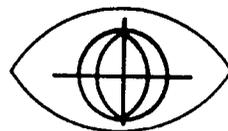


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First  
Annual Report

Vitamin A for Child Survival

Alta Verapaz, Guatemala

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the  
International  
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## I. Changes in Project Design

### A. Statement of Country Project Objectives

i. There have been no changes in the objectives since the Detailed Implementation Plan (DIP) was submitted. However, an assessment of the DIP objectives and nutritional strategy will be scheduled in February/March, 1992, to address questions and issues raised in the DIP review.

### B. Location and Size of the Priority Population

i. The DIP originally stated that 40 communities were targeted for inclusion in the project. During the community organization process 7 communities were excluded for the following reasons: in 2 communities the local military official refused to allow the local population to participate with the project despite their willingness; in 2 other communities the opposition guerilla insurgency movement has warned the project not to be involved in those communities; in a third area, the project decided that the community was too distant and too small in population; and the remaining 2 communities were reorganized politically and absorbed by larger neighboring communities. The estimated population of the current 33 project communities is as follows:

Total population	22,384
infants 0-11 mos	618
children 12-23 mos	864
children 24-59 mos	2,440
children 0-72 mos	4,477
women 15-19 years	1,209
women 35-49 years	1,343
women 15-49 years	4,846
approx. births FY90	865

See Appendix 1, List of Project Communities. The project may consider including additional communities after these 33 communities are fully operational.

### C. Health Problems Addressed by the Project

i. No changes have been made in project focus from the DIP. The project's strategy for improving the nutritional status of infants and children remains three-pronged, consisting of vitamin A supplementation (capsule), nutrition education, and gardening promotion, supported by EPI and ORT promotion. However, in FY 1991/1992, a greater emphasis will be placed on infectious disease control for the following reasons:

- in response to the cholera epidemic and the high percentage of reported cases of diarrhea in preschool children (40.2%), the project will strengthen efforts in the control of diarrheal disease through monitoring; training in home-based management of diarrhea; and distribution and use of ORT packets.

- in response to the low coverage for complete immunization in children 12-23 months of age (26.8%), the project will strengthen efforts in promotion of immunization through monitoring; and by assisting the MOH in community organization for immunization campaigns.

- in response to the high prevalence of Ascariis infection in the preschool population (75-100%), the project is considering the addition of de-worming campaigns.

#### D. Child Survival Interventions

i. There have been no changes in the type or scope of child survival interventions this past year. However, due to the following reasons stated in Section C above, the project will place greater emphasis on infectious disease control.

#### E. Strategies for Identifying and Providing Service to Individuals at High Risk

i. There have been no changes in the project's strategy in the identification of households and children at higher risk. The project continues to work through a population-based registration system. All households with children under six years of age and households with pregnant women are enrolled on a register by community health volunteers (CHV). Each CHV visits households twice a month. Those children with incomplete immunization or reported episodes of diarrhea or respiratory illness are considered at greatest risk. Growth monitoring is not provided by the CHVs but mothers are encouraged to take their children to the health center for this purpose. All children receive nutrition counselling during CHV visits.

## II. Human Resources and Collaboration

### A. Project Staff and Organization

Changes in project staff include the replacement of the Project Coordinator and the Nutrition Leader. The former Project Coordinator, Mr. Bill Scott, completed his contract in July, 1991 and was replaced by Dr. Monzon, a Guatemalan physician. Dr. Monzon has a background as a general practitioner and previous work experience with a PVO in Guatemala. The former Nutrition Leader, Ms. Irma Bailon, moved to another job and was replaced by a social

worker. Mrs. Miriam Medina Bedoya has previous experience in community development and nutrition. Resumes of the new staff are attached as Appendix 2. Minor changes in the organizational chart were made to reflect the current number of Promoters to Community Health Volunteers. The organizational chart is attached as Appendix 3.

#### B. Technical Assistance

During the year the following technical assistance was received:

- Dr. Guillermo Herrera, from the Harvard Institute for International Development (HIID), was hired as a consultant in November, 1990 to complete the final evaluation for the NutriAtol I project and to provide assistance in the development of the new vitamin A and nutrition project.

- Mr. John Barrows, the IEF-Headquarters Child Survival and Vitamin A Coordinator, made several visits to Guatemala to assist in the development of the DIP and for routine management purposes. The IEF-Headquarters Director of Programs and the Administrative Officer, while on management related visits, also consulted with project staff during the year.

- The Center for Sensory Impairment, Aging and Metabolism (CeSSIAM), a research branch of the National Committee for the Blind and Deaf (NCBD), was contracted to complete the baseline survey and analysis of the biological indicators for the project.

- A local organization in the project area, ASECSA, was contracted to assist staff in the organization and training of the project Promoters. During the training, assistance from a Peace Corps Volunteer was utilized.

#### C. Describe Community Activities

The community activities undertaken in the past year included:

- The selection and training of Promoters to work with the project took place over several months. Eight promoters are now working with the project. Selection criteria included: secondary education (equivalent to High School in the USA); the ability to communicate in the indigenous languages (Ketchi/Pokamchi); whether they were currently living in or nearby the project communities; and the successful completion of an initial three week training program. The training for the Promoters has been ongoing and has included classroom orientation to child survival, gardening, health education, and community organization. The promoters were involved in the meetings with Action Groups (community organizations composed of local leaders) and the selection of community health volunteers. The promoters were also involved in organizing and

conducting the baseline survey, and in the training of the health volunteers. This training will also be ongoing.

- The organization of the initial 40 communities has been completed. Initial contacts with each of the 40 communities, through their Action Groups (each Action Group has a Health sub-committee) were made to introduce local leaders to the purpose of the project and for community approval and feedback. Due to several reasons explained in Section I, the project is currently working with 33 of the original communities. Subsequent meetings with the Action Groups were held to discuss general health concerns in the community; to explain the purpose and content of the baseline survey; and to request the identification of women to be trained as Community Health Volunteers (CHVs). All of these meetings were facilitated by the Promoters as part of their training.

- The selection of women to be health volunteers was conducted over several months. Criteria for selection included basic literacy, acceptance by the community, and a commitment of five hours a week to the project. One hundred and fifty-two women have been identified and trained. The initial training consists of a three day small group course in nutrition (including breastfeeding, child feeding, malnutrition), gardening, diarrheal disease (including recognition of diarrhea and dehydration, use of home-based solutions, ORT packets, and cholera), respiratory infections (recognition and referral), and the importance of immunization. This training was conducted locally in each of the four project areas. This served as the first opportunity for the Promoters to establish relationships with the CHVs. See Annex for Topics of CHV Training.

The training plan calls for all future training of CHVs to be conducted in the field by the Promoters. Should CHVs drop out of the program, new CHVs will accompany existing CHVs during their household visits. These new CHVs will later attend the ongoing training of CHVs during small group meetings (3-5 communities each) conducted by Promoters on a quarterly basis, and during the training conducted annually by area.

- The Horticulture Leader has identified several varieties of indigenous fruits and vegetables to be promoted which include, among others, papayas, amaranth, sweet potatoes, and "Quilete." Also identified are many wild, foraged plant species that are considered important to the diet, and a variety of plants that serve important medicinal purposes (teas for treatment of diarrhea). These varieties are all common in the communities but are not cultivated in an organized fashion. The project benefitted from previous IEF projects that investigated the sources of vitamin A plants species, and the intrahousehold food distribution patterns conducted by an anthropologist. The purpose of the gardens is to

demonstrate both improved exotic varieties (carrots, broccoli, acelga) and the use of traditional plant species. Initially seeds have been distributed free of charge. Later seeds will be available to communities at a small charge.

Promoters are currently working at 9 schools. At each school the Promoters work with the school teachers and children. Because schools are often central to the communities, the CHVs and other community members have assisted in the planting of the gardens. Because schools are not in session the entire year, community leaders are encouraged to be involved. The project hopes that a wider involvement will help ensure that these gardening efforts can be maintained throughout the year. Equipment and seeds have been donated by local organizations in Coban for use at schools.

The 11 community gardens and the 15 home gardens have also been established. The community gardens are organized by the Promoters and CHVs. The CHVs organize community members in the donation of land and volunteer labor. The home gardens are situated at the homes of CHVs and local leaders who demonstrate interest. In all of these activities the Ministry of Agriculture field workers have participated fully. These extensionists accompany the Promoters and have expressed willingness to provide additional training and supervision.

- The project has not yet started the household visits by CHVs. Regular visits to households by CHVs are scheduled to begin after all households are enrolled in January, 1992. Also, the project has also not conducted the initial orientations on the role of vitamin A with the Ministries of Health, Agriculture, and Education for reasons not specified by staff.

#### D. Linkages to Other Health and Development Activities

New linkages developed during the year include:

- The Quetzal Project is a local environmental project in Coban supported by in-country donations. The Quetzal Project wants to integrate nutrition activities into their project. They have requested NCBD-IEF to provide nutrition training for their project staff and environmental volunteers.

- The Seeds for the Hungry Project is a Swiss sponsored horticulture organization working in Alta Verapaz. The project has supplied NCBD-IEF with seeds for use in the gardening activities.

- The Department of Agriculture and School Nutrition (DANE) is an organization supported by the Swiss government. The NCBD-IEF project has received tools and seeds (100 hoes, 30 shovels, 30

picks, and 20 wheelbarrows) for use at the schools gardens.

- The NCBD-IEF-CeSSIAM have met with a group of USA PVOs (Care, Project Hope), the Sugar Company of Guatemala, and representatives of INCAP to discuss issues of vitamin A in Guatemala.

- The Task Force Sight and Life, a project of Hoffman LaRoche, Ltd., has entered a collaborative agreement with the IEF for the support of the NCBD-IEF project. Funds will be used to support additional training and possible applied research activities.

- The Office of Nutrition, USAID, has entered into a collaborative agreement with the IEF for the support of a vitamin A and nutrition training and resource unit to be housed at the Hospital Ojos y Oidos, "Dr. Robles V," in Guatemala City. The training and resource unit will support IEF training and nutrition education activities in Guatemala, Honduras, and Belize.

- The Helen Keller VITAP project completed a nutritional survey in an area adjacent to the project with assistance from NCBD-CeSSIAM. This survey (one of several such exercises) was part of an on-going project to test the validity and reliability a food frequency questionnaire.

Additional linkages to be developed in FY 1991/1992 include the contact with the numerous PVO and church organizations working in the area. The formation of a PVO coordinating committee will be explored to discuss health, nutrition, horticulture, and education activities. The NCBD-IEF would also like to provide a series of short orientations to PVOs and church organizations in vitamin A nutrition and gardening during the following year.

### III. Progress in Health Information Data Collection

#### A. Baseline Survey

i. In order to obtain maximum participation of the community in the baseline survey and subsequent project activities, it was decided to conduct the baseline survey in two stages. The first stage was completed from 13-24 May, 1991 and included data on socioeconomic indicators, agriculture practices, dietary practices, health status including anthropometries, and coverage of health services (immunization, vitamin A).

The second part of the baseline survey was completed from 1-12 July, 1991 and included drawing of blood samples for serum retinol and hematocrit analysis. In addition, a sub-sample of children were examined for common skin infections and for parasites (*Ascaris lumbricoides*). This additional data will be analyzed by CeSSIAM as

co-factors related to serum retinol levels and vitamin A deficiency.

The rationale for dividing the baseline survey into two stages was based on the fact that blood drawing is an invasive procedure. Therefore, the project wanted to ensure that the communities were adequately informed prior to this stage of the survey.

The survey sampled four communities in the project area. The minimum sample size for the baseline survey was calculated to be 439 children. The actual number of children sampled were 529. Sub-samples for the dermatological and parasitological examinations were determined.

The average time taken to complete an interview in stage one of the baseline survey was approximately 20-30 minutes depending on the interviewees present. During part two of the baseline survey, a team of CeSSIAM personnel established "centers" which were visited by mothers and their children for the drawing of blood samples and examinations. The project Promoters were involved in the organization and the interviewing process as part of their training.

The cost of the survey including staff salaries, transportation to and from the project area, photocopying, supplies (plastic vials for blood storage), was estimated to be less than \$650.00 This excludes the additional costs (staff time) for the laboratory time required for the analysis of serum retinol.

ii. The baseline survey was designed and organized by the Project Analyst (part-time), Dr. Ivan Mendoza, with input from project staff at CeSSIAM and IEF Headquarters.

Additional technical assistance for the second stage of the survey was provided by CeSSIAM staff. All blood drawing was performed by laboratory technicians from CeSSIAM under direction of Dr. Mendoza. The laboratory analysis of the serum retinol is scheduled to be conducted at the CeSSIAM laboratory in Guatemala City using High Pressure Liquid Chromatography (HPLC). These samples have not yet been analyzed due to the scheduling of a reference laboratory in the USA.

The problems encountered with technical assistance provided by CeSSIAM were primarily the difficulty in coordination of a schedule to complete the baseline survey. The additional delay in the analysis of serum retinol samples, now scheduled for November, has been due to difficulties coordinating the CeSSIAM laboratory with the required reference laboratory based in Boston, Massachusetts.

iii. The majority of the population are characterized as indigenous and speak the local Ketchi or Poketchi dialect (77.2%);

few have gone to school and literacy rates for men and women (45.4% and 13.7% respectively) are low. Many households, however, (56.9%) have a radio. Of the households that participate in a formal organization, the majority belong to either a religious organization (37.5%) or to the civil defence (26%). Few belong to a development, health, or agriculture organization.

Although primarily farming communities, there is a reliance on the cash economy as reflected in the number of people employed. Women are often employed as maids (42.2%); and men are usually farmers (39.3%), or employed as day laborers (13%). Few persons are merchants (7.5%) or craftspersons (6%). However, it was interesting to note that of the craftspersons, approximately half were men and half were women.

The average household has a landholding of .60 hectares and farm a variety of crops for both consumption and sale. The majority of households (70.9%) also have some form of vegetable garden which are taken care of by women (48.6%) or a number of other family members (36.4%). The results of the food frequency questionnaire were not summarized by the time of this report.

Although the majority of respondents reported that they consult a health technician (68.8%) at neighboring health posts where immunization services are available, immunization coverage is low. The majority of mothers reported that 90% of their children 12-23 months of age had received at least one or more immunizations. However, of these children, only 64.3% had an immunization card and only 26.8% were found completely immunized. Either services are not reaching the population effectively or mothers are not motivated to participate. There is a similar situation in regards to receiving vitamin A capsules. Although, 31.7% reported that their children had received a vitamin A capsule, only 16.9% had documentation of receiving a capsule.

As expected, reports of diarrhea (40.2%) and respiratory illness (42.9%) in the past two weeks were high. Other illness reported were whooping cough (5.4%), measles (1.2%), skin infections (primarily impetigo) (27.2%), and eye disease (7.7%). The prevalence and extent of skin infections are felt to be co-factors related to levels of vitamin A deficiency. Later analysis in Guatemala City will determine to what extent these common skin infections are related to levels of serum retinol.

Anthropometric data (weight and height) was collected during the baseline survey, but has not been analyzed by the time of the report.

The results of the serum retinol survey are not yet available. Of the children tested for hematocrit levels, a high percentage (75%) were found to be low, and a further 21.1% were considered

moderately deficient. These low anemia levels could be due to the high prevalence of infection with *Ascaris lumbricoides*. In a worm count performed on a sub-sample of children, 75-100% were found infected. Many of these children had worm counts of 100 or more.

The results of the survey have not yet been fully communicated back to project staff and to the communities. Dr. Mendoza, presently at Iowa State University on a three month training course, has not completed the final report of the baseline survey. The analysis of serum retinol is currently scheduled for analysis in November. A final report on all findings is expected by December. Project staff will conduct meetings with Ministry officials to discuss the baseline survey results. The project Promoters will hold a series of meetings for the CHVs and Action Groups to communicate some of the baseline survey findings.

The results for serum retinol and dietary history will guide the project in its determination on what role megadose vitamin A capsules will play as a strategy in combating vitamin A deficiency. The established high prevalence of infection with *Ascaris lumbricoides*, has influenced staff to consider a mass treatment with an anti-helminthic drug during a mini-campaign during 1992. The nutrition and gardening data will help staff to further define the nutrition and gardening action messages. A copy of the baseline survey report and the questionnaire is attached as Appendix 4.

#### B. Routine Data Collection

i. The system at the community level for collection of data on the family is based on a series of "registers" of households with children under six years of age and pregnant women. Each household is enrolled by the CHV and each CHV is responsible for no more than 20 households. The information tracked includes diarrhea, respiratory illness, measles, and coverage with immunization and vitamin A capsules. Children are considered at risk if they are not completely immunized; or if they have had a reported episode of measles, diarrhea, or respiratory illness. The reports of illness are a cue to the CHV and Promoter to provide health messages appropriate to the age of the child and the circumstances of the household. See Annex, Nutrition Messages. Additional information includes the households participation in education and gardening activities.

The enrollment has not been fully completed by the time of the report. Therefore problems in the functioning of the MIS are not yet clear. The entire population is expected to be enrolled by mid-January.

The system at the clinic level to maintain records on the family is based primarily on the child vaccination card, the growth

monitoring card, (available only at static clinics), and food distribution records. The health centers attempt to maintain duplicate records of children's vaccination cards at the health center. These records are only updated when mothers attend the static and the mobile vaccination clinics. Although these records do indicate those children who have incomplete vaccination, the MOH lacks sufficient resources to actively follow-up on individual children and mobile clinics are operated sporadically.

The project will assist the clinics by ensuring that all children in the project areas receive a vaccination card and will assist in the organization of communities for immunization services.

ii. The system for reporting information on the activities of CHVs is based on the household registers. Each CHV enrolls 20 households and visits each household weekly. During each visit the CHV discusses with the mother whether her children have been ill in the past 2-4 weeks and provides appropriate "counseling." The Promoters visit each CHV several times a month to review the registers and discuss her activities. This information is summarized by the Promoter on a supervisory checklist and submitted to the Leaders on a monthly basis. See Appendix 5, for a copy of the household registers and supervisory checklist.

iii. The project's MIS is not fully operational. Therefore, there is no experience to date in monitoring indicators using the MIS. The project has had some difficulties establishing the biochemical indicators. During the second part of the baseline survey, considerable care was taken to inform the communities of the purpose of the survey and particularly of the blood drawing. As it turned out, the communities were very willing and participated fully in all of the survey activities. Although this part of the survey was conducted without any problems, the analysis of the plasma for serum retinol concentrations has been delayed due to scheduling problems with the CeSSIAM Laboratory in Guatemala City. The project recognizes that other information would be useful for the project and is considering the use of focus groups for this purpose.

The part-time Project Analyst, Dr. Ivan Mendoza, makes monthly visits to the project area to meet with staff. Future visits will include review of the MIS data, and training in basic principals in community epidemiology for the Promoters. Expert technical assistance will be consulted to make a review of the MIS during 1992. The Project Coordinator, Project Leaders, and the secretary all received additional training in micro-computer operations at a local computer training school. Similar training will be offered to some of the project Promoters during 1992.

iv. The sustainability indicators that are presently monitored include:

- # CHVs trained and active;
- # visits to HHs by the CHV;
- # household participating;
- # Action Group meetings;
- # meetings with women;
- # gardens active;

v. The household register system enrolls children under six years of age and pregnant women. CHVs monitor on a monthly basis reports of diarrhea, respiratory illness, measles, and other morbidity. The CHVs have not been instructed to detect cases of acute paralysis in children below 15 years of age.

vi. The collection of data begins with the CHVs household registers. The Promoters, on a monthly basis, extract data from the household registers onto a supervisory checklist. This information is then summarized by CHV, Area, and Promoter, by the Project Leaders. The summary reports are reviewed by the Project Coordinator for completeness and consistency and discussed with the Project Leaders. The system will be computerized at a later date. The project coordinator will be assisted by the project analyst.

vii. The same referral system (CHV, Promoter, Project Leaders, Project Coordinator) will be used to monitor the quality of data of the MIS on a monthly basis. The consistency and completeness of data are the primary quality checks to spot weaknesses in supervision.

viii. The MIS data will be reviewed during the end-of-month meeting with all Promoters. The report summaries will be used to develop monthly schedules for the supervision of CHVs. Each Promoter visits all CHVs either individually or in small groups to review the previous months data and to discuss the communities participation.

ix. The approximate proportion of expenditures spent on the MIS is approximately 8% (country budget). The primary expenses are staff time in design and training in data collection and operation of the MIS. Although the MIS is not dependent on computer, a program will be designed on EPIINFO 5. An existing office computer will be used for this purpose.

#### IV. Improvements in Program Quality and Technical Effectiveness

##### A. Lessons Learned

Lessons learned during the past year include:

- Although not a new lesson, the need to be sensitive to the cultural traditions, language, and politics of the communities is

imperative. Considerable time was taken to identify Promoters from project areas who speak the indigenous languages. The meetings with community Action Groups and government officials are also imperative in order to understand the political circumstances in the communities. Several of the project communities were found to be too politically sensitive necessitating that they be dropped from the project.

- Early start-up and planning is important in a new project. The start-up was delayed due to the late evaluation of the previous project (Nutriatol I). More productive use of the long holiday periods in Guatemala (mid-December to mid-January) by staff should be found.

- The technical assistance provided from CeSSIAM and other in-country sources was useful. However, the project became tied to the schedule of CeSSIAM especially in regards to the scheduling of the baseline survey, the analysis of blood samples for serum retinol, and in report writing. In the future the project will more carefully define contract arrangements with CeSSIAM to ensure that work is completed on time.

#### B. Steps Taken to Strengthen Technical Quality of Health Programming

The steps taken to strengthen the technical quality of health programming include:

- The Project Coordinator, Mr. Bill Scott, attended the XIV International Vitamin A Consultative Group (IVACG) meeting in Guayaquil, Ecuador, from June 18-21, 1991. Mr. Scott gave a presentation on the use of indigenous vegetables in the Guatemalan diet.

- The Project Analyst, Dr. Ivan Mendoza, attended the Second Latin American and Caribbean, PVO Child Survival Workshop in Honduras, from August 18-24, 1991.

- Field staff including the Project Coordinator, Horticulture and Nutrition Leaders, and the secretary completed a basic course on micro-computer operations.

- Periodic visits are made to the project site by senior members of the NCB, including the Medical Director and the Chief Social Worker. The purpose of these trips are to review project activities with staff. In addition the Project Analyst, Dr. Ivan Mendoza, makes a monthly visit to the project site to work with staff on monitoring and evaluation activities.

- Project staff visited other PVO groups in Guatemala (Project

Hope, CARE, Plan International) to share child survival experiences. In addition Dr. Ivan Mendoza participated in two meetings of a steering committee on vitamin A. The meetings are attended by other PVO representatives, INCAP, and the sugar manufactures for the purpose of discussing issues of vitamin A in Guatemala.

- The IEF-Headquarters Child Survival and Vitamin A Coordinator, Mr. John Barrows, made two visits to Guatemala to work with staff. Technical bulletins, and other literature are sent to Guatemala from Bethesda periodically.

## V. Work Schedule

### A. Problems and Constraints to Implementation

The major problems and constraints to implementation encountered include:

- The start-up of the project was delayed due to the late evaluation of the previous project Nutriatol I. A number of issues concerning the appropriateness of Nutriatol (a vitamin A fortified food) as a vitamin A intervention and the role it might play in a new project were at the time outstanding. These issues required clarification prior to the design of the new project.

- In the process of organizing communities, political problems were encountered in several of the communities. As mentioned in Section I above, several communities were caught in the conflicts between the military and the guerilla movement. Due to this political instability, the project cannot take any action that has the potential to jeopardize staff or community members. However, project staff will continue to be in contact with appropriate government officials to explain the benefits the project can provide these communities.

- The Project Coordinator, Mr. Bill Scott, completed his initial contract and decided to return to the USA to join his wife, now a doctoral student at the University of California at Davis. The recruitment of a qualified Guatemalan willing to live in the project area of Coban, proved to be difficult. The candidate selected backed out of his agreement the week prior to the departure of Mr. Scott and the recruitment process continued. A replacement was found only recently. In addition to the Project Coordinator, the Nutrition Leader left the project for other employment. There were, however, no difficulties in recruiting her replacement.

- The local Ministry of Health is limited in its ability to provide services (immunization, ORT) due to the lack of funding and

manpower resources. The project will assist the MOH by monitoring immunization, organizing communities to receive services during special mini-campaigns, and by providing transportation, where necessary.

- The baseline survey was delayed due to problems noted in Section III. Additional time was required to communicate the purpose of the second part of the survey (blood drawing) resulting in scheduling problems with CeSSIAM. The delay in the analyses of the blood samples for serum retinol has also been due to scheduling the use of the CeSSIAM laboratory HPLC with another IEF-Guatemala vitamin A project.

#### B. Workplan for Critical Activities 1991/1992

The workplan outlining critical activities to be completed for fiscal year 1991/1992 is attached as Appendix 6.

### VI. Changes in Project Expenditure

#### A. Pipeline Analysis

The pipeline analysis is attached as Appendix 7.

#### B. Budget Revisions

There are no major budget revisions anticipated.

### VII. Sustainability

#### A. Recurrent Costs

i. The projected costs that the project expects will need to be maintained after A.I.D. Child Survival funding ends are primarily staff salaries, training costs, vehicle operation, office operations, and basic supplies estimated at approximately \$ 5,000 monthly.

ii. The project component that the community will not be able to continue after A.I.D. Child Survival funding ends are those costs associated with the CHV's incentives. The project provides training, supervision, a certificate, t-shirt, and a handbag to the CHVs. Many of the gardening activities, however, are expected to be maintained after the project ends.

iii. The project component that the government may not be able to absorb by the end of the child survival funding will be the additional support required to closely supervise CHVs, and the additional transportation and manpower required to conduct mini-

campaigns. However, the project will attempt to work with the MOH within their existing resource constraints. This will be done primarily by coordinating mini-campaigns with the MOH's existing clinic schedules. The ability of the MOA and the MOE to maintain gardening and nutrition education activities is expected to be less problematic. The MOA has more manpower resources than the MOH. The MOE has a network of primary schools in most communities and many of the teachers have worked with the IEF in a previous nutrition project.

## B. Strategies for Reducing Sustainability Concerns

i. The project's approach to developing a sustainable health program is to create awareness among Ministries, other PVOs, and the communities on the role of vitamin A nutrition. This is achieved primarily through training, monitoring, and evaluation.

On a government level, the project has identified and works with staff representing the Ministries of Health, Agriculture, and Education, as well as other development agencies in the area. Training for these Ministry staff on vitamin A nutrition and horticulture, provides key staff with a better understanding of vitamin A strategies (short-term supplementation, medium-term fortification, and long-term production and nutritional improvements), and the role that each Ministry can play. It is hoped that each Ministry will incorporate vitamin A into their action plans.

Specifically, it is hoped that vitamin A will be incorporated into the curricula of the MOH, MOA, MOE. The project will also assist the MOH to improve their supply of vitamin A capsules, and assist the MOH and MOA with monitoring and evaluation exercises. This will be accomplished by monitoring project achievements through MIS data; through focus group activities, and other more formal surveys. The project service delivery strategy, utilizing CHVs as the primary link to the community, serves as a model for the delivery of a variety of child survival interventions. The MOH can evaluate whether they are able to improve their coverage and effectiveness of services by adopting a similar system. Through collaboration with the MOA and MOE on gardening, management and supervision duties are shared. The gardening component also emphasizes the use of indigenous plant sources of vitamin A that communities are familiar with. A variety of seeds are made available at cost. By working closely with the communities in the consumption and production aspects of vitamin A, it is hoped that demand for services will increase.

On the community level, the areas chosen to work with the project were those with a functioning Action Group and those who expressed interest in the project activities. The selection of the CHVs by the community helps to ensure that the communities' interests are

reflected, and that the CHV will be supported in her work. Regular contact with these communities through the Action Groups, CHVs, women's groups, farmer's groups, and other committees are made on a monthly basis. During these meetings the communities participation is discussed (primarily through coverage of services) and additional community concerns are taken into account. In addition IEF is working with other PVO groups in the area. However, many of the church related organizations active in Coban have not yet been contacted.

Through the establishment of a field office in Coban and the employment of a full-time staff, the NCBD is gaining additional experience and capacity to design and manage community-based programs. It is anticipated that the NCBD will assume increasing responsibility for operation and costs of the project. The NCBD's rural eye clinic in San Pedro Carcha, with assistance from the Robles Hospital Residency Program in Guatemala City, has begun to expand its primary eye care outreach activities in the project area following a similar delivery strategy. The NCBD is also maintaining a vehicle in the area for this purpose. Although there are no cost recovery plans anticipated for the child survival project, the NCBD's experience with cost recovery (fee for service) at their clinics may offer suggestions as to how the child survival project can approach this issue.

ii. There has been no training undertaken this past year to increase staff's understanding of organizational costs and improve skills in cost-recovery and price setting. However, the IEF-Headquarters Administrator, Mr. Ed Henderson, made a visit to Guatemala City to review and discuss accounting procedures with staff. A similar visit will be planned in 1992.

### C. Cost Recovery Activities

There were no cost recovery activities completed during the year.



## List of Appendices

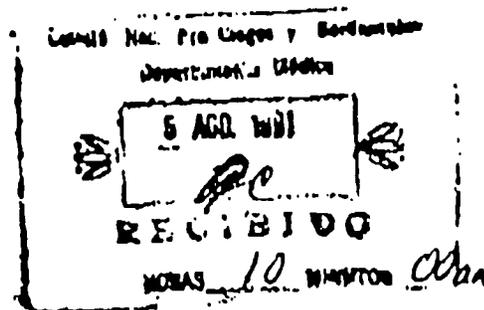
- Appendix 1: List of Project Communities
- Appendix 2: Resumes of the New staff Members
- Appendix 3: Organizational Chart
- Appendix 4: Baseline survey report and Questionnaire
- Appendix 5: Household Register and Supervisory Checklist
- Appendix 6: Workplan
- Appendix 7: Pipeline Analysis

LIST OF COMMUNITIES

AREA 1	NO. OF FAMILIES	POPULATION	NO. UNDER SIX
Lama	62	350	
Chitepey	210	1,200	
Chamil	877	5,000	
Candelaria	210	1,200	
San Marcos	160	908	
Chirrecop	43	240	
<u>Cacchibal</u>	<u>210</u>	<u>1,200</u>	
SUBTOTAL	1,772	10,098	2,020
AREA 2	NO. OF FAMILIES	POPULATION	NO. UNDER SIX
Tzunutz	60	342	
Tipulcan	97	550	
Chizon	44	250	
Esperanza	44	250	
Sehubub	70	400	
Secochoy	88	500	
Chinasis	63	360	
Caquipec	123	700	
Chirrukquin	63	360	
Semesche	94	540	
<u>Sequila</u>	<u>63</u>	<u>360</u>	
SUBTOTAL	809	4,612	922
AREA 3	NO. OF FAMILIES	POPULATION	NO. UNDER SIX
Chiyo	190	1,080	
Chitana	105	600	
Caquiton	*	*	
Pocola	105	600	
Chiquixji	131	750	
Rubeltem	48	270	
Quixal	131	750	
<u>Sesimaj</u>	<u>*</u>	<u>*</u>	
SUBTOTAL	710	4,050	810
AREA 4	NO. OF FAMILIES	POPULATION	NO. UNDER SIX
Guaxcuz	34	197	
El Rancho	230	1,336	
Chivorrón	115	657	
Mexabaj	69	396	
Pampache	49	280	
Pamuc Bella Vista	43	250	
<u>La Providencia</u>	<u>89</u>	<u>508</u>	
SUBTOTAL	629	3,624	725
<b>TOTAL</b>	<b>3,920</b>	<b>22,384</b>	<b>4,477</b>

## CURRICULUM VITAE

NAME: BYRON MONZON LOPEZ  
 AGE: 28 YEARS  
 DATE OF BIRTH:  
 SEX: MALE  
 STATUS: SINGLE  
 ADDRESS:



## TELEPHONE:

EDUCATION

University of San Carlos, Guatemala  
 School of Medicine, 1982-1988  
 Graduated October 28, 1988  
 (Student rated "A", never failed a course through the entire career)  
 Graduation Thesis: "Assesment of secretory immunoglobulin "A" in  
 Rheumathoid Arthritis patients, San Juan de Dios  
 Hospital, Guatemala".  
 Active collegiate of medicine since november 1988.  
 Registration No. 7124

High School Diploma  
 Cathedral School "San Jose de los Infantes", 1979-1981

Junior High School  
 Instituto Experimental Dr. Carlos Martínez Duran, 1976-1978

Elementary School  
 "2 5th of June" School, zone 12  
 Felix Hernández Andrino Rural School, zone 12  
 1970-1975

LANGUAGES

English, good comand of oral and written knowledge  
 University of San Carlos School of Languages

German, completed courses of 3-years duration  
 University of San Carlos school of Languages

## SPECIAL AWARDS

- University: Student rated "A" ( Never failed a course through the entire career)
- High School: Medal of third place of the graduates class of 1981
- Elementary School: Best student of the year(during 4 years).

## LABORAL EXPERIENCE

San Juan de Dios General Hospital  
Physician(student training) 1986-1987

Health Post, Ministry of Public Health  
Physician  
Santa Elena Barillas, Amatitlan, Guatemala

Assistant research in a baseline survey of a rural community in the Southern Coast of Guatemala. An Evaluation of the economical, social and health status. European Economic Community/Goverment of Guatemala. Bocacosta Project. Phone: 325510-11, Fax: 32048, Telex: 5984 INTRAGU. October -November 1989.

Medical attention and translation  
Invited to medical journey organized by the Baptist Church of Guatemala, with a group of doctors, dentists, and nurses from Alabama, USA November 1989.

Assistant research in the design of a Breastfeeding promotion program. First semester 1990, at INCAP(Central America and Panama Nutritional Institute). Regional Office, Panamerican Health Organization/World Health Organization. Carretera Roosevelt, Zona 11, Phone: 723762/67, 71991, Fax: 715658, Telex: 596 INCAP

Doctor for the Parish Clinic Santo Cura de ARS, 35 avenida y 14 calle Esquina zone 5, Guatemala since October 1988.

Director of Medical Services, Children International, Guatemala Rural. Guatemala 1990- 1991.

## ANOTHER ACTIVITIES

### % CONFERENCES

- Normal Growth and Development of Children  
Scout Group No. 59, Zona 12/1986 and Centroamerican Republic Elementary School zona 1/1986
- First Aid course  
Scout Group No. 59/ 1986

Personal Hygiene and Sexual Education Course  
Rural School of Sta. Elena Barillas  
Amatitlan, 1987

Universal Rights of Children (UNICEF)  
Miguel Garcia Granados Elementary School, Tecpan  
Guatemala, 1990

TRANSLATIONS:

Simultaneous translation  
Conference about the field experience of Surgeons from Baptist  
Church in Africa, 1987

REFERENCES

LABORAL:

Dr. Francisco Chew  
Clinical Nutrition Office, INCAP  
Phone: 723762/67

Carlos Borge Varvajal, Anthropologist  
Apartado 110-2050 San Pedro  
San Jose de Costa Rica. Phone 534352

PERSONAL:

Dr. Hilda Castro. INCAP Phone; 723762/67, Guatemala

Lic. Lazaro Zepeda Muñoz  
Sales Manager, VIFRIO BANDAG, Guatemala. Phone 761212/16

CURRICULUM VITAE

GENERAL INFORMATION:

FULL NAME: MIRIAM YANETH MEDINA DE BEDOYA  
AGE: 27  
BIRTH DATE:  
ID. CARD.

PROFESSION: SOCIAL WORKER

MARITAL STATUS: MARRIED

HOME ADDRESS:

STUDIES:  
PRIMARY 1971-76  
BASICS: 1977-79  
HIGH SCHOOL: 1980-82  
UNIVERSITY: 1983-86 (SOCIAL WORKER)  
UNIVERSITY: 1988-89 (PENDING THESIS TO :  
GET A MASTER DEGREE IN SOCIAL WORK.

WORKING EXPERIENCE:

INTRODUCTION TO SOCIAL WORKER  
SOCIAL SECURITY HOSPITAL  
LO DE COY, MIXCO, COMMUNITY  
WORKING WITH GROUPS  
E.P.S. REALIZED IN PALIN (1986)  
INVESTIGATION IN TRAINING NEEDS AND  
TECHNICAL ASSISTANCE - 1988  
SOCIAL WWORKER  
HOSPITAL RODOLFO ROBLES 1989-91

OTHERS:

- 1984 - SEMINAR IN BREASTFEEDING
- 1985 - FIRST AIDS TRAINING
- THIRD MEETING OF SOCIAL WORKERS IN TEGUCIGALPA HOND.
- ORGANIZATION OF YOUTH GROUPS IN LO DE COY VILLAGE .
- FOURTH MEETING OF SOCIAL WORKERS IN GUATEMALA CITY.
- DIPLOMA FOR SUPERVISING A SOCIAL WORK STUDENT
- FROM UNIVERSITY OF SAN CARLOS IN GUATEMALA CITY.
- SOCIAL WORKER OF THE "HOSPITAL DE OJOS Y OIDOS".

## CURRICULUM VITAE

### DATOS PERSONALES :

NOMBRE: MARYLENA ARITA AMADOR

ESTADO CIVIL: SOLTERA

NACIONALIDAD: HONDUREÑA

DIRECCION: COLONIA FLORENCIA SUR, AVENIDA LOS PINOS, 3 entrada 2CLL, #  
4021, Tegucigalpa, Honduras.

### ESTUDIOS REALIZADOS :

EDUCACION PRIMARIA: INSTITUTO INMACULADA CONCEPCION DE TEGUCIGALPA

EDUCACION SECUNDARIA: INSTITUTO TEGUCIGALPA

BACHILLERATO EN CIENCIAS Y LETRAS: INSTITUTO TEGUCIGALPA

TRES AÑOS CURSADOS DE LICENCIATURA EN LEGUAS EXTRANJERAS EN LA U-  
NIVERSIDAD NACIONAL AUTONOMA DE HONDURAS (FRANCES, INGLES).

DOCTORA EN MEDICINA Y CIRUGIA GENERAL: UNIVERSIDAD NACIONAL AUTO-  
MA DE HONDURAS.

CURSOS LIBRE PARA PIANO : ESCUELA NACIONAL DE MUSICA DE TEGUCIGALPA  
y con maestra particular.

CURSOS LIBRES DE COMPUTACION: BASIC Y WORD PERFECT.

### EXPERIENCIA PROFESIONAL

MEDICO DE LA CONSULTA EXTERNA DE NIÑOS Y ADULTOS EN EL CENTRO DE  
SALUD ALONSO SUAZO DE TEGUCIGALPA.

MEDICO A DONOREN DURANTE UN AÑO EN EL SERVICIO DE OTORRINOLARINGO-  
LOGIA DEL HOSPITAL ESCUELA DE TEGUCIGALPA. ( HACIENDO PRACTICA DO-  
CENTE Y QUIRURGICA).

ADMINISTRADORA DE LA LIBRERIA DE LA RENOVACION CARISMATICA CATOLICA DE TE-  
GUCIGALPA.

CONFERENCIAS IMPARTIDAS:

EL SIDA EN HONDURAS ( INVITACION HECHA POR RADIO CATOLICA DE HONDURAS).

CURSO DE PRIMEROS AUXILIOS (I MES DE DURACION) PARA ILAMA, TEGUCIGALPA.

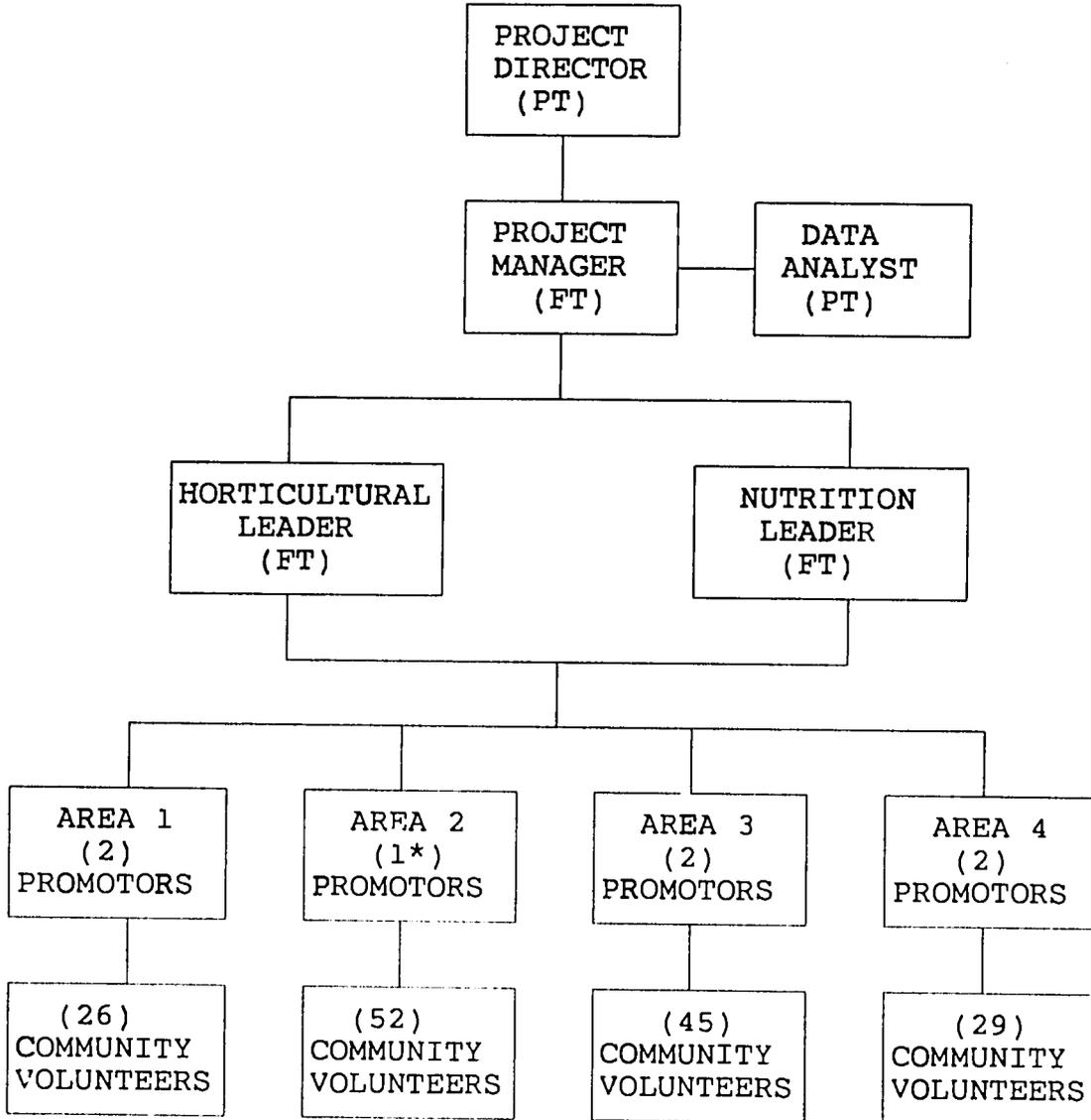
OTROS ACTIVIDADES REALIZADAS:

PRESIDENTA POR TRES AÑOS CONSECUTIVOS EN LA LICENCIATURA DE LENGUAS

EXTRANJERAS DE LA UNAH.

MIEMBRO DEL CLUB ROTARACT DE TEGUCIGALPA.

IEF/NCBD GUATEMALA  
CHILD SURVIVAL/VITAMIN A PROJECT



\* 1 MORE PROMOTOR WILL SOON BE HIRED

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National Committee for the Blind and Deaf (NCBD)

&

The International Eye Foundation (IEF)

Vitamin A and Child Survival Project

Department of Alta Verapaz, Guatemala

Interim Report: Baseline Survey

Prepared By:

Dr. Ivan Mendoza  
Lic. Maria Eugenia Romero  
Guatemala

July, 1991



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- \* AGRICULTURAL RESOURCES
- \* HEALTH STATUS
- \* NUTRITIONAL STATUS (ANTHROPOMETRICS)
- \* VITAMIN A INTAKE

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- \* SAMPLES FOR HEMATOCRIT DETERMINATION
- \* DERMATOLOGICAL EXAMINATION
- \* INTESTINAL PARASITISM

## INTRODUCTION

Planning for the Project Baseline was performed at the end of 1990 and the beginning of 1991. A series of meetings were held in order to define the indicators for vitamin A nutrition status, to set dates to perform the sampling and to determine the supplies needed for the development of the baseline. This meeting had the participation of IEF staff -central headquarters- as well as IEF local staff and professionals from the National Committee for the Blind and Deaf (NCBD)

It was agreed that four nutritional status indicators would be used: a) plasma retinol levels, b) vitamin A dietary intake; c) hematocrit determination; and d) anthropometric measurements. It was considered that it would be important to have information about communities socio-economical status, as well as the agricultural resources that they might have for vegetable cultivation.

It was decided that the baseline would be performed in two separate phases. In order to obtain greater community participation in the baseline as well as in the upcoming activities, it was decided not to perform invasive procedures (drawing blood) in this step. The first step (phase 1) was carried out from May 13 to May 24 and included surveillance on four aspects: socioeconomical issues, agricultural issues, preschool-age children vitamin A dietary intake and general health status (including anthropometric measurements: weight and height).

In phase 2, from July 1 to July 12, a "Hematological Surveillance" was carried out which consisted of blood drawing for retinol levels and hematocrit determinations. Although not contemplated at the beginning, a sub-sample of individuals underwent a physical examination for sarcoptiosis and other subsequent dermal infections. Antiparasitic treatment (pyrantel pamoate) was also given and further fecal examinations were performed looking for excreted ascaris lumbricoides worms.

This report has a brief description of the activities carried out in the two phases of the baseline and some preliminary results obtained to date. Plasma retinol levels will be determined in the next months and their results will be reported from that opportunity.

### BASELINE OBJECTIVES:

The overall objective of this phase of the project is to gather population information that may lead the project:

a) To define the socio-economical and demographic characteristics of the families and specific communities where the project activities are going to be carried out. This is because we only have global information from the department (province) and the capital municipalities.

- b) To identify the agricultural resources, type of crops, and center for technical advice on family level horticulture.
- c) To evaluate the health status of under-6-years-age children from the selected areas, by means of:
  - c.1. Immunization status
  - c.2. Use of vitamin A high-doses.
  - c.3. Prevalence of gastro-intestinal infections.
  - c.4. Prevalence of respiratory infections.
  - c.5. Prevalence of dermatological and ocular infections.
- d) To evaluate the protein-energy nutritional status by means of anthropometric measurements.
- e) To determine the vitamin A dietary intake using dietary recall surveillance in children aged one to six years.
- f) To determine the prevalence of vitamin A deficiency in children, using plasma retinol levels as the indicator.
- g) To determine the prevalence of anemia in children under 7 years old, by hematocrit determination.

SAMPLING CHARACTERISTICS:

A) SAMPLE SIZE:

Calculation of sample size was performed considering prevalence of vitamin A deficient children as the outcome variable. Prevalence of deficiency in the Alta Verapaz area was considered as the reference for these calculations. The figures used came from two prior studies conducted by CeSSIAM in pre-school children during 1987-1988. In those studies, the prevalence of children with plasma retinol levels <30 µg/dl was 60% in 1987 and about 40% in 1988. The minimum figure was considered for the calculations (40%). A confidence value of 95% ( $\alpha = 0.05$ ) and an error limit of 0.004 was used. Population size was estimated according to data reported by Municipalities and local official and non-governmental institutions. It was estimated that 20% of the total population corresponded to children less than six years of age. Having this information in mind, the sample size was calculated for estimation of a single parameter, -in this case: prevalence of vitamin A deficient children- by using the following formula:

$$\text{sample size} = n / (1 + (n / \text{population}))$$

$$\text{in which } n = z * z (p(1-p) / D * D)$$

where,

sample size = random sample

population = population size from which the sample should be drawn.

p = factor proportion in the population

D = maximum difference between population mean and sample mean (error limit)

z = area under the normal distribution curve corresponding to the established significance level

The minimum number obtained with this procedure was 439 children in the four communities which should be randomly selected.

B) SAMPLE SELECTION:

In order to select the sample communities rough sketches were obtained or made up. They were then divided into sectors with 30 to 50 households each. The sampling was done as a stratified sampling in which the number of households per sector was estimated.

EXECUTION STEPS IN THE BASELINE

As mentioned above, execution was carried out in two steps. The first one was performed from May 13 to May 24; the second was performed from July 1 to July 12. The following describes the activities carried out in each of the phases.

PHASE I:

A) CONTENTS: The investigated issues in this phase were:

- 1.- SOCIOECONOMICAL AND DEMOGRAPHIC INFORMATION
- 2.- HORTICULTURAL RESOURCES AT THE HOUSEHOLD LEVEL
- 3.- UNDER-6-YEAR OLD CHILDREN MORBIDITY
- 4.- UNDER-6-YEAR OLD CHILDREN IMMUNIZATION STATUS
- 5.- VITAMIN A DIETARY INTAKE
- 6.- NUTRITIONAL STATUS EVALUATION (ANTHROPOMETRICS)

The methodology for gathering this information was done by means of visits to the households and interviewing the person in charge of the household. For the first issue, information was obtained about occupation, scholar level and language used by the head of the family (father and mother), and by the children. Socioeconomical information was specifically focused on the house conditions. Two questions on use of health services were also included.

Information relating to horticulture included land dedicated to crops, type of crops, vegetable gardening, type of vegetables cultivated and technical support sources. The questions for this purposes were developed by the agronomist of the project.

Regarding morbidity information, a surveillance was performed recalling diseases in the last two weeks. Questions on intestinal, respiratory, dermatological and ocular infections in under-6-years-age children were asked. Questions about immunization status and use of vitamin A high-doses (megadose) were also included in this surveillance.

Information about vitamin A dietary intake was obtained by means of a 7-day consumption frequency questionnaire, based on a model developed by Quan and collaborators. This questionnaire was modified to include some other regional items.

Nutritional status (protein-energy) was made by using anthropometric measurements: weight and height. This data will be used to draw H/W, W/Age, H/age indices.

All the forms used were reviewed by the project staff in charge of the field activities (promoters), and some corrections to the questions were made in order to get into the regional context.

B) STAFF:

Carlos Teni	Promoter
Oscar Teni	Promoter
Fernando Villalobos	Promoter
Alejandro Xol	Promoter
Alberto Tzib Xol	Promoter
Hugo Yalibat	Promoter
William Scott	Project Coordinator
Guillermo Segura	Agricultural Component Leader
Irma Bailon	Educational Component Leader
Ivan Mendoza	Data analyst

C) STAFF TRAINING

Prior to the execution of the baseline, staff was trained on how to carry out the surveillance. Exercises on how to perform the interviews were carried out by the promoters. At the end of the training period, a field practice was performed in one of the communities surrounding the capital town of the province of Alta Verapaz. This activities were coordinated and supervised by the Nutritional Education and Agriculture leaders as well as by the person in charge of the data management and analysis. Forms used in the data gathering process are shown in appendix 1.

PHASE II

A) CONTENTS: In this phase of the baseline, blood samples were drawn to determine:

- 1.- Plasma retinol levels
- 2.- Hematocrit

In order to gather this information, operational centers were established in each community. Parents attended these centers with their children to give a blood sample. A "mini-lab" was established in order to separate the plasma sample. Samples were then put into foamy ice containers, and kept frozen in a freezer at about -20°C.

Additionally, given some CeSSIAM concerns, information about other aspects were obtained: a) evaluation of dermatological problems (sarcoptiosis and subsequent infections), and b) presence of *Ascaris lumbricoides* in stool.

B) STAFF  
 B.1 STAFF IN CHARGE OF THE BLOOD SAMPLING:  
 (CeSSIAM staff)

Lic. Maria Eugenia Romero  
 Dr. Carmen Yolanda Lopez  
 Ms. Aura Marina de Guerrero  
 Mr. Timoty Anderson  
 Dr. Ivan Mendoza

B.2 SUPPORTING STAFF  
 (IEF staff)

Guillermo Segura  
 Carlos Teni  
 Oscar Teni  
 Fernando Villalobos  
 Alejandro Xol  
 Alberto Tzib Xol  
 Hugo Yalibat  
 Claudia Suc  
 Angela N. Suc

C) SAMPLE STORAGE AND ANALYSIS

Plasma samples were transferred to CeSSIAM's lab (Hospital de Ojos y Oidos "Dr. Rodolfo Robles", Guatemala City). These samples were then transported to INCAP's lab for storage at -70°C until they were analyzed at CeSSIAM by this institution's staff (Licenciadas ME Romero and I. de Ramirez).

RESULTS

The following table shows the number of interviews and blood samples obtained by community in both phases of the baseline.

	COMMUNITIES				
	CHAMIL	ESPERANZA -SEHUBUB	POCOLA	EL RANCHO	TOTAL
INTERVIEWS:					
SOCIOECONOMICAL	77	48	86	62	273
HORTICULTURAL	77	48	86	62	273
MORBIDITY	180	80	155	114	529
IMMUNIZATION	180	80	155	114	529
VIT A INTAKE	180	80	155	114	529
PROCEDURES:					
ANTHROPOMETRICS	180	80	155	114	529
PLASMA RETINOL	172	71	167	89	499
HEMATOCRIT	172	71	142	94	469
DERM. EXAMINATION	175	80	125	--	380
PARASITOLOGY	--	40	20	20	80

#### DATA PROCESSING:

After data collection, the next step was the revision of the obtained information forms and elaboration of a computerized file. Regarding the data obtained in phase I, at this point we have files for socioeconomical, horticultural, health and immunization interviews. Information about anthropometrics and diet are still pending to be processed. To perform this activity, services from Sra. Margarita Ovando, were called for data entry, for an estimated period of two months, four hours daily.

Regarding phase II, a file has been designed for the hematocrit data. Remaining information is still pending until the laboratory analysis is performed.

#### PRELIMINARY RESULTS:

Preliminary results of the hematocrit and percentages of subjects affected with sarcoptiosis and intestinal parasites are presented in appendix 2

#### COMMENTS:

The baseline either in the phase 1 and in the phase 2 were satisfactorily carried out. Community acceptance of the procedures and the staff as well as community participation were good. We had an active participation of volunteers in all the communities as well as family participation, this fact lead us to an even farther coverage than the expected minimum number.

Regarding the project field workers staff, this activity (given that this is the first experience of interaction with the communities) permitted the identification of personal skills and quality for the field work.

The gathered information will permit the evaluation of the project progress according to the planned objectives at an intermediate step and/or at the end of the project. Additionally, the preliminary results obtained at this point as well as the pending results, will lead us to the orientation of some health educational activities and, eventually, to the identification of other health needs not covered by the projects (not vitamin A related) that might ask for parallel projects development.

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**APPENDIX 1**

NATIONAL COMMITTEE FOR THE BLIND AND DEAF

SOCIOECONOMIC AND DEMOGRAPHIC INFORMATION

AREA COMMUNITY SECTOR FAMILY PROMOTOR CHV

WHO ARE THE MEMBERS OF THE FAMILY?

No.	NAME & LASTNAME	KINSHIP	AGE	SEX	LANGUAGE	LITERATE	SCHOOLING	OCCUPATION	SPECIALIZE
		1=Father	Yrs:	1=M	1=Dialect	1=Yes	1-6=Elem.	1=Day Labor.	TRAINING
		2=Mother	Months	2=F	2=Spanish	2=No	7=Jr. high	2=Farmer	COURSES
		3=Son/ Daughter			3=Both		8=Several 9=Another	3=Craftsman 4=Gov. Emp. 5=Merchant 6=Maid 7=Another	

WHAT ARE THE LIVING CONDITIONS OF THE HOUSE?

WATER	SANITATION	FLOOR	WALLS	KITCHEN	ROOF	No. OF ROOMS
1=Running Water	1=Toilet	1=Brick	Concrete/ 1=Block/Brick	1=Inside Bedroom	1=Zinc	Electricity
2=Public Works	2=Latrine	2=Concrete	2=Sundried Brick	2=Separate from the Bedroom	2=Straw	1=Yes 2=No
3=Natural Source	3=No Service	3=Wood	3=Wood	3=Outside of the House	3=Tile	Radio
4=Another		4=Soil	4=Wattle & Daob		4=Another	
			5=Zinc Sheets/ Wood Waste			

WHEN A MEMBER OF THE FAMILY IS SICK, DO YOU PARTICIPATE?

TO WHOM DO YOU ASK FOR HELP?	WHERE DO YOU GO?	WITH COMMUNAL GROUPS? WHAT KIND OF GROUPS?
1=Physician, nurse, rural health technician	1=Any	1=Communal development
2=Midwife, Health Promotor, Pharmacist	2=Rural house of health	2=Of agriculture
3=Healer, neighbor, family friend	3=Health Post	3=Of health
4=People in the numbers 1 & 2	4=Health Center	4=Religious
5=People in the numbers 2 & 3	5=Hospital	5=Civil defense
6=Anyone of the former	6=More than one place	6=There are no groups in the community
	7=Another place	7=No participation

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

CONDITION OF AGRICULTURE

DO YOU HAVE A PIECE OF LAND WHERE YOU CAN PLANT?  
 (it does not matter if it is not yours)  
 Yes \_\_\_ No \_\_\_

HOW MANY PIECES OF LAND ARE YOU FARMING NOW?  
 1 \_\_\_ 2 \_\_\_ 3 \_\_\_ 4 \_\_\_ 5 \_\_\_

HOW MUCH LAND FOR FARMING DO YOU HAVE IN EVERY PIECE OF LAND AND WHAT KINDS OF CROPS DO YOU HAVE?

FIELD 1 \_\_\_ CUERDAS (14m<sup>2</sup>) \_\_\_\_\_  
 FIELD 2 \_\_\_ CUERDAS (14m<sup>2</sup>) \_\_\_\_\_  
 FIELD 3 \_\_\_ CUERDAS (14m<sup>2</sup>) \_\_\_\_\_  
 FIELD 4 \_\_\_ CUERDAS (14m<sup>2</sup>) \_\_\_\_\_  
 FIELD 5 \_\_\_ CUERDAS (14m<sup>2</sup>) \_\_\_\_\_

DO OTHER KINDS OF PLANTS GROW IN YOUR LAND WITHOUT YOU  
 HAVING TO FARM THEM?

WHAT USE DO YOU GIVE THEM?

PLANTS	CONSUME	SELL	MEDICINAL	PLANTS	CONSUME	SELL	MEDICINAL
1. _____				6. _____			
2. _____				7. _____			
3. _____				8. _____			
4. _____				9. _____			
5. _____				10. _____			

DO YOU HAVE A HOME GARDEN WITH VEGETABLES?  
 Yes \_\_\_ No \_\_\_

WHAT KIND OF CROPS DO YOU HAVE?

WHO TAKES CARE OF THE VEGETABLES?

VEGETABLES      FRUITS      SEASONINGS

1. Father
2. Mother
3. Children
4. Some other members of the family
5. Everybody

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

WHEN DO YOU NEED ASSISTANCE TO IMPROVE OR TREAT YOUR CROPS?

WHO DO YOU CONSULT? \_\_\_\_\_

WHERE DO YOU GO FOR ASSISTANCE? \_\_\_\_\_

- 1=Promotor, Volunteer Extentionist
- 2=Agronomy Technician
- 3=Agronomy Engineer
- 4=Nobody
- 5=Another (specify) \_\_\_\_\_

- 1=Digesa, Digebos
- 2=Ministry of Development
- 3=Peace Corp
- 4=Another communal institution
- 5=Another institution in the town center
- 6=Ask nobody for assistance
- 7=Ask any institution for assistance

Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

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NATIONAL COMMITTEE FOR THE BLIND AND DEAF  
INTERNATIONAL EYE FOUNDATION

SURVEY OF HEALTH AND ANTROPOMETRY

AREA COMMUNITY SECTOR FAMILY CHILD PROMOTOR CHV

NAME OF THE HEAD OF THE FAMILY: \_\_\_\_\_

CHILD'S NAME: \_\_\_\_\_

DATE OF BIRTH

SEX

AGE OF THE CHILD

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Day Mo. Yr.

M \_\_\_ F \_\_\_

\_\_\_\_\_/\_\_\_\_\_  
Yr(s) Mos.

VACCINATION

Has your child been vaccinated any time?

YES \_\_\_ NO \_\_\_

FILL IN THE BLANK WITH THE NUMBER OF DOSES OF EACH VACCINE THAT YOUR CHILD HAS RECEIVED.

Does he/she have vaccination card?

YES \_\_\_ NO \_\_\_

BCG \_\_\_ POLIO \_\_\_ DPT \_\_\_ MEASLES \_\_\_

Does he/she receive vitamin "A" capsules?

YES \_\_\_ NO \_\_\_

WHEN DOES YOUR CHILD RECEIVE THE LAST DOSES OF VITAMIN "A"?

Does he/she have a vitamin A card?

YES \_\_\_ NO \_\_\_

\_\_\_\_\_/\_\_\_\_\_/\_\_\_\_\_  
Day Mo. Yr.

WHICH DISEASES HAS YOUR CHILD HAD DURING THE LAST 14 DAYS?

ANTROPOMETRIC MEASURES

Diarrhea

YES \_\_\_ NO \_\_\_

Respiratory Tract Infections

YES \_\_\_ NO \_\_\_

Whooping Cough

YES \_\_\_ NO \_\_\_

Measles

YES \_\_\_ NO \_\_\_

Skin Diseases

YES \_\_\_ NO \_\_\_

Eye Diseases

YES \_\_\_ NO \_\_\_

WEIGHT \_\_\_\_\_ kilograms

HEIGHT \_\_\_\_\_ centimeters

NOTE: To access the height - children before 2 yrs must lay down. Children over 2 must be measured in the standing position, w/o wearing shoes or hair styles that can make variations on the measurement of height.

Notes: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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COMITE NACIONAL PRO CIEGOS Y SORDOS DE GUATEMALA - FUNDACION INTERNACIONAL DEL OJO

INFORMACION SOCIO ECONOMICA Y DEMOGRAFICA

AREA COMUNIDAD SECTOR FAMILIA PROMOTOR VOLUNTARIO

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QUIENES FORMAN LA FAMILIA?

No.	NOMBRE Y APELLIDO	PARIENTESCO 1=padre 2=madre 3=hijo	EDAD años:meses	SEXO 1=M 2=F	IDIOMA 1=dialecto 2=español 3=ambos	ALFABETO 1=si 2=no	ESCOLARIDAD 1-6=primaria 7=basicos 8=divers. 9=otros	OCUPACION 1=jornalero 2=agricultor 3=artesano 4=empl. publico 5=comerciante 6=of. domestic. 7= otros	CURSOS RECIBIDOS

COMO ESTA CONSTRUIDA LA VIVIENDA?

AGUA_____	EXCRETAS _____	PISO _____	PAREDES _____	COCINA _____	TECHO_____	No. CUARTOS VIVIENDA _____
1=entubada 2=chorro publ 3=fle.natural 4=otro	1= inodoro 2= letrina 3= no tiene	1=ladrillo 2=cemento 3=adobe 4=tierra	1=blo:ladrillo 2=adobe 3=maicera 4=pajaroco 5=lamina/lepa	1=Dentro dormitorio 2=Separada dormitorio 3=fuera de la casa	1= lamina 2= paja 3= teja 4= otro	ELECTRICIDAD_____ (1=SI 2=NO) PARED _____

CUANDO ALGUIEN ESTA ENFERMO EN LA FAMILIA ?

A QUE PERSONA CONSULTA _____
1= Medico, Enfermera, tecnico en salud rural 2= Comadrona, Promotor de salud, farmaceutico 3= curandero, vecino, familiar, amigo. 4= las personas de los numeros 1 y 2 5= las personas de los numeros 2 y 3 6= cualquiera de todos.

A QUE INSTITUCION ASISTE _____
1= ninguna 2= Casa rural de salud 3= Fuesto de salud 4= Centro de Salud 5= Hospital 6= mas de una institucion 7= otra institucion

PARTICIPA CON GRUPOS COMUNITARIOS ?

QUE TIPO DE GRUPO? _____
1=de desarrollo comunitario 2=de agricultura 3=de salud 4=religioso 5=autodefensa civil 6=no hay grupo en la comunidad 7=no participa

OBSERVACIONES:

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CUAL ES LA SITUACION RESPECTO A AGRICULTURA ?

TIENE TERRENO DISPONIBLE PARA CULTIVAR ? SI  NO  (aunque no sea propio)

CUANTOS TERRENOS ESTA CULTIVANDO ACTUALMENTE ? 

1	2	3	4	5
---	---	---	---	---

QUE CANTIDAD DE TIERRA TIENE PARA CULTIVAR EN CADA UNO DE SUS TERRENOS Y QUE CULTIVOS TIENE ?

TERRENO	CANTIDAD	TIPOS DE CULTIVOS
TERRENO 1	___ CUERDAS _____	_____
TERRENO 2	___ CUERDAS _____	_____
TERRENO 3	___ CUERDAS _____	_____
TERRENO 4	___ CUERDAS _____	_____
TERRENO 5	___ CUERDAS _____	_____

CRECEN OTRAS PLANTAS EN SUS TERRENOS SIN QUE UO LAS SIEMPRE ? ..... ¿ PARA QUE LAS USA ?

PLANTAS	CONSUMO	VENTA	MEDICINA	PLANTAS	CONSUMO	VENTA	MEDICINA
1. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	6. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	7. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	8. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10. _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SIEMBRAN EN LA CASA VERDURAS ? SI  NO

QUIENES SE ENCARGAN DE CUIDARLAS ? \_\_\_\_\_

1. PADRE
2. MADRE
3. HIJOS
4. OTROS PARIENTES
5. TODOS

QUE TIPO DE SIEMBRAS TIENEN ?

VERDURAS	FRUTAS	CONDIMENTOS
_____	_____	_____
_____	_____	_____
_____	_____	_____

CUANDO NECESITA AYUDA PARA MEJORAR O CURAR SUS CULTIVOS ?

<p>A QUE PERSONA PREGUNTA _____</p> <p>1= PROMOTOR, GUIA O REPRESENTANTE AGRICOLA</p> <p>2= TECNICO EN AGRONOMIA</p> <p>3= INGENIERO AGRONOMO</p> <p>4= NINGUNO</p> <p>5= OTRO (ESPECIFIQUE) _____</p>	<p>A QUE INSTITUCION CONSULTA ? _____</p> <p>1= DIGESA, DIGEBOS,</p> <p>2= MINISTERIO DE DESARROLLO</p> <p>3= CUERPO DE PAZ</p> <p>4= OTRA INSTITUCION EN LA COMUNIDAD</p> <p>5= OTRA INSTITUCION EN LA CABECERA</p> <p>6= NO CONSULTA A NINGUNO</p> <p>7= CONSULTA A CUALQUIER INSTITUCION</p>
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OBSERVACIONES \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

ENCUESTA DE SALUD Y ANTROPOMETRIA

AREA COMUNIDAD SECTOR FAMILIA NIÑO PROMOTOR VOLUNTARIO

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NOMBRE DEL JEFE DE LA FAMILIA _____										
NOMBRE DEL NIÑO _____										
FECHA DE NACIMIENTO	SEXO	EDAD NIÑO								
<table border="1" style="display: inline-table; width: 100px; height: 20px;"> <tr> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> <td style="width: 20px;"></td> </tr> </table>					<table border="1" style="display: inline-table; width: 40px; height: 20px;"> <tr> <td style="width: 15px; text-align: center;">M</td> <td style="width: 15px; text-align: center;">F</td> </tr> </table>	M	F	<table border="1" style="display: inline-table; width: 60px; height: 20px;"> <tr> <td style="width: 30px; text-align: center;">:</td> <td style="width: 30px;"></td> </tr> </table>	:	
M	F									
:										
(dia) (mes) (año)		(AÑOS) (MESES)								

VACUNACION

<p>HA SIDO VACUNADO SU HIJO ALGUNA VEZ ? <input type="checkbox"/> SI <input type="checkbox"/> NO</p> <p>TIENE TARJETA DE VACUNACION ? <input type="checkbox"/> SI <input type="checkbox"/> NO</p> <p>HA RECIBIDO CAPSULAS DE VITAMINA "A" ? <input type="checkbox"/> SI <input type="checkbox"/> NO</p> <p>TIENE TARJETA DE VITAMINA "A" ? <input type="checkbox"/> SI <input type="checkbox"/> NO</p>	<p>COLOQUE EN EL ESPACIO EL NUMERO DE DOSIS DE CADA VACUNA, QUE HA RECIBIDO SU NIÑO ?</p> <p>BCG <input type="text"/> POLIO <input type="text"/> DPT <input type="text"/> SARAMPION <input type="text"/></p> <p>EN QUE FECHA RECIBIO SU NIÑO VITAMINA "A", LA ULTIMA VEZ ?</p> <table border="1" style="width: 100px; height: 20px;"> <tr> <td style="width: 20px;"></td> </tr> </table> <p style="text-align: center;">(dia) (mes) (año)</p>					

QUE ENFERMEDADES HA TENIDO SU NIÑO EN LOS ULTIMOS (CATORCE (14) DIAS ?

DIARREA	<input type="checkbox"/> SI	<input type="checkbox"/> NO
INFECCION PEST	<input type="checkbox"/> SI	<input type="checkbox"/> NO
TOS FERINA	<input type="checkbox"/> SI	<input type="checkbox"/> NO
SARAMPION	<input type="checkbox"/> SI	<input type="checkbox"/> NO
ENF. DE PIEL	<input type="checkbox"/> SI	<input type="checkbox"/> NO
ENF. DE OJOS	<input type="checkbox"/> SI	<input type="checkbox"/> NO

MEDIDAS ANTROPOMETRICAS:

PESO  kilogramos

TALLA  Centímetros

NOTA: Para hacer la medición de "TALLA", los niños menores de dos años deben medirse acostados. Los mayores de dos años se miden de pie, sin zapatos ni peinados que alteren la talla.

OBSERVACIONES:

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Intake of Vitamin A rich meals and traditional green leaves  
 CONSUMO DE ALIMENTOS RICOS EN VITAMINA A Y HOJAS VERDE TRADICIONALES

AREA COMMUNITY SECTOR FAMILY NINO PROMOTOR  
 community family child

NOMBRE Name

FECHA DE ENTREVISTA Date of Visit

(DIA) (MES) (ANO)  
 Day Month Year

EDAD Age

(ANOS) (MESES)  
 Years Months

SEXO Sex

F M

CODIGO Code	ALIMENTO Meal	FRECUENCIA (7 DIAS) Frequency	CANTIDAD Amount	UNIDAD Unit
060	HIGADO DE RES Beef Liver			
111	CANGREJO Crab			
089	SESOS DE RES Beef Brain			
069	PANZA DE RES Stomach, Beef			
080	ROFE (FULMON) Lung, Beef			
053	EMBUTIDOS DE CERDO Pork Sausages			
030	HUEVO DE GALLINA Eggs, Chicken			
	HUEVO DE PATO O PAVO Eggs, Duck or Turkey			
005	LECHE DE VACA (FLUIDA) Cow Milk			
007	LECHE ENTERA EN POLVO Powder Milk			
015	QUESO SECO Dry Cheese			
016	QUESO FRESCO Fresh Cheese			
001	CREMA ESPESA Thick Cream			
002	CREMA RALA Light Cream			
599	MANTEQUILLA (DE CREMA) Butter			
602	MARGARINA (PONER MARCA) Margarine			
	AZUCAR Sugar			
	PANELA Molasses, Sugar			
612	INCAPARINA O PROTINA Incaparina			
	NUTRIATOL Nutriatol			
298	ZANAHORIA Carrots			
243	CHIPILIN Crotalaria			
314	MACUY, QUILETE, HIERBAMORA Nightblade Shade			
	CAMOTE NARANJA O MORADO Orange Sweet Potato			
	CAMOTE BLANCO White Sweet Potato			
220	BLEDO Amaranth			

CODIGO Code	ALIMENTO Meal	FRECUENCIA (7 DIAS) Frequency	CANTIDAD Quantity	UNIDAD Unit
248	ESPINACA Spinach			
219	BERRO Watercress			
313	GUICDY SASON Squash mature			
208	ACELGA Squash chard			
242	PUNTAS DE GUIQUIL Guisquil growing points and leaves			
234	CEBOLLITAS Onions			
303	CHILE PIMIENTO FRESCO Fresh Peppers			
265	LECHUGA DEL PAIS Lettuce			
292	TOMATE (especificar tipo) Tomato			
252	ARVEJA Peas			
221	BROCOLI Broccoli			
	TXOLOJ Txoloj			
	APAZOTE Goosefoot (Green leaf)			
	AYOTE Squash			
	PUNTAS DE AYOTE Squash buds			
	SAMAT Samat leaves			
	CULANTRO Coriander			
	TZITON Tziton			
	YERBA BUENA Spearmint			
	OSH Osh			
	CHOMTEE Chomtee			
	ROCTISH roctish			
376	MANGO MADURO Ripe Mango			
457	PLATANO MADURO Ripe Plantain			
384	MELON Cantaloupe			
375	MANDARINA (GRANDE) Tangarine			
455	BANANOS Bananas			
395	PAPAYA Papayas			
365	JOCOTE "mombin"			
	NARANJAS orange			

## APPENDIX 2

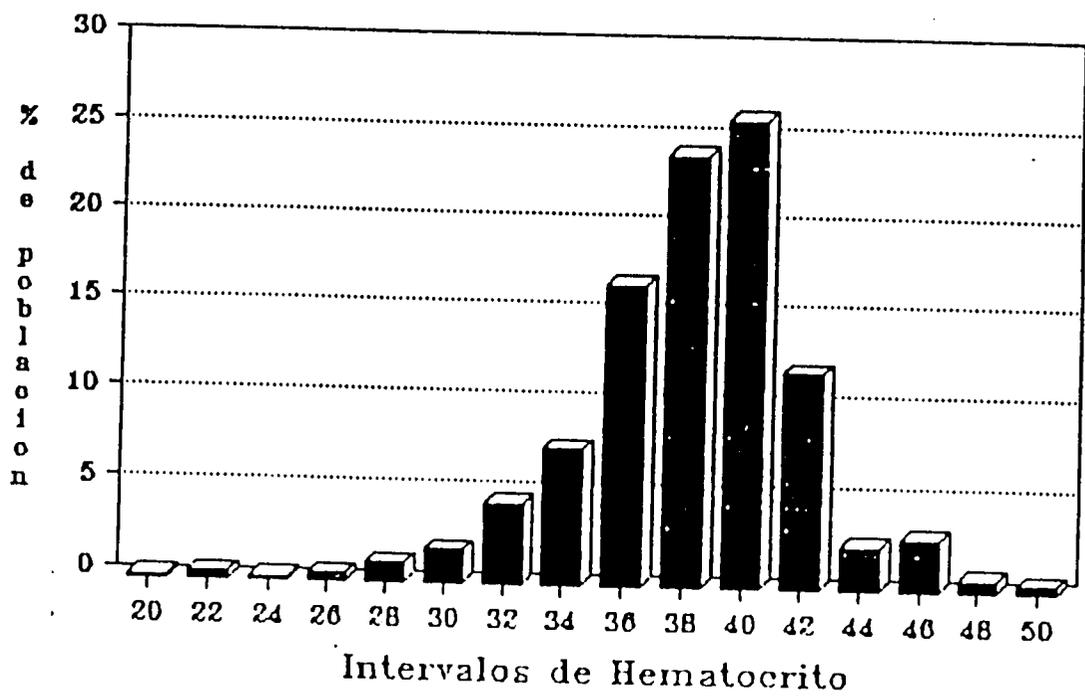
### Community Codes:

1	=	Chamil (Area 1)
2	=	Esperanza-Sehubub (Area 2)
3	=	Pocola (Area 3)
4	=	El Rancho (Area 4)

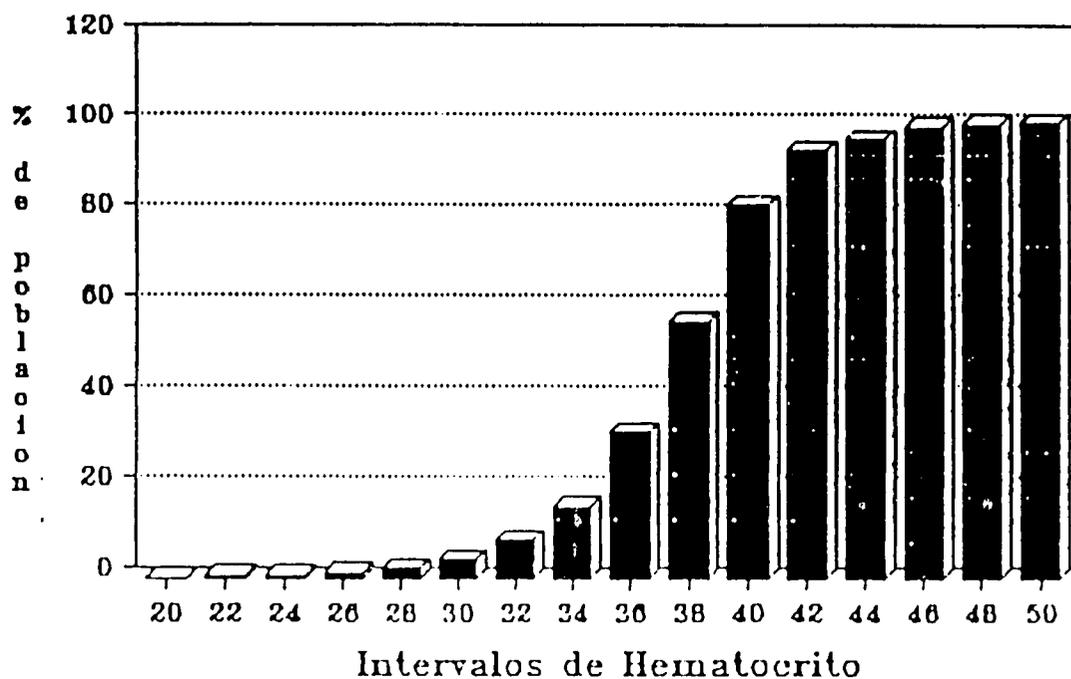
### Codes Indicating Sex of Participants

1	=	Male
2	=	Female

DISTRIBUCION DE VALORES DE HEMATOCRITO  
DE LA POBLACION TOTAL ESTUDIADA EN  
COBAN (n=502)



DISTRIBUCION DE VALORES DE HEMATOCRITO  
DE LA POBLACION TOTAL ESTUDIADA EN  
COBAN (n=502)



### Preliminary Baseline Survey Results

- the majority of the households have access to running water (45.9%) or a natural source (31.6%).
- 24.9% do not have any form of latrine.
- 56.9% of the households have a radio.
- of the households that do participate in a formal organization the majority belong to either a religious organization (37.5%) or to the civil defence (26%). Few belong to a development, health, or agriculture organization.
- the majority of the persons speak the local Ketchi or Poketchi dialect (77.2%) with a smaller number speaking both an indigenous language and Spanish (17.3%) and a small number speaking only Spanish (5.4%).
- literacy rates are low; 45.4% for men and 13.7% for women.
- the primary occupations are maids (42.2%), farmers (39.3%), day laborers (13%), merchants (7.5%), craftspersons (6%).
- the majority of men are either farmers, labors at a near by farm, a merchant, or a craftsman.
- the majority of women are either a maid or a craftsperson.
- the average household has an average of 1.76 fields and (.45 hectares) of land for farming a variety of crops for consumption and or sale.
- the majority of households (70.9%) also have some form of vegetable gardens taken care of primarily by mothers (48.6%) or all family members (36.4%).
- the majority of persons do not consult an agriculture technician concerning their crops (86.9%).
- The majority of respondents reported that they consult a health technician (68.8%) at neighboring health posts.
- The majority of mothers reported that 90% of their children 12-23 months of age had received one or more immunizations. However, of these children, only 64.3% had an immunization card and only 26.8% were found completely immunized.
- a similar situation in regards to receiving vitamin A capsules. 31.7% reported that their children had received a vitamin A capsule. However, only 16.9% had documentation of receiving a capsule.
- As expected reports of diarrhea (40.2%) and respiratory illness

was (42.9%) in the past two weeks were high.

- other illness reported were whooping cough (5.4%), measles (1.2%), skin infections (27.2%), and eye disease (7.7%).

- children examined for skin infections (27.2%) were primarily found with common childhood impetigo. The prevalence and extent of infection are felt to be co-factors related to the levels of vitamin A deficiency. Later analysis in Guatemala City will determine to what extent common skin infections are related to levels of serum retinol.

- of the children tested for hematocrit levels, a high percentage (75%) were found to be low, and a further 21.1% were considered moderately deficient.

- an additional burden to children's health is the high prevalence (75-100%) of children found infected with *Ascaris lumbricoides*, many of whom had worm counts of 100 or more.

COMITE NAC. PROCIEGOS Y SORDOS DE GUATEMALA -  
 FUNDACION INTERNACIONAL DEL OJO

PROYECTO: VITAMINA A  
 ANO 1: 1991.

National Committee for the Blind and Deaf of Guatemala - IEF

Vitamin A Project, Year 1,  
 1991

AREA	COMUNIDAD	SECTOR	FAMILIA	PROMOTOR	VOLUNTARIO
Area	Community	Sector	Family	Promotor	Volunteer

APELLIDOS DE LA FAMILIA \_\_\_\_\_  
 Family Name

PARTICIPACION EN ACTIVIDADES COMUNITARIAS DEL PROYECTO

MESES (1991) Months	JULIO	AGOS.	SEPT	OCT.	NOV.	DIC.
EDUCACION EN NUTRICION Education in Nutrition 						
EDUCACION EN HUERTOS Education in Gardens 						
HUERTOS FAMILIARES Family Gardens 						
COMPRA DE SEMILLAS Purchase of Seeds 						

NOMBRE DEL NIÑO \_\_\_\_\_  
 Name of Child

CODIGO  
 Code

SEXO  
 Sex

 M  F

FECHA NACIMIENTO \_\_\_\_\_  
 Birthdate

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EDAD:  
 Age

	.	
--	---	--

anos meses  
 years months

MESES (1991) Months	JULIO	AGOS.	SEPT	OCT.	NOV.	DIC.
DIARREA Diarrhea (ASIENTOS) 						
SARAMPION measles 						
INFECCIONES ARI RESPIRATORIAS 						
CAPSULAS VITAMINA "A" Vitamin A Capsules 		////////////////////////////////////// ////////////////////////////////////// ////////////////////////////////////// //////////////////////////////////////				
NUTRIATOL Nutriatol 						
VACUNA TRIPLE VACUNA POLIO VACUNA SARAMPION Vaccinations 		////////////////////////////////////// ////////////////////////////////////// ////////////////////////////////////// //////////////////////////////////////				

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PROYECTO: INTERVENCION VITAMINA A - SUPERVIVENCIA INFANTIL  
MONTHLY ACTIVITIES REPORT

AREA COM. PROM. DATE  
 [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]  
 dia mes ano

Volunteer's Code	1	2	3	4	5	6	7	8	9	10	TOTAL
Total of Families											
# Of families visited this month											
# of families who participated in Nutritional Educ.											
# of families who participated in Horticultural Educ.											
# of families who worked in gardens 50% of activities											
# total of children											
# of children <6 years of age who had diarrhea this month											
# of children <6 years old who had IRA'S this month											
# of children <6 years old who had Measles this month											
# of children 2-6 years old who got Vitamin 'A' this month.											
# of children <6 years old with diarrhea who took Nutriatol this month											
# of children <6 years old who had Measles vaccination this month.											
# of children <6 years old who had Polio Vaccination this month.											
# of children <6 years old who had DPT vaccination this month.											

GARDENING INFORMATION SHEET

Home Garden \_\_\_\_\_ School Garden \_\_\_\_\_ When was garden created? \_\_\_\_\_

Who works in the garden? \_\_\_\_\_  
\_\_\_\_\_

If a school garden, who works in the garden during vacation times?  
\_\_\_\_\_

Which foods are grown and what happens to the foods after harvest?

List foods planted:

Check what happens to foods after harvest:

	Consumed	Sold and Consumed	Sold
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Who eats the food from the garden? \_\_\_\_\_  
\_\_\_\_\_

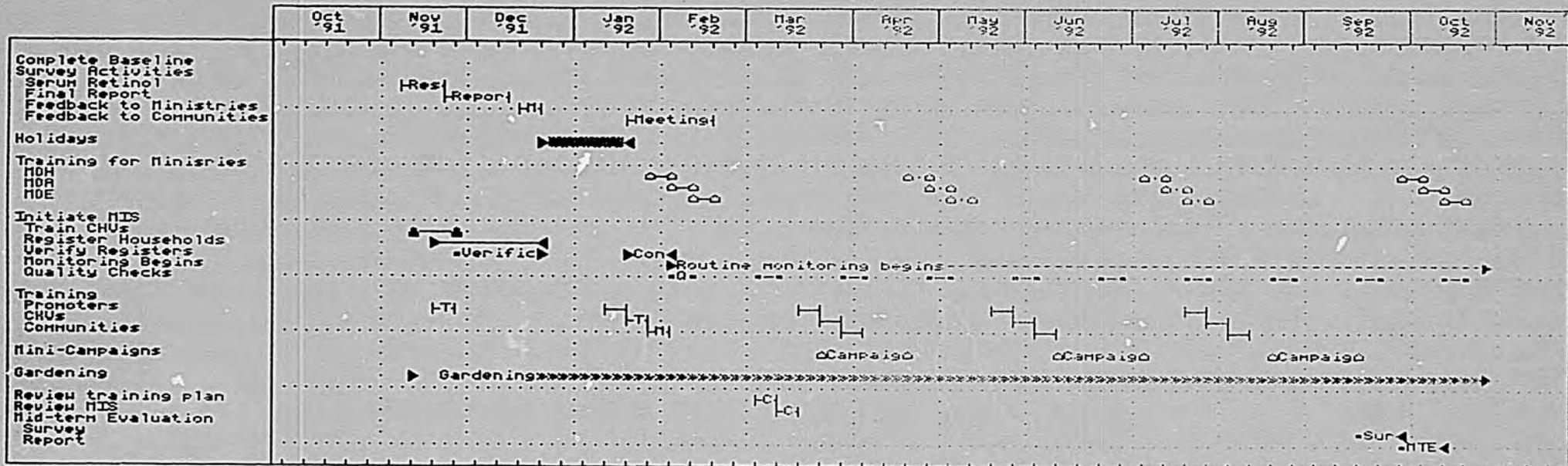
Who do you consult with about gardening? \_\_\_\_\_  
\_\_\_\_\_

What problems have you had with the garden? \_\_\_\_\_  
\_\_\_\_\_

What did you do to solve the problem(s)? \_\_\_\_\_  
\_\_\_\_\_

Where did you get seeds for the garden? \_\_\_\_\_

Where did you get tools for the garden? \_\_\_\_\_



**Results**  
11-05-91 to 11-19-91 [14 days]

Final results of the serum retinol values

**Report**  
11-19-91 to 12-10-91 [21 days]

The final report is completed after Dr. Mendoza returns from Iowa State University.

**Meeting**  
12-17-91 to 12-24-91 [7 days]

Over a period of one week Ministry officials are briefed on the survey results and their implications

**Meetings**  
01-21-92 to 02-18-92 [28 days]

During the month the communities through meetings with Action Groups are informed of the survey results and their implications.

???  
12-24-91 to 01-21-92 [28 days]

Major holiday period in Guatemala

???  
11-12-91 to 11-26-91 [14 days]

Two day training for CHUs in completion of the household registration forms to be completed in the field

???  
11-19-91 to 12-24-91 [35 days]

Promoters verify all household registers by visits to CHUs and random checks

**Cont**  
01-21-92 to 02-04-92 [14 days]

Verification continues after holiday season if necessary.

**Routine monitoring begins**  
02-04-92 to 10-27-92 [266 days]

Routine monitoring of the MIS begins. CHUs visit each household twice a month; Promoters visit each CHU twice a month and abstract data from registers on supervisory checklists to be submitted on a monthly basis to the Project Leaders-Project Coordinator.

**QC**  
02-04-92 to 02-11-92 [7 days]

Project Coordinator and Project Analyst summarize data and check for consistency

**Training**  
11-19-91 to 11-26-91 [7 days]

Routine training begins for Promoters.

**Training**  
01-21-92 to 01-28-92 [7 days]

Routine training for CHUs begins in the field.

**Meetings**  
01-28-92 to 02-04-92 [7 days]

Routine one day meetings are held with Action Groups, Womens Groups and others.

**Campaign #1**  
03-24-92 to 04-21-92 [28 days]

Vitamin A capsules, immunization, and de-worming

**Campaign #2**  
06-09-92 to 07-07-92 [28 days]

Immunization and eye screening

**Campaign #3**  
08-18-92 to 09-15-92 [28 days]

Immunization and special emphasis on ORT

**Gardening**  
11-12-91 to 10-27-92 [350 days]

Garden activities continue throughout the year at schools and communities

**Consultant**  
03-03-92 to 03-10-92 [7 days]

Consultant assists staff to develop nutrition training plan

**Consultant**  
03-10-92 to 03-17-92 [7 days]

Consultant assists staff to review the MIS and re-design if required.

**Survey**  
09-15-92 to 09-29-92 [14 days]

Mid-term survey completed

**MTE**  
09-29-92 to 10-13-92 [14 days]

Mid-term evaluation report completed with assistance from an external consultant.

## Schedule 5 HIGH RISK BIRTHS (Continued)

5 - 7	Did the project sponsor or participate in activities to promote child spacing or family planning <b>specifically directed</b> at one or more of the following high risk groups? (CIRCLE A RESPONSE FOR EACH CATEGORY)	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW
	a. Women under age 18.....	1	2	3	9
	b. Women age 35 or older.....	1	2	3	9
	c. Women who have given birth within the previous 15 months.....	1	2	3	9
	d. Women with 3 or more children.....	1	2	3	9

### TECHNICAL ASSISTANCE

5 - 8	During FY 91, did the project provide technical assistance for improving high risk birth programs? (CIRCLE ONE ANSWER)	1 - Yes, Substantial Activity 2 - Yes, Minor Activity 3 - No 9 - Don't Know
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### CHILD SURVIVAL INDICATORS

5 - 9	What is the Contraceptive Prevalence Rate (see instruction guide for information on definitions) in the project area.	
	a. Contraceptive Prevalence Rate in area.....	
	b. Date (mo/yr) data was collected.....	
	c. Source of the data used to make the estimate.....	*DC BG DK
	d. If a data collection system was used, please describe it. If possible, please include in the description the agency responsible for the system (MOH, WHO, UNICEF), the scope of the system (national or project area specific), the permanence of the system (special study or ongoing monitoring system), the methodology of collection (sample survey, clinic-based statistics, village-based statistics), and the computational procedure (weighting in a sample, weighting of data from clinics or villages, etc). (Attach additional sheets if necessary.)	

5 - 10	a. Estimate the percentage of total births in your project area during the reporting period that were high risk (see definition on page 3 of instruction guide.)	_____ %
	b. Please indicate the source of the data. (CIRCLE ONE)	*DC BG DK

### ADDITIONAL BACKGROUND INFORMATION

5 - 11 Please provide any other background information which would enable us to understand better the unique nature of the high risk births component of the project including a description of any activities not identified above, any specific lessons learned, any special steps taken to promote long-term sustainability, etc. Please give special attention to activities designed specifically to the identification of candidates for high risk pregnancies and any particular steps taken to avert those pregnancies. (Attach additional sheets if necessary.)

**Source Codes:** DC: Data Collection System; BG: Best Guess; DK: Don't Know

## Schedule 6 HIV/AIDS ACTIVITIES

6 - 4 The table below is to be used to summarize the scope of the HIV/AIDS activities supported under this project.

The following are guidelines to be applied for completing information in the columns in the table starting with Column A.

- Column - A. Use Activity codes listed below to describe the nature of the HIV/AIDS activities.
- Column - B. Show the percent of total AIDS activity, as reported in question 9, of the Main Schedule, attributed to each activity reported in Column A. Column B should add to 100%.
- Column - C. Estimate the percent of resources supporting research for each activity reported in Column A.
- Column - D. List the organization(s) by number from question 6-3 on page 16 which support each activity listed in Column A.
- Column - E. Cite target population for each activity listed in Column A. Use Population Code(s) listed below as appropriate for each activity.
- Column - F. Indicate by Y or N (Yes or No) whether activities listed in Column A are community-based with target community involvement in the design, implementation, and /or evaluation of the activities.
- Column - G. Please cite the number of individuals reached by prevention efforts in each activity area and indicate in Column H the source of the data by circling one of the the following: DC (Data Collection), BG (Best Guess), or DK (Don't Know).

A Activity	B % of AIDS Attribution	C % Research	D Organizations Supported	E Population Targets	F Comm. Based	G Nos. Reached FY91	H Data Sources
BTS							DC BG DK
CSP							DC BG DK
CPD							DC BG DK
HSV							DC BG DK
PNR							DC BG DK
STD							DC BG DK
PDM							DC BG DK
OAI							DC BG DK
	100%						

### ACTIVITY CODES:

Blood Transfusion Screening..... BTS  
 Condom Supply..... CSP  
 Condom Promotion and Distribution..... CPD  
 HIV Surveillance..... HSV  
 Partner Number Reduction..... PNR  
 STD Diagnosis Treatment Services..... STD  
 Policy Dialogue/Modelling..... PDM  
 Other..... OAI

(Please specify)

### TARGET POPULATION CODES:

General Public..... GPU  
 Children (0-8 years)..... CHI  
 Youth (9-14 years)..... YOU  
 Female Sex Workers..... FSW  
 Male Sex Workers..... MSW  
 Other Women at Risk..... OWR  
 Other Men at Risk..... OMR  
 IV Drug Users..... IDU  
 Clinic/Hospital-based  
   Health Service Providers..... HSP  
   Traditional Healers..... TRH  
   Other Service Providers..... OSP  
   Community Leaders..... CML  
   Other..... OTH

(Please specify)

6 - 5 What percentage of the condoms being supplied by USAID are used for AIDS prevention (rather than family planning)? \_\_\_\_\_%

# Schedule 7 OTHER HEALTH AND CHILD SURVIVAL ACTIVITIES

(Continued)

PLEASE ANSWER 7-7 ONLY IF YOU CIRCLED "4 - Malaria" IN RESPONSE TO ITEM 7-1.

**7-7 Malaria Strategies.**  
 During FY 91, did the project sponsor, promote or participate in any of the following strategies or activities for the purpose of malaria control?  
 (PLEASE CIRCLE A RESPONSE FOR EACH OF THE STRATEGIES LISTED BELOW.)

	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW
a. Malaria surveillance and/or treatment.....	1	2	③	9
b. Surveys for chloroquine sensitivity/resistance.....	1	2	③	9
<b>c. Mosquito control:</b>				
1. Against adult mosquitos.....	1	2	③	9
2. Against larvae.....	1	2	③	9
3. Environmental modification..... (including source reductions)	1	2	③	9
<b>d. Public education to promote:</b>				
1. Anti-malarial treatment.....	1	2	③	9
2. Anti-mosquito measures.....	1	2	③	9
3. Impregnated bednets.....	1	2	③	9
4. Other _____..... (Please Specify)	1	2	③	9

## TECHNICAL ASSISTANCE

**7-8** During FY 91, did the project provide technical assistance in any of the types of interventions circled in item 7-1?  
 1 - Yes → COMPLETE ITEM 7-9  
 ② - No } SKIP NOW TO ITEM 7-10  
 9 - Don't Know }

**7-9** For each type of intervention circled in item 7-1 above, indicate the level of technical assistance provided.  
 (CIRCLE ONE RESPONSE FOR EACH INTERVENTION)

	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW
a. Acute Respiratory Infection.....	1	2	③	9
b. Health Care Financing.....	1	2	③	9
c. Water and Sanitation.....	1	2	③	9
d. Malaria.....	1	2	③	9
e. Maternal Health.....	1	2	③	9
f. Elderly/Adult Health.....	1	2	③	9
g. Other _____..... e.g. orphans, etc. (Please Specify)	1	2	③	9

## ADDITIONAL BACKGROUND INFORMATION

**7-10** Please provide any other background information which would enable us to understand better the unique nature of any or all of the other health and child survival components of the project including a description of any activities not identified above, any specific lessons learned, any special steps taken to promote long-term sustainability, etc.  
 (Attach additional sheets if necessary.)

1991 COUNTRY PROJECT PIPELINE ANALYSIS: REPORT FORM A  
INTERNATIONAL EYE FOUNDATION/GUATEMALA

Appendix 7

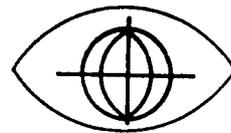
HEADQUARTERS	Actual Expenditures 7/1/90 - 9/30/91		Projected Expenditures 10/1/91 - 6/30/93		Agreement Budget 7/1/90 - 6/30/93		TOTAL
	AID	IEF	AID	IEF	AID	IEF	
<b>I. PROCUREMENT</b>							
<b>EQUIPMENT</b>							
Computer upgrades	570	0	(70)	0	500	0	500
Printer:VA Coord.	0	0	125	0	125	0	125
<b>SUPPLIES</b>							
Computer	0	0	150	300	150	300	450
General office	140	308	110	192	250	500	750
Prof./technical	0	0	250	500	250	500	750
<b>SERVICES/CONSULT</b>							
See Country Budget							
<b>SUBTOTAL (PROC.)</b>	<b>710</b>	<b>308</b>	<b>565</b>	<b>992</b>	<b>1,275</b>	<b>1,300</b>	<b>2,575</b>
<b>II. EVALUATION (see country budget)</b>							
<b>SUBTOTAL (EVAL.)</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>III. INDIRECT COSTS</b>							
<b>IV. OTHER PROGRAM COSTS</b>							
<b>A. HQ PERSONNEL</b>							
Salaries	10,691	10,148	16,084	8,115	26,775	18,263	45,038
Fringe (30%)	1,723	2,268	6,310	3,211	8,033	5,479	13,512
<b>SUBTOTAL (PERS.)</b>	<b>12,414</b>	<b>12,416</b>	<b>22,394</b>	<b>11,326</b>	<b>34,808</b>	<b>23,742</b>	<b>58,550</b>
<b>B. TRAVEL COSTS</b>							
<b>SHORT-TERM</b>							
Airfare & PD	4,004	1,718	5,197	7,607	9,201	9,325	18,526
<b>SUBTOTAL (Trav.)</b>	<b>4,004</b>	<b>1,718</b>	<b>5,197</b>	<b>7,607</b>	<b>9,201</b>	<b>9,325</b>	<b>18,526</b>
<b>C. OTHER DIRECT COSTS</b>							
<b>Office Operations</b>							
Telephone/Fax	92	759	1,208	341	1,300	1,100	2,400
Postage/Courier	52	307	342	93	394	400	794
Freight	0	291	1,500	34	1,500	325	1,825
<b>Subtotal (Other)</b>	<b>144</b>	<b>1,357</b>	<b>3,050</b>	<b>468</b>	<b>3,194</b>	<b>1,825</b>	<b>5,019</b>
<b>SUBTOTAL (IV)</b>	<b>16,562</b>	<b>15,491</b>	<b>30,641</b>	<b>19,401</b>	<b>47,203</b>	<b>34,892</b>	<b>82,095</b>
<b>SUBTOTAL I, II, IV</b>	<b>17,272</b>	<b>15,799</b>	<b>31,206</b>	<b>20,393</b>	<b>48,478</b>	<b>36,192</b>	<b>84,670</b>
<b>G&amp;A Costs 24.41%</b>	<b>4,216</b>	<b>3,857</b>	<b>7,617</b>	<b>4,978</b>	<b>11,833</b>	<b>8,834</b>	<b>20,667</b>
<b>TOTAL HQ. COSTS</b>	<b>21,488</b>	<b>19,656</b>	<b>38,823</b>	<b>25,371</b>	<b>60,311</b>	<b>45,026</b>	<b>105,337</b>

**1991 COUNTRY PROJECT PIPELINE ANALYSIS: REPORT FORM A**  
**INTERNATIONAL EYE FOUNDATION/GUATEMALA**

COUNTRY	Actual Expenditures 7/1/90 - 9/30/91		Projected Expenditures 10/1/91 - 6/30/93		Agreement Budget 7/1/90 - 6/30/93		
	AID	IEF	AID	IEF	AID	IEF	TOTAL
<b>I. PROCUREMENT</b>							
<b>A. EQUIPMENT and SUPPLIES</b>							
<b>TECHNICAL</b>							
1. Vehicles/Motorcy.	0	19,583	0	15,117	0	34,700	34,700
2. Camera	0	0	0	200	0	200	200
<b>OFFICE EQUIPMENT</b>							
1. Computer Upgrades	0	0	0	750	0	750	750
2. Volt. Reg./UPS	0	0	0	1,200	0	1,200	1,200
3. Office/House Fur.	1,139	0	361	0	1,500	0	1,500
<b>SUPPLIES</b>							
1. General Office	1,618	811	3,482	0	5,100	0	5,100
2. NutriAtoi	0	0	0	32,000	0	32,000	32,000
3. Garden tools	1,200	0	3,300	0	4,500	0	4,500
4. Train. Materials	176	5	2,824	0	3,000	0	3,000
5. Medical Supplies	229	282	471	0	700	0	700
<b>B. SERVICES</b>							
Consultants (DIP, MIS, Baseline)	0	0	0	0	0	0	0
DIP Admin Support	0	0	250	0	250	0	250
Local Consultants (25 days @ \$50)	1,287	0	963	0	2,250	0	2,250
Enumerators & logistic support	1,128	0	1,122	1,250	2,250	1,250	3,500
<b>SUBTOTAL I.</b>	<b>6,777</b>	<b>20,681</b>	<b>12,773</b>	<b>50,517</b>	<b>19,550</b>	<b>70,100</b>	<b>89,650</b>
<b>II. EVALUATIONS</b>							
Consultants	0	0	10,000	3,000	10,000	3,000	13,000
Travel/Per Diem	0	0	5,000	2,000	5,000	2,000	7,000
Admin/Report Cost	0	0	1,500	0	1,500	0	1,500
Midterm/Final Evi Local fees, per diem	0	0	3,500	0	3,500	0	3,500
<b>SUBTOTAL II.</b>	<b>0</b>	<b>0</b>	<b>20,000</b>	<b>5,000</b>	<b>20,000</b>	<b>5,000</b>	<b>25,000</b>
<b>III. INDIRECT COSTS (See G &amp; A line item)</b>							
<b>IV. OTHER PROGRAM COSTS</b>							

**1991 COUNTRY PROJECT PIPELINE ANALYSIS: REPORT FORM A  
INTERNATIONAL EYE FOUNDATION/GUATEMALA**

COUNTRY	Actual Expenditures 7/1/90 - 9/30/91		Projected Expenditures 10/1/91 - 6/30/93		Agreement Budget 7/1/90 - 6/30/93		
	AID	IEF	AID	IEF	AID	IEF	TOTAL
<b>A. PERSONNEL</b>							
1. Project Director (50%)	19,500	0	44,000	0	63,500	0	63,500
2. Project Coord. Fringe (25%)	25,000 4,500	0 0	53,000 14,952	10,000 2,500	78,000 19,452	10,000 2,500	88,000 21,952
3. Field Staff	19,814	0	44,086	0	63,900	0	63,900
<b>SUBTOTAL IV. A.</b>	<b>68,814</b>	<b>0</b>	<b>156,038</b>	<b>12,500</b>	<b>224,852</b>	<b>12,500</b>	<b>237,352</b>
<b>B. TRAVEL AND PER DIEM</b>							
1. Short-term Staff travel & per d	4,053	0	9,597	0	13,650	0	13,650
2. Long-term Project Coordinator Relocate (rt air) Shipping	0 101	0 0	1,775 899	0 0	1,775 1,000	0 0	1,775 1,000
<b>Subtotal IV. B.</b>	<b>4,154</b>	<b>0</b>	<b>12,271</b>	<b>0</b>	<b>16,425</b>	<b>0</b>	<b>16,425</b>
<b>C. Other Direct Costs</b>							
1. Vehicle Operat. Fuel Maint./Spares Ins/Lic/Reg	6,076 1,017 563	0 0 1,400	9,124 7,948 0	0 0 4,375	15,200 9,528 0	0 0 5,775	15,200 9,528 5,775
3. Office Operations Office Rent Telephone Postage/Courier	1,480 173 28	580 0 0	6,270 227 672	0 1,300 0	7,750 400 700	0 1,300 0	7,750 1,700 700
4. Training Sessions Per Diems Supplies Facilities	707 560 0	0 0 0	2,293 940 1,500	0 0 0	3,000 1,500 1,500	0 0 0	3,000 1,500 1,500
<b>Subtotal IV. C.</b>	<b>10,604</b>	<b>1,980</b>	<b>28,974</b>	<b>5,675</b>	<b>39,578</b>	<b>7,075</b>	<b>46,653</b>
<b>SUBTOTAL IV. A.B.C.</b>	<b>83,572</b>	<b>1,980</b>	<b>197,283</b>	<b>18,175</b>	<b>280,855</b>	<b>19,575</b>	<b>300,430</b>
<b>SUBTOTAL</b>	<b>90,349</b>	<b>22,661</b>	<b>230,056</b>	<b>73,692</b>	<b>320,405</b>	<b>94,675</b>	<b>415,080</b>
<b>G &amp; A 24.41%</b>	<b>21,776</b>	<b>751</b>	<b>56,069</b>	<b>14,005</b>	<b>77,845</b>	<b>14,115</b>	<b>91,960</b>
<b>TOTAL</b>	<b>112,125</b>	<b>23,412</b>	<b>286,125</b>	<b>87,697</b>	<b>398,250</b>	<b>108,790</b>	<b>507,040</b>



**ANNEX**

CHV's  
Topics Of CHV's Training

Wednesday, 11 September 1991

- 9:00 - Vitamin A
  - Diseases originated by vitamin A malnutrition
  - Acute respiratory infection
  - Diarrhea
  - Extended Plan for Immunization
  
- 11:00 - Coffee break
  
- 11:30 - Sources of vitamin A
  
- 12:00 - Lunch
  
  
- 2:00 - Gardeners
  - Gardening - its importance and its varieties
  - Newly introduced and native plants rich in B-carotene
  - Techniques for soil preservation
  
- 4:00 - Coffee break
  
- 4:30 - Production of fertilizers
  - Fertilization
  - Seed production

Thursday, 12 September 1991

- 8:00 - Farming techniques
  - How to use the household register form
  
- 10:00 - Coffee break
  
- 10:30 - Practiced using the household register form in groups
  
- 12:00 - Lunch

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2:00 - Farming techniques for carrots, beets and acelga  
(Alberto Tzip)

2:30 - Discussed normal growth and development  
(Carlos Teni)

3:00 - Nutrition  
(Alejandro Xol)

3:30 - Coffee break

4:00 - Malnutrition  
(Oscar Teni)

Friday, 13 September 1991

8:00 - Breastfeeding  
(Claudia Suc)

8:30 - Child survival  
(Lorena Delgado)

9:00 - Cholera  
(Lety de Juarez)

9:30 - Using proper hygienic preparation for foods  
(N. Suc)

10:00 - Coffee break

11:30 - Discussed techniques in projecting material to the  
community  
(Yaneth de Bedoya)

12:00 - Lunch

2:00 - Cultural activities

## NUTRITION FACTS:

1. FACTS ON FOOD PRODUCTION AND STORAGE
  - A. Use of improved varieties of food crops will increase the household food supply.
  - B. Growing maize, beans, root crops (sweet potatoes, carrots), vegetables, and fruits will ensure that families have food the whole year.
  - C. Growing many different types of food will supply a variety of food in family meals.
  - D. Growing more pumpkins, sweet potatoes, beans, soy beans, and other vegetables along with field crops in the rainy season, improves and increases the family food supply.
  - E. Growing dark green vegetables like quilete and apazote, and orange vegetables like pumpkins, and orange fruits like papayas and mangos during the dry season will improve family meals.
  - F. Planting fruit trees, such as papaws, guavas, mangoes, bananas and citrus is easy and will provide good snacks for the family. Plant more trees if you want to sell fruit in the market.
  - G. Many people have a vegetable garden at their house. Growing vegetables can be fun for the family. Vegetable gardens do not require large spaces; you can also use the space next to the house or even empty containers.
  - H. Oilseeds, such as groundnut, sunflower, pumpkin and soybeans should be grown and used to improve family meals.
  - I. Families can be assured of well fed members if they keep enough food of different types to last until the next harvest.

## NUTRITION FACTS:

2. FACTS ON CHOOSING FOOD FOR THE FAMILY
  - A. Beans, groundnuts, cheese, and eggs are as good as meat for a meal.
  - B. Dark green vegetables like quilete, bleño, apazote, chipilin and orange vegetables like pumpkin and camote have more food value than pale vegetables.
  - C. Yellow maize has more vitamins than white maize.
  - D. Milk is better for children than soft drinks.
  - E. Fresh fruits are better for snacks than packaged foods bought at the market.

## NUTRITION FACTS:

3.       FACTS ON FEEDING ADULTS AND OLDER CHILDREN
  - A.    People who work hard in the field need to eat more food to be strong.
  - B.    Pregnant or breastfeeding women work hard and need more food than men.
  - C.    Children who are given food in the morning before going to school are in general more alert in class.
  - D.    Healthy in between meals snacks like fruits help children to grow well.

## NUTRITION FACTS:

### 4. FACTS ON NUTRITION AND WOMEN

- A. Women who are pregnant need extra food and rest for the growth of a healthy baby.
- B. Pregnant women need a great variety of food to increase the chances of having a healthy baby, to help avoid complications and to remain healthy herself. There are no foods that should be avoided during pregnancy.
- C. Frequent pregnancies weaken the mother and increase the risk of having a small weak baby.
- D. Getting pregnant at an early age or very late age increases the health risks for both mother and baby.
- E. If a mother rests 2-3 years between pregnancies, she can breastfeed for a long time, have time to care for the baby properly and can fully recover from child bearing.
- F. Girls who are healthy and well-fed during their own childhood and teenage years have fewer problems in pregnancy and childbirth. Adolescent girls also need a variety of good foods to grow well.

## NUTRITION FACTS:

### 5. FACTS ON BREASTFEEDING

- A. Breastmilk alone is the best food and drink for babies until they are 4-6 months old, and they need nothing else.
- B. Frequent sucking is needed to produce enough breastmilk for the baby's needs.
- C. Babies should start to breastfeed as soon as possible after birth. Virtually every mother can breastfeed her baby.
- D. Children need to be breastfed until they are at least two years old.
- E. It is always safe for sick mothers to continue breastfeeding. If a mother is forced to stop for a few days she can start again if the baby suckles frequently.
- F. It is safe for pregnant mothers to breastfeed.
- G. Bottle-feeding can lead to serious illness and death.

## NUTRITION FACTS:

### 6. FACTS ON FEEDING INFANTS AND PRESCHOOL CHILDREN

- A. Breast milk alone is not enough after the age of 4 months. Other foods need to be introduced gradually in order for the baby to continue to grow well.
- B. The right foods for babies aged around 4-6 months are mixed atole. You can mix many different types of foods you have available in the house such as mashed banana, sweet potato, papaw and other fruit. Breastfeeding also needs to be continued. Try making different recipes with the foods you have available.
- C. Frequent feeding is necessary for young children because they have small stomachs and cannot eat much at one time.
- D. Babies aged 6-8 months are more likely to get enough if fed at least 4 times a day in addition to breast feeding.
- E. At around 8 months a child needs to start eating the family meals in addition to weaning foods and breast milk.
- F. Young children that are given snacks between meals are likely to eat enough food. Good snacks are fruits, boiled yucca and pumpkin with sugar and cinnamon.
- G. Children with diarrhea often die because they do not drink enough. They need to be given plenty of fluids and food, as well as should continue to be breast fed.
- H. Children recovering from an illness need extra food to regain lost weight and strength.
- I. All children need foods rich in vitamin A like quilete, carrots, sweet potatoes, papayas, and mangos.

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## NUTRITION FACTS:

### 7. FACTS ON CHILD GROWTH

- A. Children often stop gaining weight when they start weaning. At this time their growth needs to be watched carefully. If the child is not gaining weight, something is wrong.
- B. Children who are malnourished and/or have measles are at risk of serious eye disease. They need to be taken to the clinic immediately for a complete course of vitamin A capsules.
- C. After an illness, children need extra food. Add a small amount of lard/oil to the family food, and try to add Vitamin A rich foods.
- D. Vitamin A comes from breastmilk, dark green leafy vegetables and orange and yellow fruits and vegetables.
- E. Children often lack vitamin A in their bodies. Vitamin A protects children from many illness like diarrhea and measles.
- F. If a child has diarrhea or measles, vitamin A is lost from the child's body. You can replace vitamin A by breastfeeding more often, and by feeding the child fruits and vegetables.

## NUTRITION FACTS:

### 8. IMMUNIZATION

- A. Immunization protects against several major diseases. A child who is not immunized is more likely to become undernourished, to become disabled, and to die.
- B. A child who is not immunized can get measles and whooping cough which can kill or weaken your child. Measles is also a major cause of malnutrition and blindness.
- C. Breastfeeding is a kind of immunization against several diseases. It is important to breastfeed and to immunize your child.
- D. All children should be immunized by the first year of life. The child must complete all immunizations. This will take 4 to 5 visits to the clinic during the year.
- E. It is safe to immunize a sick child.
- F. Sometimes children who receive immunizations cry, develop a rash, or a fever. Give your child extra foods and liquids. If the problems continues more than three days, go to the health center.
- G. Every women between the ages of 15 and 44 should be fully immunized against tetanus.

## NUTRITION FACTS:

### 9. DIARRHEA

- A. Many children get diarrhea throughout the year. Diarrhea is dangerous because it drains liquid from the child's body. As soon as diarrhea starts, it is essential to give the child extra drinks to replace the liquids that are lost.
- B. Suitable drinks to give a child with diarrhea are: breastmilk, gruels, juice, soups, teas, and water from boiling rice.
- C. Sometimes the health center has packets of Litrasol which is mixed with water and given to children with diarrhea. This is a special drink that you should ask the health center about.
- D. Litrasol should be mixed with clean water and given to the child with diarrhea every time a watery stool is passed.
- E. If you do not have any of these drinks available, weak tea is also good for diarrhea.
- F. Give liquids to the child from a cup and not a bottle. For small children use a spoon. If the child vomits, wait for a few minutes and begin again.
- G. Give extra liquids and food until the diarrhea has stopped.
- H. A child with diarrhea needs extra foods; don't stop feeding your child.
- I. Children who are sick usually have less appetite, so offer small amounts frequently.
- J. See the health center if the child has no tears or has too much diarrhea. If the health center is far, ask your neighbor for help.
- K. Most medicines for diarrhea will not help your child and they are expensive to buy.
- L. Diarrhea and other diseases can be prevented by using latrines and keeping them clean.
- M. Washing hands very well after using the latrine and before handling food prevents diarrhea and other diseases.

## NUTRITION FACTS:

### 10. COUGHS

- A. Most children get coughs and colds and most get better by themselves. Sometimes children get pneumonia and they need special attention.
- B. If a child with a cough is breathing much too rapidly, then the child is in danger. Bring the child to a clinic immediately.
- C. Families can help prevent pneumonia by making sure babies are breastfed for at least 6 months and that all children are well-fed and immunized.
- D. A child with a cough or cold should be helped to eat and drink plenty of liquids.
- E. A child with a cough or cold should be kept warm, but not hot and should breath clean, non-smoky air.

1991  
USAID Health and Child Survival Project  
Questionnaire

with AIDS/HIV Activities Reporting Schedule

**PVO Grant**

	Pages
Main Schedule.....	1 – 6
Schedule 1 – Demographic.....	7
Schedule 2 – Diarrheal Disease Control.....	8 – 9
Schedule 3 – Immunization.....	10 – 11
Schedule 4 – Nutrition.....	12 – 13
Schedule 5 – High Risk Births.....	14 – 15
Schedule 6 – AIDS/HIV Activities.....	16 – 17
Schedule 7 – Other Health and Child Survival.....	18 – 19

Country Guatemala

Project Title FY 90 Vitamin A Grant to IEF

Project Number 9380IEF.03

Name(s) of Person(s) responding to the questionnaire: Mr. John Barrows

Title(s) Child Survival/Vitamin A Coordinator Date: 10-31-91



# USAID HEALTH AND CHILD SURVIVAL PROJECT QUESTIONNAIRE – FY 91

## 1. Percentage Attributions to Program Functions

This question should be answered in two steps. **First complete Column A, and then complete Column B.** This list of program functions is nearly compatible with the "Activity Codes" in the Agency's AC/SI system. If you are reporting attributions in this questionnaire which are different from those reported in the FY 1993 ABS, please note the reason for the discrepancy. The "AC" code corresponding to the USAID Health Information System category is displayed in parentheses for each program function.

This year, the questionnaire includes a new category for **Environmental Health** which does not correspond exactly to any of the activity codes available for attribution through the AC/SI system. In this questionnaire, environmental health refers to activity encompassing those diseases and health problems caused by or aggravated by environmental degradation. Activities in the following areas pursued for specific health objectives may be attributed to **Environmental Health**: wastewater management; solid waste management; air pollution control; toxic radiological and hazardous waste management; occupational health; injury prevention and control, and food hygiene. (Water and sanitation for health and vector-borne disease control should be attributed to the codes established specifically for those activities.)

**Step 1 – In Column A** write the percent of the Life-of-Project authorized budget (from all USAID dollar funding accounts) that is attributable to each of the functions listed below. The percentages in Column A should sum to 100%.

**Step 2 – If the project has a child survival component** complete **Column B.** The entry in Column B should be the percentage of the entry in Column A devoted to Child Survival; for example, if 40% of the project is to Immunization/Vaccination and all of that attribution is for child survival, enter 100% in Column B.

**PLEASE REVIEW THE EXAMPLE BELOW BEFORE COMPLETING THE TABLE.**

### EXAMPLE

	Column A Total Percent Attribution	Column B Percent for Child Survival	Complete Schedule 1 and...
a. Diarrheal Disease/Oral Rehydration.....(HEDD)	40%	100%	↓ Schedule 2
-	-	-	-
-	-	-	-
m. Water and Sanitation for Health.....(HEWH)	60%	20%	↓ Schedule 7
-	-	-	-
-	-	-	-
-	-	-	-
<b>TOTAL, All Functions</b>	<b>100%</b>		

↓

This means that 20% of the water and sanitation component of the project is attributed to child survival.

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# USAID HEALTH AND CHILD SURVIVAL QUESTIONNAIRE – FY 91

## FUNDING INFORMATION

10. What is the total USAID authorized LIFE-OF-PROJECT funding for this project or subproject (authorized dollar funds from ALL USAID funding accounts)? 458,000  
\$ \_\_\_\_\_

11. Does this project receive PL 480 funding (for example, for commodities or ocean freight). 1 – Yes → ANSWER ITEM 12 AND 13  
② – No } SKIP NOW TO ITEM 14  
9 – Don't Know }

12. In the spaces provided, indicate the total PL 480 funding received by the project or subproject during FY 91 (Oct. 1, 1990 to Sept. 30, 1991). AMOUNT

a. PL-480, Title I.....▶	\$ _____
b. PL-480, Title II (including the value of food and monetization).....▶	\$ _____
c. PL-480, Title III.....▶	\$ _____

13. Please describe briefly how the PL 480 funding was used in the project during FY 91. (Use separate sheet if necessary).

14. Activities Involving the Private Sector of the Host Country

a. What type(s) of initiatives to stimulate or support the local private sector are a part of this project?

(CIRCLE ALL THAT APPLY)

n/a

- 1 – Private production of health care goods or commodities.
- 2 – Assistance to privatize public health programs or services.
- 3 – Assistance to regulate private sector health services or commodity production and distribution.
- 4 – Training of private sector health care providers.
- 5 – Involvement of for-profit businesses in project activities.
- 6 – Other \_\_\_\_\_  
(Please specify)

b. Of the total USAID Life-of-Project funding, estimate the percentage for the activities circled in question 16-a. \_\_\_\_\_ %

\*Codes for "Source": DC: Data Collection System; BG: Best Guess; DK: Don't Know

AS

# USAID HEALTH AND CHILD SURVIVAL QUESTIONNAIRE - FY 91

## HIGHLIGHTS

19. The primary uses of project highlights are for Congressional and other reporting. Please take a few minutes to make your project come alive for that reporting. Lively descriptions of specific project activities from FY 91 enhance the likelihood that your project will be described in reports such as the annual Report To Congress on Child Survival. Use the examples below as starting points for your description. (Attach additional sheets if necessary.)
- Significant Success Stories:** (Example: Involving a locally based firm with expertise in social marketing strengthened the demand for ORS packets, resulting in an increase in the ORT USE RATE from 10% in 1990 to 25% in 1991...)
  - Lessons Learned:** (Example: An operations research study showed that one incentive to continuing participation in the formal health sector was a "successful" first encounter; therefore, health workers were trained to spend extra time with new clients...)
  - Anecdotes:** (Example: During a visit to a remote village, the young daughter of the village chief interrupted her mother to explain the proper technique for preparing ORS. This reflects the effect of training students in the use of ORS...)
  - Policy Change:** (Example: Data from a major survey showed a shift in dietary practice to less nutritious foods leading the government to modify its pricing policy...)
  - Relation to Country Programs/Strategy:** (Example: The project's major accomplishment is strengthening of the MOH's Family Health Division. In addition to the development of a strong financial control and accounting system, the project supported supervisory training which has facilitated the integration of services in health centers...)

20. Because photographs can often communicate important concepts to busy decision makers much more quickly than words, can you include photographs to supplement the above text? (If yes, please include credit/caption information, including the location and year of the photo on a separate sheet and place picture, slide, or negative in an envelope.) Do not write on photos.

Photographs included? 1 - Yes  2 - No

Project Number: 93801EF.03

Subproject Number: 03

# Schedule 1 DEMOGRAPHIC CHARACTERISTICS/PVO SCHEDULE

(Continued)

1 - 6 Is the population served living primarily in an urban or rural environment? (CIRCLE ONE)

1 - Primarily urban  
(If project serves primarily urban population or peri urban, please describe strategies employed).....

- ② Primarily rural
- 3 - Mixed
- 4 - Don't know

1 - 7 If you use a demographic data collection system, please describe how data are collected and analyzed.

Community Health Volunteers (CHVs) register all households with children under five years of age and with pregnant women. Information is abstracted from the registers by project staff on a monthly basis. Reports are summarized by supervisors for submission to the Project Coedinator.

## Schedule 2 DIARRHEAL DISEASE CONTROL

(Continued)

### STRATEGIES

2 - 9	During FY 91, did the project sponsor, promote or participate in any of the following strategies or activities designed to prevent or treat diarrheal diseases or dehydration? (PLEASE CIRCLE A RESPONSE FOR EACH OF THE STRATEGIES LISTED BELOW.)	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW
	a. Free distribution of ORS packets through the public sector.....▶	1	2	3	9
	b. The selling of ORS packets through the public sector.....▶	1	2	3	9
	c. Marketing of ORS packets through commercial outlets or private health care providers.....▶	1	2	3	9
	d. Promotion of sugar/salt solution prepared in the home.....▶	1	2	3	9
	e. Promotion of other home-based solutions.....▶	1	2	3	9
	f. Promotion of continued breastfeeding during diarrhea.....▶	1	2	3	9
	g. Promotion of other appropriate feeding during and after diarrhea.....▶	1	2	3	9
	h. Hygiene education.....▶	1	2	3	9
	i. Improved water or sanitation.....▶	1	2	3	9
	j. Modification of curriculum in medical or nursing schools.....▶	1	2	3	9

### TECHNICAL ASSISTANCE

2 - 10	During FY 91, did the project provide technical assistance for improving diarrheal disease control programs? (CIRCLE ONE)	1 - Yes, Substantial Activity	3 - No
		2 - Yes, Minor Activity	9 - Don't Know

### CHILD SURVIVAL INDICATORS

2 - 11	What is the ORT Use Rate (see the Instructions for Information on definitions) in the project area?	
	a. ORT Use Rate.....▶	
	b. Date (mo/yr) data was collected.....▶	
	c. Source of the data used to make the estimate.....▶	*DC BG DK
	d. If a data collection system was used, please describe it. If possible, please include in the description the agency responsible for the system (MOH, WHO, UNICEF), the scope of the system (national or project area specific), the permanence of the system (special study or ongoing monitoring system), the methodology of collection (sample survey, clinic-based statistics, village-based statistics), and the computational procedure (weighting in a sample, weighting of data from clinics or villages, etc.). (Attach additional sheets if necessary.)	

### ADDITIONAL BACKGROUND INFORMATION

2 - 12 Please provide any other background information which would enable us to understand better the unique nature of the diarrheal disease control component of the project including a description of any activities not identified above, any specific lessons learned, any special steps taken to promote long-term sustainability, etc. (Attach additional sheets if necessary.)

\*Source Codes: DC: Data Collection System; BG: Best Guess; DK: Don't Know

## Schedule 3 IMMUNIZATION

(Continued)

### STRATEGIES

3 - 9 During FY 91, did the project sponsor, promote or participate in any of the following vaccination strategies or activities?

(CIRCLE THE CHOICE THAT MOST NEARLY APPLIES FOR EACH STRATEGY)

	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW
a. Mass Immunization Campaigns.....	1	2	3	9
b. Fixed Immunization Center(s).....	1	2	3	9
c. Mobile Vaccination Team(s).....	1	2	3	9
d. Social Marketing to Stimulate Demand.....	1	2	3	9
e. Local Production of Vaccines.....	1	2	3	9

### TECHNICAL ASSISTANCE

3 - 10 During FY 91, did the project provide technical assistance for improving immunization programs? (CIRCLE ONE)

- 1 - Yes, Substantial Activity
- 2 - Yes, Minor Activity
- 3 - No
- 4 - Don't Know

### CHILD SURVIVAL INDICATORS

3 - 11 a. What is the vaccination coverage rate (see instruction guide for information on definitions) in the project area?

	BCG	DPT3	Polio3	Measles	Tetanus
Percent of fully vaccinated children, 12 - 23 mos. of age...					
Date (mo/yr) data was collected.....					
Source of information (CIRCLE ONE).....	*DC BG DK				

b. If a data collection system was used, please describe it. If possible, please include in the description the agency responsible for the system (MOH, WHO, UNICEF), the scope of the system (national or project area specific), the permanence of the system (special study or ongoing monitoring system), the methodology of collection (sample survey, clinic-based statistics, village-based statistics), and the computational procedure (weighting in a sample, weighting of data from clinics or villages, etc). (Attach additional sheets if necessary.)

### ADDITIONAL BACKGROUND INFORMATION

3 - 12 Please provide any other background information which would enable us to understand better the unique nature of the immunization component of the project including a description of any activities not identified above, any specific lessons learned, any special steps taken to promote long-term sustainability, etc. Due to the newly announced measles initiative, we are particularly interested to hear about any measles activity undertaken through this project. (Attach additional sheets if necessary.)

**Source Codes:** DC: Data Collection System; BG: Best Guess; DK: Don't Know

Country: \_\_\_\_\_

Project Number: \_\_\_\_\_

Subproject Number: \_\_\_\_\_

## Schedule 4 NUTRITION (Continued)

### TRAINING

- 4 - 4 During FY 91, were project funds committed to support training in **infant and child feeding practices and/or growth monitoring?** (CIRCLE ONE)
- 1 - Yes →  
 2 - No  
 9 - Don't Know
- COMPLETE ITEM 4 - 5  
 } SKIP NOW TO ITEM 4 - 6

4 - 5 Which of the following types of people received training as a consequence of project support? (CIRCLE ALL THAT APPLY)	Infant and Child Feeding Practices				Growth Monitoring			
	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW	YES Substantial Activity	YES Minor Activity	NO	DONT KNOW
a. Physicians .....	1	2	<input checked="" type="radio"/> 3	9	1	2	<input checked="" type="radio"/> 3	9
b. Nurses .....	1	2	<input checked="" type="radio"/> 3	9	1	2	<input checked="" type="radio"/> 3	9
c. Community Health Workers.....	1	<input checked="" type="radio"/> 2	3	9	1	<input checked="" type="radio"/> 2	3	9
d. Traditional Healers.....	1	2	<input checked="" type="radio"/> 3	9	1	2	<input checked="" type="radio"/> 3	9
e. Community Leaders and Family Members.....	1	<input checked="" type="radio"/> 2	3	9	1	<input checked="" type="radio"/> 2	3	9
f. Other .....	1	2	<input checked="" type="radio"/> 3	9	1	2	<input checked="" type="radio"/> 3	9

### TECHNICAL ASSISTANCE

- 4 - 6 During FY 91, were project funds committed to the provision of **technical assistance** in support of nutrition activities? (CIRCLE ONE ANSWER)
- 1 - Yes, Substantial Activity  
 2 - Yes, Minor Activity  
 3 - No  
 9 - Don't Know

### CHILD SURVIVAL INDICATORS

- 4 - 7 a. What is the rate of **malnutrition** (see instruction guide for clarification of definitions) in the target group served by the project?

	Group 1	Group 2	Group 3	Group 4
Target Group.....	Children 0-11 mos.	Children 12-23 mos.	Other Under 5 yrs. (Specify)	Other (Specify)
Estimated Rate of Malnutrition.....			71%	
Date (mo/yr) of estimate.....			1988	
Source of Information (CIRCLE ONE)	*DC BG DK	*DC BG DK	<input checked="" type="radio"/> DC BG DK	*DC BG DK

- b. If a data collection system was used, please describe it. If possible, please include in the description the agency responsible for the system (MOH, UNICEF, WHO), the scope of the system (national or project area specific), the permanence of the system (special study or ongoing monitoring system), the methodology of the collection (sample survey, clinic-based statistics or village-based statistics) and the computation procedures (weighting in a sample, weighting of data from clinics or villages, etc.) (Attach additional sheets if necessary)

Baseline survey conducted by COGAAT (Cooperacion Guatemalteco Alemana Alimentos Por Trabajo) financed by the German Government.

### ADDITIONAL BACKGROUND INFORMATION

- 4 - 8 Please describe any other background information which would enable us to understand better the unique nature of the nutrition component of the project including a description of any activities not identified above, any specific lessons learned, any special steps taken to promote long-term sustainability, etc. (Attach additional sheets if necessary.)

**Source Codes:** DC: Data Collection System; BG: Best Guess; DK: Don't Know