct	61,454	34,750	14,569	29,622	140,395
Indirect (12%)	7,374	4,170	1,748	3,555	16,847
Total amount	68,828	38,920	16,317	33,177	157,242

**International Nutrition Planners Forum (INPF)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

<b>Program Objectives for Fiscal Year 1991</b>
--

The Nutrition Foundation, Inc., serving as the INPF Secretariat, plans to undertake the following activities related to INPF during this fiscal year:

1. Organize, arrange, convene and support the 6<sup>th</sup> International INPF Conference on the theme "Effective Nutrition Communication for Behavior Change". This will be held in Bangkok, Thailand on 10-13 September 1991.
2. Manage publication (writing, editing, printing, binding) and distribution of the proceedings from the 6<sup>th</sup> International INPF Conference.
3. Arrange and support the presentation of a summary from the 6<sup>th</sup> International INPF Conference at the Asian Congress of Nutrition in Kuala Lumpur, Malaysia, on 16-19 September 1991.
4. Organize, arrange, convene and support INPF Steering Committee Meetings in January 1991 and September 1991. Invite a second African representative to join the steering committee.
5. Support the efforts of a task force on communications to determine nutrition information needs among developing country nutrition workers. Develop a questionnaire asking about the nature of this need, send to broad representation of nutritionists, and analyze results to determine INPF actions.
6. Initiate, draft terms of reference, and convene five member task force to develop guidelines for using the publication *Crucial Elements of Successful Community Nutrition Programs* in community based nutrition intervention programs. Publish and distribute these guidelines to appropriate groups.
7. Develop a comprehensive mailing list of individuals and organizations in LDC's for distribution of INPF and other relevant information.
8. Distribute *Crucial Elements of Successful Community Nutrition Programs* and other INPF information to individuals and groups that request it for use as an adjunct in training programs to provide sound nutrition principles.
9. Provide INPF news to various newsletters and information centers to increase exposure and understanding of INPF and its mission.
10. Provide annual, quarterly, financial, meeting and trip reports as specified in the cooperative agreement.

**International Nutrition Planners Forum (INPF)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

**Workplan Activity Links to Cooperative Agreement Program Objectives**

The following objectives stated on pages 34 and 35 of Cooperative Agreement No. DAN-5115-A-00-7114-00, Modification #04, are supported by the INPF FY91 workplans to be undertaken by The Nutrition Foundation, Inc. Numbers following in parentheses relate to the INPF objectives itemized on the previous page and described by fiscal year quarters below.

1. Organize, arrange and support [the June 1990] INPF Steering Committee meeting(s) [to be held in Washington, DC]. [wording in cooperative agreement, but not relevant to ongoing workplans]. (3)
2. Manage the publication of proceedings and reports. (1,2,5,6)
3. Maintain correspondence and liaison with various international organizations (government, private non-governmental, commercial, and agencies in the United Nations system). (1-9)
4. Organize, arrange and support the International INPF conference (including all logistical details). (1,2,4)
5. Develop a list of developing country specialists nominated by AID/Washington and USAID Missions and other sources, to participate in the 1991 conference. (1,4)
6. Function as a referral service to state-of-the-art repositories of subject information. (2,5-9)
7. Encourage and promote policies, planning, research, and operations needed to move the INPF toward obtaining its objectives. (4,6)
8. Organize and facilitate the advisory functions of INPF. (4,6)
9. Expand and promote communications between the various organizations engaged in nutrition programs in LDC's. (1-9).

**International Nutrition Planners Forum (INPF)  
FY91 Work Plan, by Quarters**

The Nutrition Foundation, Inc., serving as the INPF Secretariat, plans to undertake the following activities related to INPF during this fiscal year:

**Q1 FY91 (1 Oct - 31 Dec 1990)**

**INPF Steering Committee**

Plans for an INPF Steering Committee meeting on 14-15 January 1991 will be finalized during this quarter, including confirmation of the site outside Paris, France, and accommodations for sleeping and meeting rooms. A memorandum detailing background information related to the 6<sup>th</sup> International INPF Conference will be drafted with Dr. Mark Lediard, AED, and Dr. Jerome. Research on child survival emphasis countries will be carried out to provide additional assistance in determining countries to invite to the international conference. Relevant information will be sent to steering committee members during this quarter in advance of the January meeting. In addition, a second African nutritionist representing Francophone West Africa will be invited to join the steering committee to complete the membership at seven. Those attending the January 1991 meeting are:

Dr. Mamdouh Gabr, Cairo, Egypt, INPF Steering Committee Chairman  
Dr. Norge W. Jerome, Washington, DC, USA  
Dr. Jaime Ariza, San Juan, Puerto Rico  
Dr. A.W. Patterson, Kingston, Jamaica  
Ms. Julia Tagwireyi, Harare, Zimbabwe  
Dr. Mathurin C. Nago, Cotonou, Benin (New Member Invited)  
Dr. Aree Valyasevi, Bangkok, Thailand  
Dr. Timothy Morck, Washington DC, USA (INPF Secretariat)  
Mr. George Nevares, Washington DC, USA (INPF Secretariat)  
Dr. Mark Lediard, Washington DC, USA (AED consultant, no airfare)

The INPF Secretariat will pay for travel and expenses related to the meeting for all the above except Dr. Jerome, who has other federal travel funds. Airline reservations will be made for this travel.

**6<sup>th</sup> International INPF Conference**

As stated above, a background document will be developed for steering committee response before the January meeting. Agenda planning will continue and a draft program will be prepared for presentation at the January meeting. Site options will be pursued in conjunction with Bangkok advisors, and costs projected. A database to track meeting details will be developed and implemented during this quarter.

## **Task Force on Communications**

Terms of reference for this task force will be developed. Co-chairs Dr. A.W. Patterson and Dr. J. Ariza will be contacted to review a questionnaire developed during this quarter designed to poll nutritionists working in LDC's about their nutrition information needs and sources. The format will be simple, with boxes to check responses and minimal writing required, and translated into three languages all on one form.

## **Task Force on Developing Guidelines for using *Crucial Elements of Successful Community Nutrition Programs* in Community Based Nutrition Intervention Programs**

Terms of reference will be developed for this task force and five members having practical program experience, not necessarily in nutrition, will be invited. The purpose of this task force will be to develop guidelines that can be used to help individuals interested in integrating nutrition into other programs (e.g. child survival, education, agriculture, womens programs, free enterprise, etc.) by describing how to use the information contained in the publication *Crucial Elements of Successful Community Nutrition Programs* to ensure that a nutrition intervention has maximal chances of succeeding. An initial meeting of the task force will be held late in the quarter.

## **Mailing list Development**

A list of individuals and organizations that would benefit from INPF and other nutrition-related information will be developed. This will be a continuing process with emphasis on reaching developing country nutrition programmers.

## **Administrative**

INPF information will be included in the Q4 FY90 quarterly report as well as in the Annual Report of Cooperative Agreement No. DAN-5115-A-00-7114-00 for FY 90. Remaining copies of *Crucial Elements of Successful Community Nutrition Programs* in all three languages will be moved from LTS to The Nutrition Foundation for subsequent distribution.

## **News Release**

Announcement about the formation of the INPF Secretariat at The Nutrition Foundation will be sent to newsletters and periodicals.

**Q2 FY91 (1 Jan - 31 Mar 1991)**

## **INPF Steering Committee**

The INPF Steering Committee meeting outside Paris, France will be held on 14-15 January 1991. All travel and rooming accommodations will be made by the secretariat. At the meeting, decisions will be made about: the 6<sup>th</sup> International INPF

Conference program and invitees, task force activities, and the presentation to the Asian Congress of Nutrition following the Bangkok meeting. Following the steering committee meeting, trip reports and meeting minutes will be prepared and submitted to S&T/N. Minutes of the steering committee meeting will then be sent to all members.

## **6<sup>th</sup> International INPF Conference**

At the January steering committee meeting, the conference theme, format, and program agenda will be approved. Countries to be extended invitations to send 3-person teams will be identified by the steering committee. Names of nutrition/communication experts will be provided by the steering committee or investigated by the secretariat. Invitations will be extended to donor agencies to contribute support (both financial and participatory) for a special session at the end of the 6<sup>th</sup> International INPF Conference. During that session they will present to developing country attendees opportunities for assistance in setting up country-wide nutrition communication programs. A site visit by the INPF Program Manager and NF Conference Coordinator will be made during this quarter to finalize hotel contracts, to make financial arrangements with a local bank to enable payment of per diem and meeting expenses, and to meet with the local host coordinating committee. A trip report will be prepared and submitted to S&T/N.

## **Task Force on Communications**

The questionnaire on information needs of nutritionists in developing countries will be mailed to addresses obtained from the Clearinghouse of Infant Feeding and Maternal Nutrition mailing list, SLAN mailing list, CAJANUS mailing list, and others received. A system for collecting and coding the returned responses will be instituted.

## **Task Force on Developing Guidelines for using *Crucial Elements of Successful Community Nutrition Programs* in Community Based Nutrition Intervention Programs**

This new task force was suggested after the June 1990 meeting of the steering committee. Therefore, the terms of reference and a report of the first meeting will be presented to the steering committee at the January meeting for discussion. The task force will meet later this quarter to establish a timeframe for accomplishing its work.

## **Mailing list Development**

As they are received, the secretariat will continue to add names to the INPF mailing list. A summary of *Crucial Elements of Successful Community Nutrition Programs* will be sent to everyone on the list, along with information on how to obtain the full report.

## **Administrative**

INPF information will be included in the quarterly report for Q1 FY91.

## **News Release**

An announcement of the upcoming 6<sup>th</sup> International INPF Conference will be sent to newsletters and periodicals on the INPF mailing list.

**Q3 FY91 (1 Apr - 30 Jun 1991)**

## **INPF Steering Committee**

Communications will be maintained with the steering committee following the January meeting to inform them of developments in program and participant details associated with the 6<sup>th</sup> International INPF Conference and the follow-on meeting in Kuala Lumpur. Travel arrangements will be made for the steering committee members to attend the meeting in Bangkok.

## **6<sup>th</sup> International INPF Conference**

During this quarter, major tasks will include making arrangements for INPF-sponsored travel and per diem, and lodging. In addition, there will be preparation of documents and materials needed in advance of meeting as well as final details related to format for donor luncheon and possible site visit.

## **Task Force on Communications**

During this quarter, responses returned will be analyzed and results tabulated for presentation to the steering committee at the next meeting.

## **Task Force on Developing Guidelines for using *Crucial Elements of Successful Community Nutrition Programs* in Community Based Nutrition Intervention Programs**

The first draft will be prepared of a document that will present guidelines for helping develop curriculum materials targeted to assist in incorporating *Crucial Elements of Successful Community Nutrition Programs* into nutrition programs. This manuscript will be circulated among task force members for comments. Meeting arrangements will be made to hold a task force meeting in Washington, DC during this quarter.

## **Mailing list Development**

The secretariat will continue to add to the INPF mailing list as individuals/organizations make contact with secretariat through any of its related programs. Additions to the APHA Clearinghouse on Infant Feeding and Maternal Nutrition will also be solicited.

## **Administrative**

INPF information will be included in the Q2 FY91 Quarterly Report. Draft FY92 workplans will be written this quarter, incorporating INPF information for the next year.

**Q4 FY91 (1 Jul - 30 Sep 1991)**

## **INPF Steering Committee**

A steering committee meeting will be scheduled and held during the time of the 6<sup>th</sup> International INPF Conference in Bangkok, Thailand. The secretariat will pay expenses related to travel and per diem during the time of the meeting for the same individuals specified in Q1 under this same heading. The agenda for the steering committee meeting will be prepared and mailed in advance to all steering committee members. The tentative theme, date and site for the 7<sup>th</sup> International INPF Conference will be discussed. Minutes of this meeting will be submitted to S&T/N and subsequently to the steering committee members.

## **6<sup>th</sup> International INPF Conference**

The 6<sup>th</sup> International INPF Conference will be held 10-13 September in Bangkok, Thailand. All logistic support on-site will be provided by the secretariat. A trip report will be submitted to S&T/N following the meeting. The budget item for travel and per diem is quite large for this quarter, due to the secretariat covering travel and 5 days per diem for the following meeting participants: Six members of the steering committee plus two secretariat staff, Dr. Lediard, and 12 country teams made up of three persons per team (total of 45 people). There may be other organizations, or USAID Missions that will help support some of these country participants, so the actual expenses may end up less than the amount budgeted.

## **Presentation of Results from 6<sup>th</sup> International INPF Conference at Asian Congress of Nutrition, Kuala Lumpur, Malaysia 16-19 September 1991**

Final arrangements will be made to enable presentation of a summary of the 6<sup>th</sup> International INPF Conference at the Asian Nutrition Congress. The secretariat will attend the meeting to coordinate details of the presentation, and possibly make the presentation.

## **Task Force on Communications**

Results of the questionnaire analysis will be given to the steering committee during its meeting this quarter. INPF actions to address these findings will be decided.

**Task Force on Developing Guidelines for using *Crucial Elements of Successful Community Nutrition Programs* in Community Based Nutrition Intervention Programs**

The "Guidelines" manuscript will be prepared for submission to the printer.

**Mailing list Development**

Names will continue to be added as before in preparation for distributing the proceedings of the 6<sup>th</sup> International INPF Conference, when published.

**Administrative Duties**

INPF information will be included in the Q3 FY91 report and in the final workplan report for FY92. In addition, the draft FY91 Annual Report will be written and will include INPF information.

**News Release**

An announcement containing a summary of the 6<sup>th</sup> International INPF Conference will be sent to newsletters and periodicals.

## INPF FY91 WORK PLAN, BY QUARTERS

### Q1FY91 (10/1/90-12/31/90)

Steering Committee: Invite 2nd African, arrangements for Jan mtg (travel, site, agenda)

6<sup>th</sup> Int'l INPF Conference: background doc prep, agenda devel, budget projected, site options

Task Force on Communications: terms of ref, develop questionnaire on communication needs, contact clearinghouse

Task Force on developing guidelines for using "*Crucial elements...*" into nutrition progs. Terms of ref, identify and invite members, hold first meeting.

Develop mailing list

Quarterly report

Annual Report FY90

News rel: INPF new secretariat

### Q2FY91 (1/1/91-3/31/91)

Steering Committee Meeting Paris, France 14-15 Jan 91. 6<sup>th</sup> INPF Prog approved, TF reports, minutes, trip report prepared

6<sup>th</sup> Int'l INPF Conference: prog finalized, countries to be invited selected, site visit to secure hotel/financial arrangmts,

TF Communications: Questionnaire mailed out in January

Guidelines TF: present plan to Steer. Comm, follow-up meeting

Add to mailing list

Distribute 5<sup>th</sup> INPF Summaries in 3 languages

Quarterly report

News rel: Announce upcoming 6<sup>th</sup> INPF Meeting

### Q3FY91 (4/1/91-6/30/91)

Follow-on communications with SC related to Jan mtg

6<sup>th</sup> Int'l INPF Conference: Logistics, travel finalized, background materials prepared

Questionnaire results collated and analyzed

Guidelines TF: Write draft of guidelines and TF review, meet to discuss

Add to mailing list

Quarterly report

Work Plan: draft FY92

### Q4FY91 (7/1/91-9/30/91)

Steering Committee meets in Bangkok: Next conference theme, TF reports, minutes prepared

6<sup>th</sup> Int'l INPF Conference held in Bangkok 10-13 Sept 1991. Participants confirmed, papers rec'd and packets prepared, site arrangements made

Presentation at Asian Congress of Nutrition, Panel Presentation of summary from Bangkok Mtg

Report results of questionnaire to steering committee

Guidelines TF: Final draft prepared for printer

Add to mailing list

Quarterly report

Annual Report FY91 Draft

Work Plan: final FY92

News Rel: 6<sup>th</sup> International INPF Conference Meeting held

INPF Program FY 91 Budget

Program Expenses by Quarter, FY 91					
INPF	Q1	Q2	Q3	Q4	Total
Direct Labor	12,081	12,244	10,034	20,874	55,233
Fringe Benefits	1,911	1,931	1,514	3,195	8,551
Consultants	1,000	2,000	2,000	1,000	6,000
Publications				5,000	5,000
Editorial & ss		250	500	1,000	1,750
Travel & PD		25,194		149,206	174,400
Supplies	250	320	250	810	1,630
Equip Purchase	750	750	750	750	3,000
Office Rent	1,838	1,838	1,838	1,838	7,352
Fiscal Admin	1,963	1,963	1,963	1,963	7,852
Communications	1,550	2,510	1,550	4,945	10,555
Meeting room Rent		500		2,700	3,200
<b>Total direct</b>	<b>21,343</b>	<b>49,500</b>	<b>20,399</b>	<b>193,281</b>	<b>284,523</b>
Indirect (12%)	2,561	5,940	2,448	23,194	34,143
<b>Total amount</b>	<b>23,904</b>	<b>55,440</b>	<b>22,847</b>	<b>216,475</b>	<b>318,666</b>

**International Nutrition Network Exchange (INNE)  
FY91 Work Plan (1 October 1990 through 30 September 1991)**

**Program Objectives for Fiscal Year 1991**

The Nutrition Foundation, Inc., serving as the INNE Secretariat, plans to undertake the following activities related to INNE during this fiscal year:

1. Organize, arrange and support the 1<sup>st</sup> Annual INNE Convocation in Washington, DC on 2-3 October, 1990 to include supporting one invited guest presentation.
2. Organize, arrange and support the 2<sup>nd</sup> Annual INNE Convocation in Washington, DC on 8-9 May, 1991 to include supporting one invited guest presentation.
3. Prepare meeting summaries of the above convocations and circulate to participants and other appropriate groups and/or individuals.
4. Maintain correspondence and liaison with all organizations participating in S&T/N-funded programs, related to these meetings.
5. Convene a planning group to assist in planning the 2<sup>nd</sup> Annual INNE Convocation and prepare minutes of planning meetings.

These activities are directly linked to overall objectives for INNE as specified in Cooperative Agreement No. DAN-5115-A-00-7114-00, modification #04, page 37. The following pages present a plan to accomplish these objectives, delineated by quarters of fiscal year 1991.

**International Nutrition Network Exchange (INNE)  
FY91 Work Plan, by Quarters**

**Q1 FY91 (1 Oct - 31 Dec 1990)**

**Annual INNE Convocation for S&T/N Implementors**

The 1st Annual INNE Convocation for S&T/N implementors will be organized and held in Washington, DC on 2-3 October, 1990. This is based on preparations made during Q4 FY90 since the meeting is immediately after the start of the new fiscal year. Thirty-two implementors will be invited. Details of preparation include developing the meeting program, selecting meeting site and associated contractual arrangements, inviting speakers, and arranging for keynote speaker.

Implementors will be asked to submit written descriptions of the scope of work of their S&T/N-funded programs, with particular emphasis on those taking place in African countries.

Much of the preparation for this meeting will occur during Q4, FY 90 since the meeting is scheduled only two days into the new fiscal year. Follow-up meeting summaries will be prepared and submitted to S&T/N for review, and then circulated to all invited implementors, and others as appropriate. Meeting evaluation forms will be analyzed and summarized and included with the meeting report to S&T/N.

**Planning Committee**

During this quarter, a six-member planning committee will be selected from implementors in the Washington, DC area to assist the secretariat and AID program officer in planning the 2<sup>nd</sup> Annual INNE Convocation. This committee will include representation from organizations receiving assistance from S&T/N in the form of a) grants, b) cooperative agreements, c) contracts, d) Indefinite Quantity Contracts (IQC's) in addition to one AID representative and the INNE Secretariat. At least two of the above should have nutrition-related activities that receive funding through mission buy-ins. The first meeting of the planning committee will be held this quarter to select theme, format, and potential speakers. Minutes of this meeting will be submitted to S&T/N within ten working days of the meeting.

**Administrative**

INNE information will be included in Q4 FY90 quarterly report, as well as in Annual Report of Cooperative Agreement No. DAN-5115-A-00-7114-00 for FY90.

**Q2 FY91 (1 Jan - 31 Mar 1991)**

**Annual INNE Convocation for S&T/N Implementors**

In the second quarter, plans and arrangements for the 2<sup>nd</sup> Annual INNE Convocation will be finalized and speakers will be invited. Implementors will be invited from S&T/N list provided to the secretariat by 14 February 1991.

**Administrative**

INNE information will be included in the quarterly report covering Q1 FY91.

**Q3 FY91 (1 Apr - 30 Jun 1991)**

**Annual INNE Convocation for S&T/N Implementors**

In the third quarter, the 2<sup>nd</sup> Annual INNE Convocation will be held in Washington, DC on 8-9 May, 1991. Logistics associated with the convocation will be carried out by the secretariat as detailed in Q1. Meeting summary will be prepared and submitted to S&T/N for review.

**Administrative**

INNE information will be included in the Quarterly Report for Q2 FY91. Appropriate INNE activity and budgetary information will be included in the FY92 workplans drafted during this quarter.

**Q4 FY91 (1 Jul - 30 Sep 1991)**

**Annual INNE Convocation for S&T/N Implementors**

Upon incorporating comments or changes to meeting summary received from S&T/N, final summary will be distributed to all invited implementors and others, as appropriate.

**Administrative**

INNE information will be included in the Quarterly Report for Q3 FY91. Appropriate INNE activity and budgetary information will be included in the FY92 workplans finalized during this quarter.

Activities conducted by INNE during FY91 will be incorporated into the initial draft of the FY91 Annual Report prepared during this quarter.

## INNE FY91 WORK PLAN, BY QUARTERS

### Q1FY91 (10/1/90-12/31/90)

Convocation #1: October 2-3, 1990, Washington, DC, report written, submitted for S&T/N review, distributed to participants

Convocation #2 planning meeting, theme, date, site, speakers selected

Quarterly report

Annual Report FY90

### Q2FY91 (1/1/91-3/31/91)

Final planning, program finalized, speakers invited, meeting details, background materials

Quarterly report

### Q3FY91 (4/1/91-6/30/91)

Convocation #2: May 8-9, 1991, Washington, DC, report written, submitted for S&T/N review, theme for next convocation chosen

Quarterly report

Work Plan: draft FY92

### Q4FY91 (7/1/91-9/30/91)

Report distributed to participants, follow up

Quarterly report

Annual Report FY 91: draft

Work Plan: final FY92

INNE Program FY 91 Budget

Program Expenses by Quarter, FY 91

INNE	Q1	Q2	Q3	Q4	Total
Direct Labor	2,445	1,655	2,750	305	7,155
Fringe Benefits	401	256	438	37	1,132
Consultants	400		400		800
Publications	500		500		1,000
Editorial & ss	600		1,100		1,700
Travel & PD	2,500		2,500		5,000
Supplies	200	50	300	50	600
Equip Purchase	50	50	50	50	200
Office Rent	105	105	105	105	420
Fiscal Admin	148	148	148	148	592
Communications	530	250	1,090	250	2,120
Meeting room Rent	1,850		1,850		3,700
Total direct	9,729	2,514	11,231	945	24,419
Indirect (12%)	1,167	302	1,348	113	2,930
Total amount	10,896	2,816	12,579	1,058	27,349

169

Combined Program FY 91 Budget

Combined Program Expenses by Quarter, FY 91					
COMBINED	Q1	Q2	Q3	Q4	Total
Direct Labor	48,906	48,906	48,906	48,906	195,624
Fringe Benefits	8,026	8,027	8,027	8,027	32,107
Consultants	3,400	3,000	4,400	3,000	13,800
Publications	5,250	9,750	27,050	30,850	72,900
Editorial & ss	1,850	500	5,000	2,250	9,600
Travel & PD	29,587	50,569	79,475	160,281	319,912
Supplies	1,975	1,045	3,425	1,435	7,880
Equip Purchase	1,200	1,200	1,200	1,200	4,800
Office Rent	6,718	6,718	6,718	6,718	26,872
Fiscal Admin	7,589	7,589	7,589	7,589	30,356
Communications	8,930	7,760	7,640	10,195	34,525
Meeting room Rent	3,350	500	4,600	2,700	11,150
Total direct	126,781	145,564	204,030	283,151	759,526
Indirect (12%)	15,214	17,468	24,484	33,978	91,143
Total amount	141,995	163,032	228,514	317,129	850,669