

Prepared for

Office of Nutrition
Bureau for Research and Development
U.S. Agency for International Development
Washington, D.C.
Contract No. DAN-5116-C-00-9114-00
Project No. 936-5116

QUARTERLY REPORT
April 1993 - June 1993

Edited and Produced by
Vitamin A Field Support Project (VITAL)
International Science and Technology Institute, Inc.
1616 North Fort Myer Street, Suite 1240
Arlington, Virginia 22209
Phone: (703)841-0652
FAX: (703)841-1597

Published August 1993

VITAL

VITAMIN A FIELD SUPPORT PROJECT

QUARTERLY REPORT

April 1993-June 1993

PROJECT OVERVIEW

The VITAL project was initiated by the Nutrition Office of the Research & Development Bureau (R&D/N), U.S. Agency for International Development (USAID) in the fiscal year 1989 to reduce vitamin A deficiency. The project is committed to serve USAID, host country governments, and institutions in the design and implementation of vitamin A intervention programs.

As part of the Office of Nutrition's Vitamin A for Health project, VITAL provides **technical assistance** for prevalence assessments, feasibility studies, project design, monitoring and evaluation. Program interventions include vitamin A supplementation through health care delivery systems, food fortification, nutrition education, and home or community gardening.

Through **collaborative inquiries**, VITAL supports operational research to test innovative ways of increasing the coverage, effectiveness, and sustainability of vitamin A activities to prevent blindness and enhance child survival.

Through its multi-channelled **information gathering and dissemination strategy**, VITAL provides a central resource base for information exchange and training on vitamin A problems and programs throughout the world.

VITAL is managed by the International Science and Technology Institute, Inc. (ISTI). Its subcontractors include the University of Arizona, Community Systems Foundation, and the Program for Appropriate Technology in Health (PATH). A Technical Advisory Group, composed of distinguished nutrition experts provides guidance and monitors work in progress.

REPORTING PERIOD ACTIVITIES

General

Project Work Plan and Schedule

The Project Work Plan has been revised and updated since the Semiannual Report in March 1993 and is included as an annex to this report. It covers the period July 1993 through March 1994, the planned project completion date. The bulk of the work during the remaining period will be to complete country programs in Latin America, Africa, and Asia funded through buy-ins. We will also concentrate on maximizing distribution and utilization of the many Information component documents and training materials which were produced during the project period, and conduct reviews and analyses of several of the substantive project activities, including home gardening, food preservation, and prevalence surveys.

We have been monitoring closely our use of the remaining level of effort (LOE) and making every effort to minimize use of core contract person months. At this time, we are on schedule to maintain adequate LOE through March 1994.

Africa Region

1. Cameroon

During the reporting period data analysis from the Survey on Blindness and Vitamin A Deficiency in the Extreme North Province (ENP) continued at Drew University. Dietary, clinical, and biochemical data were merged and relationships between the different vitamin A and ophthalmic indicators examined. Dr. Roy Wilson, P.I. for the survey, directed these analyses for eventual inclusion in the survey report.

In May, Dr. Mohamed Mansour visited Cameroon and met with key Ministry and survey personnel to begin planning for the dissemination symposium. National and provincial organizing committees were formed, a venue selected, a tentative agenda prepared, and a list of participants drawn up. The symposium was planned for August 26-27, 1993, in Maroua. During the next quarter, the survey report will be completed and the symposium will be held. (The symposium was subsequently postponed to November 5-6.)

VITAL closed out its contract with OCEAC for management of the biochemical component of the ENP survey. The remaining balance was returned to VITAL. An advance was sent for analysis of the data from the Pygmy study in Mekas. It is anticipated that VITAL will engage the services of OCEAC again to coordinate in-country preparations for the symposium.

2. Niger

VITAL continued providing assistance to the FAO funded project "Promotion of Production and Consumption of Vitamin A Rich Foods in Niger". In early April, VITAL sent communication consultant Mme. Mamadoulaibou Aissa to work with the project staff in Bouza. During this consultancy, Mme. Mamadoulaibou identified aspects of the HKI/AED mini-project in nutrition communication in the neighboring sub-district of Birni-Konni which could be applied to the project in Bouza, including key educational messages and educational support materials. A multi-media nutrition education/communication strategy was developed.

In September, VITAL will participate in a tripartite review of the project, together with the FAO, UNDP and the GON. The purpose of this review is to evaluate the first year of the project's operation, and to revisit (and modify, if appropriate) the objectives planned for the second year. VITAL's participation is considered by the FAO to be important because of its inputs into implementation of the baseline survey, development of the education/communication strategy, training and construction in the use of solar dryers, and development of monitoring and evaluation indicators.

3. Nigeria

Survey training activities, the pilot study, and the start-up of Phase I of the national micronutrient survey (NMS) took place during the reporting period. In April, Dr. Tandé Ajaiyeoba, the survey ophthalmologist, visited Johns Hopkins University for a one week refresher training in CIC methodology. Dr. Mohamed Mansour went to Nigeria in May and June and trained survey nutritionists in the IVACG dietary assessment methodology. Training of all survey teams was completed in Ibadan. Field and laboratory supplies for the main survey were procured and shipped, and the survey began in mid-June.

The survey in the northern zones (Phase II) is scheduled to begin in mid-July, after the southern zones are completed and Phase I experience is reviewed. VITAL will send a nutritionist and data management specialist to participate in

the mid-survey review and help develop a data analysis plan and refine survey methods, as needed, for the survey in the north. Data entry will be completed and analyses of biochemical specimens will be conducted. Drs. Atinmo, Dare, and Okungbowa will prepare abstracts about the survey for presentation at the West African Meeting on Vitamin A in August, 1993.

4. Uganda

Progress was made on development of the Kamuli District pilot project, identified at the Jinja workshop in February as part of the Vitamin A Nutrition Action Plan. VITAL sent two consultants to provide technical assistance to the MOH to elaborate on and develop the preliminary plans for a disease-targeted vitamin A supplementation project and a diet diversification project. Dr. Mohamed Mansour went to Uganda in early June, and worked jointly with the Ugandan planning team to design the diet diversification project for Kamuli. Dr. John McKigney travelled later in June, and worked closely with the MOH and UNICEF to outline a plan for the supplementation project targeted to children 0 to 6 years of age. The work in Kamuli District is intended to lay the foundation for similar activities in other regions of Uganda.

The Ugandans intend to use the outcome of the two consultancies to develop an integrated program plan for Kamuli, and a proposal which will be submitted to UNICEF for eventual funding. Part of the pilot project involves sending a team of Ugandans to Tanzania to observe aspects of the Tanzanian vitamin A program. In addition, the Tanzanian Food and Nutrition Center has offered to send one of its advisors to Uganda to provide training, particularly for the supplementation component. VITAL will continue to coordinate efforts to implement the Kamuli District pilot project.

5. West Africa Meeting

R&D/N agreed to provide funding for a West African Meeting on Vitamin A. This meeting, scheduled for August 9-11, 1993, in Accra, Ghana, is intended to be a forum to bring together individuals and organizations to share programming experience in the West African region. VITAL was asked to manage the R&D/N support and to provide planning and technical assistance to the Conference Planning Group. VITAL's Africa region staff helped develop the meeting agenda, identify key speakers and participants, and disseminate the meeting announcement and call for abstracts. Many of USAID's collaborators in the region will prepare abstracts for and attend the meeting, and VITAL will send representatives to participate in the meeting.

Asia Region

1. India

In April/May, VITAL arranged for the shipment of vitamin A fortified oil to CARE/India (through the PL 490 program) for stability tests in response to CARE's concerns about the loss of vitamin A activity in Corn Soy Blend which is currently fortified with vitamin A. The Lauhoff Grain Company (producer of CSB) conducted the vitamin A analyses, prior to shipment, of one batch of CSB that is being tracked and sampled in India for follow-up sampling and vitamin A analyses. CARE/India is comparing the stability of vitamin A in CSB and oil under field conditions. At baseline, samples of oil were analyzed at the University of Maine, and further analyses of samples from India are planned for completion in September/October.

2. Nepal

In April, VITAL signed subcontracts with several organizations to coordinate pilot projects under the supervision of the Technical Advisory Group (TAG) that promote dietary change, improved production, and preservation and consumption of vitamin A-rich foods; training and supervision of community health workers; and capsule distribution.

Nepal Netra Jyoti Sangh is providing technical assistance to the TAG in planning, implementation, and monitoring of the MOH's National Vitamin A Deficiency Control Programme. Logistical support for the TAG's training activities is being provided by MASS. The training program at the health post level was developed and field-tested in early June, but heavy rains delayed training activities later in the month. Plans are also underway to begin the capsule distribution component in early October.

Under TAG guidance, New Era has been finalizing the survey design to determine the prevalence of xerophthalmia in the Far and Mid-Western provinces and has recruited and trained the survey team. The organization had difficulty in identifying enough ophthalmic assistants to carry out the survey at the proposed sites, which resulted in a decrease in the number of districts to be surveyed. In mid-June, the survey began in four districts.

United Mission to Nepal began conducting vitamin A activities in July at UMN sites in the Jajarkot district, including promotion of improved vitamin A nutrition among children and pregnant and lactating mothers, training of

health post staff, and development of kitchen gardens through existing non-formal education classes.

CARE/Nepal is continuing home gardening and conducting nutrition education activities at two field sites. CARE has expanded its vitamin A activities to other field sites as part of Nepal's national vitamin A program and provides training to other PVOs. An evaluation recommended by VITAL to review the training and nutrition education activities has been planned for April 1994.

HKI/Nepal is serving as liaison between the TAG and the PVOs and NGOs participating in the national vitamin A program. Guidelines and semi-annual reporting forms for the NGOs/PVOs were developed and sent out.

3. Papua New Guinea

VITAL's collaboration with John Snow, Inc. (JSI) continued with a month-long visit in May by Indonesian ophthalmologist and VITAL consultant Iwan Sovani. Dr. Sovani and local nutritionists conducted a hospital-based vitamin A assessment of children for clinical signs of xerophthalmia in Papua New Guinea and the Trobriand Islands. No clinical signs were observed. VITAL is currently entering dietary data from the survey into EPI-INFO for further analysis.

4. Philippines

The Philippines Food and Nutrition Research Institute continued its assessment of the impact of home gardening interventions on increased vitamin A consumption and status by finishing data collection in three field sites using its version of the Simplified Dietary Assessment Questionnaire. The data processing phase began in June and is expected to be finished by mid-October with a report scheduled for completion in late-November. Following the completion of the processing phase, the Institute plans to train other Philippine nutritionists on the use of the SDAQ. The assessment includes serum retinol as an indicator of vitamin A status.

5. South Pacific - Solomon Islands

VITAL consultants Susan Eastman and Peter Heywood visited the Solomon Islands to design a two-to-three-year intervention program in collaboration

with the Ministry of Health and Medical Services and local nongovernmental organizations. A work plan for VITAL assistance through March 1994 was also developed. Ms. Eastman then reviewed the program and work plan with VITAL consultant Kathy Fry in Vanuatu and USAID/Suva staff. Since the visit, USAID/Suva has advised us that it is unlikely that the Solomon Islands MOH will follow up on the recommendations in the near future.

6. South Pacific - Cook Islands

Following approval of its proposal to VITAL, the Cook Islands Health Board began a year-long campaign in April to increase awareness among mothers and Childwelfare Association members of the importance of vitamin A through community workshops, radio and television announcements and dissemination of a locally-produced vitamin A pamphlet.

7. SEARO Nutrition-cum-Action Network

After lengthy, and eventually unsuccessful, discussions with the WHO/SEARO office in New Delhi about channeling VITAL funds through that office to support this collaborative inquiry project, the Institute of Nutrition of Mahidol University (INMU) offered to serve as the coordinator and VITAL subcontractor for the project. Consequently, we provided a first tranche of funds to INMU for its own project and for the Nutrition Research and Development Center in Indonesia. A third institution, the National Institute of Nutrition of India, is carrying out its part of the project with its own funds. The purpose of the activity is to determine the effects of food preservation, preparation, and storage techniques on the vitamin A activity of locally consumed betacarotene-rich foods, and to develop year-round recipes of commonly used vitamin A-rich foods. A meeting to review the project with the three groups, SEARO, VITAL, and R&D/N has been scheduled for early October during the International Congress of Nutrition conference in Australia.

Latin America and Caribbean Region

1. Bolivia

The Bolivia National Program has continued in its three major branches of activity: supplementation and fortification through the Ministry of Health, and gardening through PROCOSI.

As scheduled, VITAL consultant Dr. Noe Orellana went to Bolivia in May and June to perform a follow up evaluation of supplementation training and dissemination activities through health personnel and field promoters in the Illimani and Cochabamba health districts. Dr. Orellana and the Ministry staff found that Illimani District has done excellent work in radio spots and education of the communities. The training activity will now be launched in all of the 26 health districts of Bolivia.

PROCOSI's gardening activity has continued in its second year, adding Guarani and Mataco communities to the activity. They plan to perform a second dietary assessment of the Mataco communities during the off season period of various vitamin A-rich foods in order to verify residents' vitamin A status.

For the fortification activity, UNICEF had planned to provide up to \$25,000 of vitamin A Palmitate to help the Sugar Mill of Bermejo produce its first 7 metric ton batch of sugar. However, due to the July elections, the current Ministry Director of Human Services Dr. Roberto Bohrt was not able to finish this endeavor with Mario Telleria, VITAL consultant. Fourth Quarter activities for the Bolivia National Program include engaging the new Ministry leadership in vitamin A and other micronutrient activity and launching the carrot consumption campaign through a media strategy that VITAL consultants will design through research and pilot experimentation.

2. Ecuador

The Ecuador Ministry of Health launched its Micronutrient Survey on May 24 and finished surveying three regions by the end of June, reaching 95% of the targetted children in those regions. They plan to finish the field work and at least 50% of the samples by mid-August, in order to work with the data during the LAC meeting in Recife, August 23-27. Given that the work is on time and under budget, the MOH is considering adding a sixth region in the Amazon zone of Ecuador.

3. Guatemala

Sweet Potato Project

Phase II of the Sweet Potato project implemented by the International Eye Foundation (IEF) through its Guatemala affiliate CESSIAM, got underway in this quarter. Phase I successfully determined that vitamin A rich sweet potatoes could be dried commercially and used in a gruel and puree form by

young children as a weaning food, or post weaning food. Its beta carotene content was confirmed and acceptability was confirmed through small-scale taste trials using several recipes and preparations. The findings were presented by CESSIAM at the XV IVACG meeting in March.

Phase II is to produce 7,500 lbs of dried "instantized" sweet potato powder and determine the community-level utilization and consumption patterns, including quantities and frequency of use, preparation methods, and costs in four small rural communities. This phase was to begin in April but was delayed until late June because of a late sweet potato harvest due to unusually cool and wet weather. However, the trial communities were selected, staff assigned, and baseline information collected in the communities. The new batch of sweet potatoes will be dried and processed by Mahler Co. in early July and packaged and distributed to the communities by the end of July. Samples of the product will be sent to North Carolina State University in early July for chemical and beta carotene content analyses. Product demand and utilization will be monitored in the communities during August - November, and a final report will be completed by January 1994.

Because of the positive initial results of phase I, CESSIAM has invited the R&D/N Project SUSTAIN to provide guidance on product commercialization and marketing in order to enhance prospects for sustainability. A SUSTAIN representative is expected to visit CESSIAM to discuss the project in August.

National Micronutrient Strategy

VITAL's assistance to the MOH Strategy Development activity was postponed due to the June 1993 Coup d'Etat "Cerranazo". However, the national micronutrient commission completed its strategy document and the MOH and USAID mission have asked VITAL to help with its initiation.

4. Haiti

VITAL consultant Benedict Tisa went to Haiti during April 25 - May 9 to assist PROVAX and its member NGOs to prepare a vitamin A Information, Education & Communications (IEC) strategy and work plan. He recommended that the strategy focus on creating a demand for the vitamin A capsules and ensuring their ready availability. He defined an aggressive social marketing campaign to engage opinion makers, religious leaders and popular artists who will produce songs about vitamin A and its importance for child health. The group prepared a May - December work plan which includes meetings with schools and churches, materials development, training, and

- 2 other promotional activities. Tisa's planned return visit in July, to evaluate progress and update the workplan, was cancelled due to political problems in Haiti.

Dr. John McKigney went to Haiti in April to help PROVAX redesign the data collection format used to monitor vitamin A capsule distribution.

Christian Reformed World Relief Committee's ODDEKA signed a subcontract with VITAL to conduct training of women's groups in the Pignon Region of Haiti in solar drying. The training coincided with the harvesting of the mangos.

5. Honduras

The project technical coordinator and a health educator, hired by IEF through its subcontract with VITAL, continued their work with the Ministry of Health, performing vitamin A and micronutrient training in the three priority districts of Comayague, San Pedro Sula, and Choluteca, and field testing and finalizing educational tools such as "The ABC's of Micronutrition". In May and June, VITAL and Johns Hopkins University sent Dr. Marcelo Castrillo to design and field test a micronutrient monitoring and surveillance system that will be implemented in the three regions through health centers and schools. This system will also prove useful to test the impact of sugar fortification on child health status, given that a drawing card to keep the sugar industry in fortification, is to show them the impact of fortification on child health.

A new subcontract for ten months was signed with IEF to continue to provide administrative and financial management support. VITAL will ensure that a smooth transition takes place for R&D/N's IMPACT project which will take over the technical support role to Honduras' National Coordinated activity in FY 1994. Dr. José Mora will go to Honduras in July and September to review progress and provide technical assistance.

6. Nicaragua

The Nicaragua Ministry of Health launched its micronutrient survey in June, 1993. PROFAMILIA signed a subcontract with VITAL to administer and perform financial management for the Ministry. Dr. José Mora traveled to Nicaragua in April, 1993 to reassure the Mission that VITAL could still perform the survey despite the delay in initiating activities due to 1993 Buy-in issues. Dr. José Mora and Dr. David Nelson will visit to ensure proper

initiation of the survey in July. INCAP staff will train in dietary assessment, field laboratory techniques, and data analysis in July and August.

Information Program

1. Publications

VITAL News, Volume 4, Issue 1 was published. The focus of the issue was the XV International Vitamin A Consultative Group (IVACG) Meeting in Arusha, Tanzania in March. Cornell professor, Michael Latham, wrote the lead article on the Meeting's implications for the Africa region, with special emphasis on developments in Tanzania and Ghana. The issue also contains articles on breastfeeding and vitamin A by Vicki Newman of Wellstart and high-carotene carrots by Philipp Simon of the USDA's Agricultural Research Service. The mailing list now numbers 1,066, including the names of addresses of all participants at the IVACG Meeting in Arusha.

The "USAID Vitamin A Program, 1965-1993" summary was completed for the Office of Nutrition and distributed to USAID offices and missions.

Vitamin A Facts were updated for both the Africa and Latin America/Caribbean regions, in anticipation of the upcoming regional workshops. Also for use at the Latin America and Caribbean workshop in Recife, Brazil in August, several documents were translated into Spanish, including selected abstracts from the XV IVACG Meeting Proceedings, George Beaton, et al "Effectiveness of Vitamin A Supplementation in the Control of Young Child Morbidity and Mortality in Developing Countries," and Penelope Nestel's "Food Fortification in Developing Countries." Spanish and French translations of "Solar Drying for Vitamin A" were completed during the reporting period.

A revised version of Dr. Jere Behrman's "The Economic Rationale for Investing in Nutrition in Developing Countries" was produced; the final document will be completed in English, French, and Spanish in the next quarter.

During this reporting period, VITAL began synthesizing its experience with gardening activities that were undertaken for the purpose of improving vitamin A intakes. Programs selected for the review include the national Ministry of Agriculture-supported gardening program in the Philippines which is being evaluated by the Food and Nutrition Research Institute under the guidance of Dr. Rodolfo Florentino, the FHA vitamin A grant-supported

program in Guatemala implemented by Project HOPE, the FAO/VITAL-supported program in Niger, and the Nepal CARE program. VITAL has assisted in the design and analyses of household level data collection activities in each of the programs. The case study report is expected to be completed in February, 1994.

In response to many requests for VITAL publications received through the IVACG Meeting in Tanzania, VITAL staff disseminated hundreds of copies of documents and training materials worldwide. Also, the Philippines Ministry of Health requested, via USAID/Manila, 100 copies of "Food Fortification in Developing Countries" for use in a Ministry task force which is investigating food fortification issues.

2. Training Materials

The three program intervention training modules, "Improving the Vitamin A Content of Diets," "Fortification of Foods with Vitamin A," and "Supplement Distribution Programs" were translated into French and Spanish in preparation for the upcoming West Africa and Latin America/Caribbean regional meetings. Considerable revisions were made to the "Supplement Distribution Program" module to incorporate recent changes in supplementation protocols, as recommended by WHO. VITAL staff worked very closely with WHO authorities on the module revisions.

In response to feedback received by Latin America and Caribbean regional personnel, VITAL produced LAC versions of all of the program intervention modules, including the addition of culturally appropriate photos from the region. The modules will be demonstrated at the Latin American and Caribbean regional meeting in Recife, Brazil in August.

REACH has been working under the Measles Initiative program in Kenya to introduce vitamin A supplementation for all hospitalized cases. A workshop was conducted this Spring to adapt the VITAL measles training materials for use in Kenya. The USAID mission and UNICEF (capsule supplier) have been supportive of this activity. In addition to Kenya, PATH helped adapt and disseminate the VITAL measles materials in Indonesia, and requested input on the same for the Philippines.

BEST AVAILABLE

3. Africa Regional Information Collection and Dissemination Projects

Tropical Diseases Research Centre (TDRC), Zambia

TDRC began its radio communication project by airing its first Zambia National Broadcasting Corporation (ZNBC) radio interview with TDRC Senior Scientist Dr. Emmanuel Kafwembe on the topic of vitamin A deficiency in the region. TDRC distributed cassette copies of the interview to each of its regional collaborators for them to use or draw from in their own work. Also, TDRC started airing vitamin A-related childrens stories on ZNBC. Duplicates of these stories will also be distributed to regional collaborators on the Vitamin A Information Dissemination Project. VITAL has been assisting TDRC to locate such stories worldwide.

TDRC disseminated two vitamin A-related articles to all of its regional collaborators and continued to add names to its mailing list, including many agricultural specialists.

Institut du Sahel (INSAH), Mali

The first disbursement of funds was sent to INSAH in May. Several shipments of VITAL and other vitamin A and micronutrient-related documents were sent from VITAL to INSAH for them to assess as potential dissemination items to the regional collaborators of the Francophone Africa Vitamin A Information Dissemination Project. Since many of the documents are in English, INSAH is determining which of them it will first translate into French for dissemination.

Dr. Gaoussou Traore from INSAH attended a 3-week course in Washington on information dissemination and communication issues sponsored by the Clearinghouse on Infant Feeding and Maternal Nutrition. During that time, he visited VITAL and met with staff to discuss status of the Vitamin A Information Dissemination Project.

BEST AVAILABLE

VITAL Annual Work Plan (LAC Region)

| QIF | ECUADOR | PERU | GUATEMALA |
|---------------|--|-------|---|
| Jul.- Sep.'93 | Biochemical analysis of blood samples, data entry, cleaning and analysis | _____ | Analyze and present data collected during the trial of sweet potato weaning food Assist national strategy initiation |
| Oct.- Dec.'93 | Present survey results at a national seminar Plan follow-on VA activities | _____ | Continue assisting national strategy initiation |
| Jan.- Mar.'94 | _____ | _____ | _____ |

| QIR | Bolivia | HAITI | NICARAGUA |
|---------------|---|--|---|
| Jul.-Sep.'93 | Oversee fortification initiative Plan & implement fortification impact evaluation Evaluate supplementation programs Design carrot consumption promotion program. | Marketing strategy developed & coordination between producers of mangos Continue training for PVOs to improve supplementation coverage Final evaluation of solar drying activities. PROVAX ends 9/30 | Training of field staff Fields survey Data cleaning and entry |
| Oct.- Dec.'93 | Midterm evaluation of CARE, SCF, and Esperanza projects. Assist start-up of carrot consumption program | _____ | Analysis Prepare report and present at national seminar |
| Jan.- Mar.'94 | Evaluation of consumption promotion pilots Final review of Bolivia program | _____ | _____ |

VITAL Annual Work Plan (LAC Region)

| QTR | PANAMA | DOMINICAN REPUBLIC | HONDURAS |
|-----------------|------------------------------|--|--|
| Jul. - Sep. '93 | Sugar fortification workshop | FUDECO focus on production of dried foods | Implement National Micronutrient Strategy Provide TA in home gardening, food preservation, and organizing salt producers Continue TA to sugar and salt producers and with food fortification monitoring system |
| Oct. - Dec. '93 | _____ | Evaluation of the solar drying activity; consumption | Continue MOH/IEF program |
| Jan. - Mar. '94 | _____ | _____ | Complete MOH/IEF program & IEF subcontract Evaluate program |

(Africa Region)

| QTR | UGANDA | ZAMBIA | REGIONAL |
|-----------------|---|--|---|
| Jul. - Sep. '93 | TA and financial support for Kamuli pilot projects | Disseminate latest vitamin A information to TDRC Update "Country Profiles" database Extend TDRC agreement for additional quarter | Provide financial and technical support for West African Vitamin A Meeting in Ghana |
| Oct. - Dec. '93 | Implement Kamuli program activities | Disseminate latest vitamin A information to TDRC Possible regional information workshop TDRC evaluation | ----- |
| Jul. - Mar. '94 | Evaluation and transfer/closure of program activities | ----- | ----- |

| QTR | INFORMATION GATHERING & DISSEMINATION |
|-----------------|---|
| Jul. - Sep. '93 | Latin American Regional Meeting in Brazil, Aug. 23-28 Africa Regional Meeting in Ghana, Aug. 9-11 Disseminate VITAL modules Plan and Produce special Publications, e.g., "Vitamin A Bibliography" and case studies |
| Oct. - Dec. '93 | VITAL News, Vol 4, No. 2, focus on Social Marketing Analyze/evaluate mailing list Produce "case studies" |
| Jan. - Mar. '94 | VITAL News, Vol. 4, No. 3 Produce "case studies" Update all modules based on feedback from training experience Evaluate information component |

VITAL Annual Work Plan (Africa Region)

| QTR | CAMEROON | GHANA | KENYA | MALI |
|----------------|---|-------|-------|--|
| Jul.- Sep. '93 | Assist in preparation of final report for VAD survey. Provide assistance with national dissemination workshop Contribute to planning of program strategies | ----- | ----- | Continue information dissemination activities with INSAH |
| Oct.- Dec. '93 | Support & participate in national workshop Nov.5-6 Contribute to planning of program strategies if requested | ----- | ----- | Continue information dissemination activities with INSAH |
| Jan.- Mar. '94 | ----- | ----- | ----- | Continue information dissemination activities with INSAH Evaluation and closure of project with INSAH |

| QTR | NIGER | NIGERIA | TANZANIA |
|----------------|--|--|--|
| Jul.- Sep. '93 | Continue support for FAO gardening project Plan measles case management activities | Survey field work completed, data entry, cleaning and analysis | Assist with solar drying project in Singida region |
| Oct.- Dec. '93 | Continue support for FAO gardening project Implement measles case management activities | Draft report on survey | ----- |
| Jan.- Mar. '94 | Continue support for FAO gardening project and evaluate VITAL contribution | Final report completed TA for National Symposium | ----- |

(Asia Region)

| QTR | NEPAL | PHILIPPINES | SOUTH PACIFIC |
|----------------|---|---|--|
| Jul.- Sep.'93 | Implementation of national strategy. Develop monitoring system for national program Monitoring of consumption of VA-rich foods for CARE project | FNRI Gardens Impact Study Report finalized | Final Report, PNG hospital-based study PNG CIC training by JHU for MOH/JSI survey |
| Oct.- Dec. '93 | Second capsule distribution; Oct - Nov. Implementation of national strategy | _____ | Project implementation - Cook Islands |
| Jan.- Mar.'94 | Implementation of national strategy Monitoring of CARE gardens Evaluate program | _____ | Project implementation - Cook Islands |

| QTR | INDIA | SEARO |
|---------------|---|--|
| Jul.- Sep.'93 | CARE/India prepare report of results of test of vegetable oil fortification | Formulation of recipes INMU, NROC & NIN to review progress & issues while at IUNS meeting in Australia, with participation of Dr. Davidson, Dr. Beecher & Dr. Underwood |
| Oct.- Dec.'93 | _____ | Sample gathering by 3 institutions for lab analysis. |
| Jan.- Mar.'94 | _____ | Lab analysis by three institutions and final report |