

PD-ABE-702  
86309

PROJECT CONCERN INTERNATIONAL  
A CHILD SURVIVAL INITIATIVE  
FOR  
SANTIAGO ATITLAN AND SOLOLA, GUATEMALA

PART II

SUBMITTED TO  
THE UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT  
WASHINGTON, D.C.

FOR THE PERIOD SEPTEMBER 1989 THROUGH AUGUST 1994

Representative: Mr. David Wilson (619) 279-9690  
PROJECT CONCERN INTERNATIONAL, 3550 AFTON ROAD, SAN DIEGO, CA 92123

23 DECEMBER 1988

## TABLE OF CONTENTS

	Page
A. SUMMARY DESCRIPTION OF PROJECT.....	1
B. COUNTRY PROJECT SUMMARY TABLE.....	2
C. BACKGROUND	
C.1. Project location.....	3
C.2. Major health problems.....	3
C.3. Current status of programming.....	4
C.4. Current infrastructure.....	4
C.5. Past experience.....	5
C.6. Integration into host country strategies.....	5
D. PROJECT DESIGN	
D.1. Duration.....	6
D.2. Goals and objectives.....	6
D.3. Project interventions.....	11
D.4. Proposed project approaches.....	11
D.5. Population served.....	12
D.6. Current activities.....	12
D.7. Coordinating organizations.....	12
D.8. Sustainability.....	13
E. HUMAN RESOURCES	
E.1. Key positions/person months.....	13
E.2. Administration/management.....	14
E.3. Health services personnel.....	14
F. PROJECT HEALTH INFORMATION SYSTEM	
F.1. Budget.....	15
F.2. Methodology.....	15
F.3. Reports and evaluations.....	16
F.4. Technical assistance.....	16
F.5. Data collection.....	16
G. SCHEDULE OF ACTIVITIES	
G.1. Schedule of activities (chart).....	16
G.2. Key constraints.....	16
H. FINANCIAL PLAN AND SUSTAINABILITY	
H.1. Estimated country budget.....	17
H.2. Justification.....	17
H.3. Strategies for Sustainability.....	17
APPENDICES	
1. Biodata of Key Staff.....	18
2. Letters of Support.....	20
3. Annual Evaluations/Reports.....	23
4. Target population .....	24
5. Schedule of activities (chart).....	25
6. Estimated country budget.....	27
7. Project area map.....	31
8. Morbidity and mortality rates for Solola.....	32

## A. SUMMARY DESCRIPTION OF PROJECT

The project area encompasses the entire Department of Solola located in the southwest highlands and piedmont area of Guatemala 126 kms. west of the capital. Solola consists of 19 municipalities, eight of which lie on the shores of Lake Atitlan where PCI has had project activities in and around Santiago Atitlan for the past 13 years. The target populations comprise approximately 70,000 women of childbearing age and 34,000 children under the age of 6 within a total project area population of 194,749.

Key interventions will be immunizations (EPI), oral rehydration therapy (ORT), growth monitoring and nutrition, safe birthing practices/birth spacing, and treatment of acute respiratory infections. The department-wide project in Solola will entail the formation of a PCI Technical Advisory Team to provide support to the MOH in order to increase its ability to carry out Child Survival interventions.

The existing project in Santiago Atitlan will continue work already begun in immunization coverage, the use of ORT, and growth monitoring and nutrition.

The main goal of the project is to increase the capacity of the MOH structure in Solola Department to effectively carry out GOBI interventions as well as to identify and treat acute respiratory infections. The aim is to reduce morbidity and mortality rates among women of childbearing age, infants, and children. Measurable project objectives (detailed in the body of the proposal) are to increase coverage of immunization, use of ORT, treatment of ARI, use of birth spacing and safe birth practices, and to reduce the rate of malnutrition among mothers and children.

Funds requested from USAID:	\$1,738,600
Funds provided by PCI:	579,500
Annual project budgets:	
1990	513,000
1991	452,900
1992	490,600
1993	455,600
1994	406,000
	<u>\$2,318,100</u>

**FORMAT E: COUNTRY PROJECT SUMMARY TABLE**

ORGANIZATION: PROJECT CONCERN INTERNATIONAL

COUNTRY: Guatemala

PROJECT TITLE: Child Survival V

**INTERVENTIONS AND TARGET POPULATION:**

NUMBER:	< 12 Months	< 24 Months	< 60 Months* ( < 5 Years)	< 72 Months** ( < 6 Years)	Women 15 - 45 Years	Total Population In Service Area
1. ORT	7,591	16,350	33,865			194,749
2. IMMUNIZATION	7,591	16,350	33,865			194,749
3. NUTRITION			33,865			194,749
4. VITAMIN A						
5. CHILD SPACING					70,000	
6. OTHER (specify)						

< = less than    \*\*Only for Vitamin A Interventions  
 \*For Child Survival Interventions

**III. ACTIVITIES:** Circle all activity codes\* that apply

1. ORT	(1) (2) (3) (4) (5) (6) /27
2. IMMUNIZATION	7 /8 (9) (10) /27
3. NUTRITION	11 /12 (13) (14) (15) (16) (17) /27
4. VITAMIN A	18 /19 /20 /21 /22 /27
5. CHILD SPACING	(23) (24) /25 (26) /27
6. OTHER (specify)	ARI & HIS

\* Activity Codes:

- |  |  |
|--|--|
| 1 - distribute ORS packets                               | 15 - promote growth monitoring                                 |
| 2 - ORT training   | 16 - training in breastfeeding & weaning practices             |
| 3 - promote ORT home-mix                                 | 17 - training in growth monitoring                             |
| 4 - promote ORT home-base fluids                         | 18 - Vit A Nutritional education                               |
| 5 - dietary management of diarrhea                       | 19 - Vit A Food production                                     |
| 6 - hygiene education                                    | 20 - Vit A Supplementation                                     |
| 7 - distribute vaccines                                  | 21 - Vit A Deficiency treatment                                |
| 8 - immunize mother/children                             | 22 - Vit A Fortification                                       |
| 9 - promote immunization                                 | 23 - distribute contraceptives                                 |
| 10 - training in immunization                            | 24 - sponsor training sessions on high-risk births             |
| 11 - distribute or provide food                          | 25 - promote breastfeeding to delay conception or space births |
| 12 - distribute or provide Iron & Folic acid             | 26 - promote child spacing or family planning                  |
| 13 - distribute or provide scales & growth charts        | 27 - other (specify)   |
| 14 - counsel mother on breastfeeding & weaning practices |  |

III. Duration: Start Date 1 September 1989 Estimated Completion Date: 31 August 1994

**IV. Budget:**

A. By Year ( In thousands of dollars \$000:	A. I. D. CONTRIBUTION	PVO CONTRIBUTION	OTHER FUNDS	TOTAL
Year 1	332,250	110,750		443,000
Year 2	287,175	95,725		382,900
Year 3	315,450	105,150		420,600
Year 4	289,200	96,400		385,600
Year 5	252,000	84,000		336,000
Sub-total Field Costs	1,476,075	492,025		1,968,100
Sub-total HQ/HO Costs	262,100	87,400		349,500
Total =	1,738,175	579,425		2,317,600

B. % OF TOTAL AID FUNDS REQUESTED BY INTERVENTION	
1. ORT	30 %
2. Immunization	30 %
3. Nutrition	
4. Vitamin A	
5. Child Spacing	
6. Other (specify) ARI - 30 % HIS - 10 %	

## C. PROJECT LOCATION/BACKGROUND

C.1. Location The project is located in the department of Solola, which consists of 19 municipalities considered urban areas, and 263 villages with populations of 50 to 2000 people. The district covers an area of 1,061 sq. kms. which includes Lake Atitlan and the land area surrounding the lake and the mountain-piedmont area to the west-northwest. Eight municipalities lie on the shores of Lake Atitlan. The department is divided into seven health districts. The third most populous district is Santiago, the site of PCI's current CS activities. (Please see project area map, Appendix 7.)

The Solola area was chosen for several reasons: a) PCI has an established presence in the area through its work in Santiago over the past 13 years; b) PCI has been working with the MOH at the district level throughout the CSII grant period and has enjoyed good relations with the MOH at the department level; and c) PCI is fully integrated into the MOH and NGO activities in Solola.

C.2. Major health problems After five years of effort in EPI and ORT and three years' work in the channeling strategy, coverage throughout the department remains low. Efforts have been delayed by supply shortages, strikes, budget cuts, changes in both MOH policy and personnel, and the continuous problem of violence in the Solola area.

In 1987, only 8% of children under age 1 had received the third dose of DPT vaccine. The percentage for polio was 10, measles vaccine for children under 5 years was 13%, and for BCG, 32%. The percent of pregnant women covered by two doses of T.T. was 39.3%. Treatment rates for the MOH for diarrheal disease and acute respiratory infections were 18% and 10%. The percentage of pregnant women in prenatal care with respect to the estimated population of pregnant women (9737) is 38%, which partly explains the low tetanus toxoid coverage.

Malnutrition is considered endemic to the area, with at least 80% of children under 5 years suffering from some degree of malnutrition. Protein-calorie deficiency is the fourth leading cause of death.

Despite low overall immunization coverage, the incidence of vaccine-preventable illnesses such as measles and pertussis is relatively low. However, the actual incidence in the community may be higher than reported, and these illnesses occur in outbreaks which are cyclical; thus, incidence over the long term is unknown.

Despite low coverage with T.T. vaccine of pregnant women and the prevalence of home births attended by TBAs (85%), the incidence of neonatal tetanus is low. A surprisingly high incidence of stillbirths and neonatal asphyxia warrants study. (Please see Appendix 8.)

C.3. Current status of programming PCI adopted the MOH channeling strategy to implement its Child Survival interventions. Channeling refers to the division of health districts into areas and then the areas into 12 sectors, each comprising 25 to 50 houses. Ideally, MOH health care personnel are assigned to each area and are supposed to provide CS interventions (EPI, ORT, ARIs, and growth monitoring) on a house-to-house basis. Owing to personnel shortages and the scarcity of Tzutuil speakers in the MOH, PCI provides trained volunteers in each sector to complement the MOH's work and to provide health education on each of the interventions to individual families. The MCH volunteers provide service to their own communities; they speak Tzutuil and are nonliterate. Because the majority of the MCH volunteers are not literate, the pictorial reporting system developed by PCI with them is an essential part of the channeling system, and the effectiveness of the MCH volunteers depends on a functioning channeling system. The MCH volunteers, rather than MOH personnel, make house-to-house visits to educate, promote vaccines, and distribute ORT packets. They report back on their efforts through the pictorial reporting form. The MOH provides the vaccine, monitors the cold chain, vaccinates and provides the ORT packets. Nutrition intervention continues to be directed primarily toward severely malnourished children on a curative recuperation basis and is not oriented toward growth monitoring, identification of at-risk children, hence is not a preventive intervention.

C.4. Current infrastructure The PCI program in Santiago Atitlan grew from a small clinic operation which began in 1975. Since the late 70's, the project has evolved into a community-based program integrated into the MOH system, with the PCI clinic used as a treatment, referral, and training center. Currently, the program encompasses two nutrition rehabilitation programs, MCH clinic, training systems for CHWs, TBAs, and MCH volunteers, a TB treatment and outreach program, radio health outreach programs, and appropriate technology promotion of smokeless stoves and composting latrines. The undertaking is funded by both Child Survival and Matching Grants with PCI matching funds. The appropriate technology activities are self-financing, the TB project is supported by the MOH, and the MCH clinic has now become 60% self-financed.

Under CS V, it is planned that the existing PHC and related activities will continue but will be either self-financing or supported solely by the MOH. It is foreseen that only an organizational infrastructure would be in place at the end of CS V, in the form of the PCI technical advisory team (TAT) integrated into the MOH departmental office in Solola.

C.5. Past experience From its experience in Santiago Atitlan PCI has learned that making services available does not necessarily create acceptance. Experience with introducing ORT demonstrates that even when ORT solution was available and in convenient form, there remained a number of obstacles to acceptance. As a result of this experience, care is taken to make no assumptions regarding any GOBI interventions until each has been validated by the following process:

1. Condense the activity down to its most essential elements.
2. Determine how the community responds to each of these elements (KAP--knowledge, attitude, and practice--survey, focus groups).
3. Design a health education program to capitalize on the community's practices or to deal with negative practices.
4. Validate.
5. Train.
6. Evaluate.

A further lesson regarding the need to validate assumptions is gleaned from the fact that there appears to be a lack of understanding about the relationship between food intake and growth. In Santiago Atitlan, the malnourished child is regarded as normal because there are so few well-nourished children for comparison. In the absence of a readily apparent normal model against which a comparison can be made and progress measured, it is very difficult to create a basis upon which mothers can begin to grasp the relationship between food intake and growth.

The general applicability of specific lessons learned in Santiago Atitlan may be limited; however, the operational approach which requires that any assumption be validated through a 'zero-based', rational process clearly has general applicability. It is this fundamental lesson from the work in Santiago Atitlan that will form the basis of the work of the PCI advisory team within the Solola Department.

C.6. Integration into host country strategies The PCI plan coincides with the MOH plan. PCI's work is in accord with MOH emphasis on decentralization and AID's efforts to deliver more funds and services to the departments and

communities. The PCI planning process and development of objectives for this proposal were carried out in conjunction with the MOH office in Solola.

For many years PCI has had direct input into the MOH planning process at the department and health district levels. Although the public health system in Guatemala is centralized, there is a move afoot to decentralize planning and decision-making. This would be a welcome change with respect to the work proposed in Solola. It has been the experience of PCI staff in Santiago Atitlan that there are sufficient dedicated and knowledgeable people within the Solola MOH to carry out effective CS interventions in conjunction with PCI and other NGOs working in the department. The history of the PCI program in Santiago Atitlan, and its successful development of a close, cooperative relationship with the MOH provide an excellent base from which to extend such cooperation throughout the department. The MOH has especially relied on PCI's contribution to community-based activities.

#### D. PROJECT DESIGN/DURATION

D.1. Duration The project is proposed for a period of 60 months from October 1989 through September 1994.

D.2. Goals and objectives The goal of PCI in Solola is to decrease morbidity and mortality of children under two years of age from vaccine-preventable illnesses, dehydration secondary to diarrhea, respiratory infection, and protein-calorie malnutrition, and to reduce neonatal and maternal mortality due to unsafe birth practices and close birth spacing.

The objectives include:

##### 1. Immunizations

To vaccinate 80% of all children under one with age-appropriate doses of DPT (i.e., 30% of all children between nine months and one year should have third doses of DPT)

To vaccinate 91% of all children under one with age-appropriate doses of oral polio vaccine (OPV)

To vaccinate 44% of children under one with age-appropriate doses of measles vaccine

To vaccinate 67% of children under one with BCG vaccine

To vaccinate 76% of pregnant women with two doses of tetanus toxoid vaccine

2. Oral rehydration therapy (ORT) For Solola:

To educate 30% of all mothers of children under five in each health district in the management of diarrhea and dehydration (home liquids, ORT, referral) by the end of the fifth year.

Thirty percent of all mothers of children under five in each health district will be able to demonstrate the correct preparation of oral rehydration fluid (ORT or SSS) by the end of the fifth year.

Eighty percent of CHWs in each health district will be able to manage diarrheal diseases and to demonstrate the correct preparation of oral rehydration fluid by the end of the third year.

All MOH health trainers in each district will be knowledgeable in the correct management of diarrheal disease according to severity and will be able to demonstrate the correct preparation of oral rehydration fluids (ORS or SSS) by the end of the second year.

All CHWs in each health district will have adequate monthly supplies (adequate defined by average monthly morbidity in the service area) or ORT packets by the end of the third year.

All MOH health care facilities (health centers and health posts) will have adequate monthly supplies of ORT packets by the end of the second year.

3. Acute respiratory infection (ARI)

Eighty percent of CHWs in each health district will be able to identify the signs and symptoms of respiratory infection (slight, moderate, severe) and to manage each (home treatment, home treatment with antibiotics, referral to health center) by the end of the third year.

All MOH health trainers will be able to identify the signs and symptoms of ARI and the correct management according to severity.

All MOH facilities (health centers and posts) will have adequate monthly supplies (defined by average monthly morbidity) of medicines required to treat ARI (antipyretics, antibiotics).

#### 4. Maternal health

Tentative objectives for safe birth practices in Solcla department include:

To assess mothers' knowledge, beliefs and practices with respect to pregnancy and childbirth

To assess TBAs' knowledge, beliefs and practices with respect to pregnancy and childbirth

To determine (by observation if possible) how deliveries are currently being attended (use of birthing kit, implements, etc.)

To determine what resources are available to the MOH for TBAs

To suggest changes in line with resources available

#### 5. Growth monitoring and nutrition

To assess the knowledge, beliefs and practices of mothers of children under two in each district with respect to child care (breast-feeding patterns, weaning practices, association of growth and developmental milestones, association of hygiene and disease)

To determine which, if any, of these beliefs can be or need to be changed

To determine what resources are available to the MOH and what flexibility exists in the use of these resources.

To suggest changes in line with resources available

Project activities include:

#### IMMUNIZATIONS

In the first six months of the CS grant:

-Determine immunization strategy to be used in each district.

-Determine logistical problems, if any, e.g., vaccines don't arrive on time, too few thermoses, frequent power outages.

-Evaluate health personnel in relation to cold chain monitoring, application of vaccines, missed opportunities, beliefs about vaccinations (KAP survey).

-Determine barriers (KAP survey) to acceptance of vaccines in the community (vaccines make children sick, vaccines are to sterilize children, frequent abscesses, lack of understanding of function).

In second six months:

- Design, with MOH staff, a health education plan to overcome barriers to vaccinations.

Second, third years:

- Carry out health education plan.
- Evaluate results.
- If successful, continue; if unsuccessful, redesign.
- Vaccinate.

Fourth, fifth years:

- Continue to vaccinate.

#### ORT

First year:

- Determine availability of ORT packets and logistical problems, if any.
- With focus groups, determine KAP of mothers in each district toward treatment of diarrhea.
- With MOH personnel, design health education plan for each district (based on PCI model).
- Produce materials.

Second year:

- Train health personnel in each district in health education plan.

Third year:

- Train CHWs, TBAs, storekeepers, community leaders, etc. in health education plan.
- Through CHWs, educate mothers of children under two in the community.

Fourth, fifth years:

- Train, evaluate, adapt, retrain.
- Evaluate mothers of two-year-olds in each district as to levels of knowledge, usage, and ability to correctly prepare ORT.

#### ARI

First year:

- Evaluate MOH personnel in each district as to knowledge about adequate treatment of ARI.
- Determine availability of appropriate medicines.
- Using focus groups, determine KAP of mothers of children under two in relation to ARI.
- With MOH personnel, design ARI health education plan.
- Produce and validate materials.

Second year:

- Train MOH personnel in appropriate treatment for ARI and use of education materials.

Third year:

- Train CHWs, TBAs, storekeepers, etc.
- Educate mothers of children under two.

Fourth and fifth years:

- Continue training efforts.
- Evaluate program, redesign, retrain.

#### NUTRITION

By the end of CS II, PCI's GMP program in Santiago should be in place, but insufficient time will have passed to determine effectiveness of efforts. Activities would be geared toward refining programs and evaluating results.

#### SAFE BIRTH PRACTICES

First year:

- Establish advisory team in Solola.
- Investigate MOH Child Survival objectives in relation to plans to meet those objectives and resources available to carry out plan.
- Investigate current HIS as to accuracy of data, ability to produce data needed for planning, amount of time used to produce the data.
- Determine what special problems exist in each district and how these problems have been overcome or ways in which the districts are still hampered by these problems.
- Design plan to overcome problems in administration, planning, evaluation, logistics, budgeting and HIS.
- Design or re-adapt HIS for the department and each health district using outside technical assistance.
- Write DIP based on plan.

Second year:

- Carry out KAP survey or focus group discussions on immunizations, diarrheal diseases, respiratory diseases in representative communities throughout the department (bilingual investigator essential).
- Analyze results of investigations to determine to what extent community education programs must be individually adapted to each district.
- Evaluate KAP of CHWs in each district.
- Design, test, and adapt health messages.
- Produce materials.
- Hold seminars for district chiefs in management, administration, planning.
- Train health personnel in use of HIS.

- Supervise health personnel in use of system in each district.
- Train MOH trainers (TSR and auxiliary nurses) in techniques for training CHWs.

Third year:

- Follow up management seminars with training.
- Continue supervising HIS system.
- Supervise training of CHWs in each district by MOH trainers.

Fourth and fifth years:

- Continue management seminars.
- Continue supervising HIS system.
- Continue supervising training of CHWs in each district by MOH trainers.
- Supervise education in the community by CHWs.

### D.3. Project interventions

Immunization Activities: 30%

Improve MOH EPI program in department of Solola team through support for HIS and training of MOH personnel to train CHWs. Expand T.T. coverage to three doses for all women of childbearing age.

ORT: 30%

Investigate KAP, design appropriate materials and train MOH personnel to train CHWs throughout Solola.

ARI: 30%

Investigate KAP, design appropriate materials and train MOH personnel to train CHWs in Solola.

H.I.S.: 10%

Design and evaluate computerized HIS for Solola based on family registration or other type of system; implement, evaluate.

D.4. Proposed project approaches PCI will be working on two levels simultaneously in the department of Solola with two different health teams that will be separate but related. The Santiago team will work at the community level directly with MCH volunteers, who will be providing services (ORT packets, GMP), as well as promoting services (vaccinations, education about ARI). Lessons learned will contribute to the programs carried out at the Solola level. The Santiago

program will work primarily on acceptance of CS interventions.

At the Solola level PCI will be working on improving access to CS interventions by working directly with the MOH to improve management skills (planning, evaluation, budgeting), logistics (adequate supplies, transportation) and reporting and monitoring (HIS). The lessons learned in health education in the Santiago program will be adapted to other health districts in Solola.

D.5. Population served Please see table in Appendix 4.

D.6. Current activities The CSV proposal is different both in scope and in activities proposed. The CSII project concentrated on Santiago Atitlan, working directly with and training community volunteers to carry out MOH priorities. The CSV program will continue activities begun in Santiago Atitlan under CSII (EPI, DDC, ARI). It will also add GMP and safe birth practices, and will work through MOH personnel at the department level and in all health districts to improve program management, training and HIS. Its additional training focus will be on the training of MOH trainers.

D.7. Coordinating organizations Since PCI began CSII activities in Santiago, it has been working closely with the MOH at the district level. PCI began contemplating an extension of the program to Solola MOH after discussions with the area chief Consejo Tecnico, and this proposal is a direct result of those discussions, and of Sr. Tecnico's request for assistance. By the end of the five years, PCI will phase over direct operations in Santiago, turning the CS activities over to the district MOH and the clinic to the community. In Solola, the project has been designed with MOH counterparts, with the primary objective to improve their skills so that they can assume direct responsibility for the project by the end of the grant.

PCI signed a basic agreement with the Ministry of Health in January, 1988.

PCI has begun work to establish an association of PVOs operating in the health sector in Solola. The PVOs have been meeting since July 1988. They have valuable community experience, and some are already trying to increase collaboration with the MOH.

PCI has a long-term working relationship with APROFAM, as well as a written contract for APROFAM to provide child spacing education to personnel and volunteers and, through PCI's main clinic and maternal child health clinic, to provide low cost contraceptives to users in the community.

PCI began receiving technical assistance from INCAP in 1988 for its ORT program, and this assistance will likely continue in GMP as well as with evaluations.

D.8. Sustainability PCI will work to improve and strengthen the established infrastructure of the MOH through the training of MOH personnel and the addition of needed equipment (launch, motor, photocopier, computer) which will improve communications and efficiency within the MOH.

E. HUMAN RESOURCES

E.1. Key positions/person months

Program administrator (expatriate: 60 person months)

Responsible for overseeing both Solola and Santiago aspects of program, but principal duties will be in Solola. Will work with counterpart in the MOH (Jefe de Area) and will communicate with national MOH to keep them informed of progress in Solola. One of the principal duties will be to keep Solola MOH moving toward the objectives of the National CS Plan but with activities adapted to Solola. Will be responsible for DIP, annual reports, mid-term evaluation, final evaluation and final reports. Requires MPH in health administration and five or more years' experience in developing country, preferably with MOH.

H.I.S. specialist (expatriate: 30 months)

Will work with counterpart in MOH (statistician) to design a health information system that meets MOH required levels of reporting while providing adequate information to district chiefs, TSR and CHWs. Will work closely with health education specialist to ensure that the HIS can be incorporated into training programs and does not conflict with the health education programs. HIS should produce reliable baseline data, report on progress toward goals and do so with minimum of effort from field staff. Requires HIS and computer skills, with at least two years' experience in setting up similar programs in developing countries.

Health education specialist (expatriate: 60 months)

Will work with counterpart in MOH (social worker and TSR supervisor) as well as counterparts in health districts (district chiefs, TSR and auxiliary nurses). Will help counterparts to determine training needs in each area by first investigating KAP related to immunizations, diarrheal diseases and ARI; will help develop training materials to overcome barriers to these programs, teach counterparts how to validate materials and how to train CHWs. Will oversee CHW training when possible. Will probably require one or two assistants with Quiche and Cakchiquel language skills as

well as health education experience. Should have an MPH in health education and five years' experience in developing country.

(See also Santiago CS job descriptions in section E.3.)

## E.2. Administration/management

a. Project administration will be carried out by the project administrator.

b. Financial management will be provided by the accountant in Santiago and overseen by Project Administrator.

c. Technical content of training and services will be overseen by the health education specialist, the director of community health programs (a Guatemalan physician) in Santiago.

d. The HIS will be managed by the MOH counterpart at MOH with the PCI HIS Specialist providing backup and ensuring quality.

e. At PCI headquarters in San Diego, Paul Dean, MD, MPH, provides technical support with medical and public health issues; Blanca Lomeli, MD, MPH (pending) provides training for field personnel; Barbie Rohrbach, RN, MPH (pending), provides technical guidance on CS and monitoring and evaluation matters; and David Wilson, James Puccetti, and William Ross provide program, administrative, and financial support.

PCI will provide technical assistance from headquarters through regular visits throughout the life of the grant.

E.3. Health services personnel In the Santiago program, supervision and program management will be carried out by a management team (Junta Directiva) composed of the directors of the three sub-programs: administrative, curative care, and community health program.

The director of the administrative program will be responsible for financial management (reports, budgets) of the entire program. The director's staff includes an accounting assistant, receptionist/medical records clerk, pharmacist, driver/mechanic, and maintenance and cleaning personnel.

Director of the curative care/referral center is a Guatemalan physician who supervises three locally trained nurses, a lab tech and a dental tech. The Director of the community health program is also a Guatemalan physician. She works with an assistant and a professional nurse, and together

they program for and supervise six trainer-supervisors and are also in charge of two nutrition centers and a maternal-child health clinic. A fourth trainer-supervisor works in Cerro de Oro. Together they supervise a group of 114 MCH volunteers, 19 TBAs and ten CHWs. Paid staff works full-time. Volunteers work an estimated 15-20 hours per week.

Within the district MOH, PCI coordinates with the district chief, who is both supervisor and care provider. He is assisted by a graduate nurse, a rural health technician whose duty is to oversee CHWs, three auxiliary nurses (who provide clinical services and vaccinations, promotion of ORT and management of ARI in the community), and a sanitation inspector.

One of the problems within the MOH system is that the same people responsible for providing clinical services are also responsible for providing community services (training and supervision of CHWs, for example). The MOH also establishes objectives for clinical coverage as well as community activities (vaccinations, ORT, ARI), with the result that neither is done well, but neither one can be abandoned to dedicate time fully to the other.

E.4. Other staff ODN interns have proved quite useful in assisting with specific tasks in the Santiago program. PCI has explored and will continue to explore the possibility of using Peace Corps and other volunteers in the project.

## F. PROJECT HEALTH INFORMATION SYSTEM

F.1. Budget Apart from baseline surveys, \$8,400 or 0.42% of the budget has been set aside for monitoring and evaluation.

F.2. Method The MOH has created an information system (Sistema Unica de Informacion) to track the same tier indicators as those required by AID. It is based on a family registration system that, because of personnel shortages and distances to cover, is unlikely to be carried out in all health districts. PCI has worked to create a pictorial information system adapted to non-literate health workers. Part of PCI's efforts will be directed toward the creation of a more efficient reporting system that gives the same composite information as that sent now, but which requires less time of field staff. In areas such as Santiago, the family registration will be possible. In others, sample surveys are likely to be used.

### F.3. Reports and evaluations

Preliminary Report on Health Districts	Jan. 1990
D.I.P.	Feb. 1990
First Annual Report	Sept. 1990
Second Annual Report	Sept. 1991
Mid-term Evaluation	Feb. 1992
Third Annual Report	Sept. 1992
Fourth Annual Report	Sept. 1993
Final Report	Sept. 1994

F.4. Technical assistance PCI will use independent consultants for mid-term and final evaluations. Short-term technical assistance will be required to create health education materials (write messages, design illustrations and layout). Technical assistance will also be used to help design the H.I.S.

F.5. Data collection In Santiago, data collection is part of the function of every service provider. MCH volunteers also collect data. Compilation of data is done by the secretary (eventually computerized). In Solola, direct responsibility for data collection will lie with the MOH statistician. Data produced for the MOH is the same data that will be used by PCI.

## G. SCHEDULE OF ACTIVITIES

G.1. Schedule of activities Please refer to the chart in Appendix 5.

G.2. Key constraints Because PCI already has an established presence and an agreement with the MOH, it anticipates few delays at the beginning of the program. Delays caused by political violence have been a recurring constraint on the Santiago program.

Because of the labile economic and political situation in the country as a whole, MOH strikes, and personnel turnover are all likely possibilities in the next five years.

Most of the necessary equipment (computer, photocopier) will already be on hand at start-up. A bi-lingual secretary is also already on staff.

In the unlikely event of a delay in procurement of vehicles and motorcycles, one vehicle can be loaned from the Santiago program.

## H. FINANCIAL PLAN AND SUSTAINABILITY

H.1. Estimated country project budget Please see Appendix 6. Please see also the budget worksheets under separate cover.

H.2. Justification PCI is submitting this proposal for CS V funds for the Guatemala project in order to bring all PCI activity in Guatemala into Child Survival. Currently, the Guatemala project is supported by both a Matching Grant and Child Survival II funding. These dual programs and funding mechanisms place heavy administrative and accounting demands on PCI staff. To address this concern, discussions were held with the AID Child Survival and health coordinator regarding the advisability of having the Guatemala project funded under a single mechanism. It was his view that such a consolidation would not only reduce the demands on the PCI/-Guatemala staff, but would also strengthen project management through by increasing administrative and financial efficiency.

H.3 Strategies for sustainability The proposed expansion to the department of Solola will build on existing host counterpart systems and use human resources already but not being used to greatest advantage. The project also builds on the success PCI has worked to achieve in its activities in Santiago Atitlan. Expansion to the department level will ensure that the interventions introduced in Santiago will gain a stronger base of support from the MOH; at the same time, the successful programs in Santiago will serve as examples to reinforce efforts by the MOH as it implements CS interventions with PCI support throughout the department.

JEAN ALEXANDER  
 Clinica Santiaguito  
 Santiago Atitlan, Dpto. de Solola  
 Guatemala, C.A.

EDUCATION:

- 1978-1980 Medical University of South Carolina, Charleston, S.C.  
 B.S.N., 1980 Major: Nursing
- 1972-1975 Davidson College, Davidson, North Carolina  
 B.A., 1975 Major: Spanish
- 1971-1972 Winthrop College, Rock Hill, South Carolina

LICENSURE:

North Carolina Nursing  
 South Carolina Nursing

WORKEXPERIENCE:

- Project Coordinator, Santiago Atitlan, Guatemala (April 1982-Present)  
 Responsible for hospital/clinic administration and primary health care training and delivery. Supervise professional, paraprofessional and volunteer staff.
- September 1980 to March 1982 Staff Nurse, Charlotte Memorial Hospital, Charlotte, N.C.  
 Duties and Responsibilities: As the charge nurse on nights, coordinated care for thirty-one patients on a general medical floor; was responsible for all medications and treatment given, for reporting any significant change in condition to the physicians and for coordinating efforts of the health team members.
- June 1979 to August 1980 Coordinator, S.C. Student Health Coalition, Medical University of S.C. Charleston, S.C.  
 Duties and Responsibilities: While a student in nursing school worked with two other coordinators to promote and establish an interdisciplinary student health project which reached over 400 clients in rural South Carolina in the summer of 1980, offering free physicals, health education and health referral. During the school year coordinated Coalition's selection of communities, student publicity and selection as well as training programs for students. During the summer worked as assistant to the administrator and performed pediatric assessments with other nursing students under preceptor's supervision.
- May 1979 to June 1979 Translator and Nutrition Counselor, South Carolina Migrant WIC Project DHEC, Columbia, S.C.  
 Duties and Responsibilities: Served as translator and nutrition counselor in the first year of a Migrant WIC project designed to meet the special needs of Migrant clients in the Buford and Charleston, S.C. areas. Traveled between area health clinics that served migrants by promoting and certifying them for WIC as well as offering nutritional counseling.
- May 1978 to August 1978 Translator and Food Stamp Certifier, Food Stamp Program Charleston, S.C.  
 Duties and Responsibilities: Served as translator and certifier for the Migrant Food Stamp Program in the Charleston Area.

- May 1978  
to  
July 1978
- Translator, Migrant Health Division of DHEC, Charleston, S.C.  
Duties and Responsibilities: Worked as translator and coordinator of health care delivery services for a state migrant health project which operated clinics at three migrant camps two nights a week for two months. Translated for physicians, nurses and clients at the clinic.
- October  
1977  
to  
December  
1979
- Volunteer Counselor, Hotline, Charleston, S.C.  
Duties and Responsibilities: Served four hours weekly as a volunteer counselor for a free twenty-four hour a day telephone counseling service after completing a sixteen hour training course in active listening techniques and crisis counseling. Also attended monthly in-service training sessions.
- January  
1977  
to  
July  
1977
- English Teacher, English Language Services, Sacred Heart College, Belmont, N.C.  
Duties and Responsibilities: Taught English to foreign students in a program designed to prepare foreign students for American colleges and universities. Taught conversation, reading, grammar and lab.
- August  
1975  
to  
August  
1976
- VISTA Volunteer, Operation SER, Dallas Jobs for Progress, Dallas, Texas  
Duties and Responsibilities: Worked as a bi-lingual job developer in Mexican American agency which helped Mexican-American clients find educational training and employment. Duties included contacting employers throughout the Dallas area for employment and training opportunities and counseling clients on opportunities. While there, participated in expanding the satellite office from a three-person office with an average of five clients a month, to a seven-member staff offering all of the same counseling, educational and training facilities of the main office with as many as one hundred clients a month.

Solola, 9 de Noviembre de 1988

Oficio No. 38-88/DECC/lam

Licenciada:

Betsy Alexander

Administradora PROYECTO CONCERN

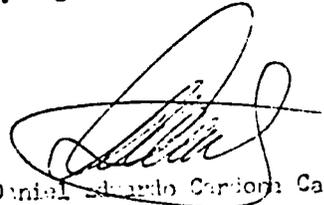
Sololá.

Licda. Alexander:

Por medio de la presente me dirijo a usted, deseándole toda clase de éxitos al frente de tan benéfico proyecto.

El objeto de ésta es para adjuntarle la información relacionado al APOYO TÉCNICO ADMINISTRATIVO que el PROYECTO CONCERN pueda brindar al Area de Salud de Sololá, lo cual fue analizado detenidamente por el equipo técnico del area con base a las necesidades detectados en las unidades de salud.

Al agradecer su valiosa colaboración e intervención me suscribo de usted como su atento y seguro servidor.



Dr. Daniel Eduardo Cardona Cardona

Jefe de Area de Salud, Sololá.



## RECURSO HUMANO

La Jefatura de Area de Salud de Sololá, ha priorizado la necesidad de CAPACITAR AL PERSONAL TECNICO ADMINISTRATIVO que laboran en los distintos niveles de atención; para lograr un grado de optimización de los recursos disponibles. En virtud de ello se considero necesario contar con personal experto, para que realice la capacitación en las siguientes disciplinas:

1. SISTEMA DE INFORMACION:

- 1.1. Computación
- 1.2. Estadística

2. SISTEMA ADMINISTRATIVO:

- 1.1. Administración en general
- 1.2. Logística

3. SISTEMA DE EDUCACION:

- 1.1. Cambio de actitudes personal técnico administrativo y comunidad
- 1.2. Enseñanza de metodología para introducir educación a nivel comunitario en salud.
- 1.3. Relaciones Pública.

Sololá, 8 de Octubre de 1988

  
Dr. Daniel Eduardo Cardona Cardona  
Jefe de Area de Salud Sololá.



## MATERIAL Y EQUIPO

La Jefatura de Area de Salud de Sololá, ha priorizado las siguientes necesidades de MATERIAL Y EQUIPO que actualmente carece y que son necesarios para mejorar los indicadores de salud:

### 1. MOTOR DE LANCHAS de 105 HP:

La Jefatura de Area de salud cuenta con una lancha sin motor, misma que ha obstaculizado la realización de diferentes actividades: Supervisión, ejecución, evaluación y retroalimentación de los diferentes programas de Atención Primaria de Salud implementados en el area en los distritos y aldeanos al lago.

### 2. COMPUTACION:

Para analizar procesamiento electrónico de datos.

### 3. 8 VIDEOTELEVISIONES PORTATILES:

Para cada Centro de Salud: Sololá, Panajachel, San Lucas Tolimán, Santiago Atitlán, Santa Lucía Utatlán, Mahualá, San Pablo La Laguna, Jefatura de Area, así como una cámara de filmación para la Jefatura de Area, con el objeto de elaborar el material educativo Audio visual según las necesidades específicas de cada distrito del departamento de Sololá.

### 4. 20 Retroproyectoras de Bataronías ( portátiles, slides).

Para que con supervisión adecuada del personal institucional, los Promotores Rurales de Salud lleven mensajes educativos en salud a diferentes grupos organizados de la comunidad.

### 5. Un aparato de Sonido ( micrófono, bocina, altoparlante)

### 6. 10 Megafonos para cada servicios de Salud y Jefatura de Area

Para apoyar las acciones de promoción y educación en todo el area.

### 7. FOTOCOPIADORA:

Para reproducir toda información y distribuirlos a los Centros de Salud en forma inmediata y a un costo bajo en el sentido que solo buscaríamos financiamiento para papelería y tinta.

Sololá, 9 de Noviembre de 1983

  
Dr. Daniel Eduardo Cardona Cardona  
Jefe de Area de Salud Sololá.

EVALUATIONS OF PCI CHILD SURVIVAL PROJECTS CONDUCTED IN CY 1988

1. Final evaluations of Child Survival I projects in Indonesia and Bolivia.

Submission date: November 30, 1988

2. Mid-term evaluations of Child Survival II projects in Bolivia and Guatemala.

- Submission dates:

Bolivia (Potosi and Cochabamba)	October 15, 1988
Guatemala	November 30, 1988

D.5. TARGET POPULATIONS

A Target Populations	Soiola	Panajachel	San Lucas Toliman	Santiago Atitlan	Santa Lucia Utatlan	Nahuala	San Pablo La Laguna	Total
1. Population Totals	42829	12541	20678	34621	20458	56374	7248	194,749
2. Infants under 12 months	1831	477	931	1346	847	1774	385	7591
3. Children under 24 months-Data N/A	-	-	-	-	-	-	-	-
4. Children 24 months to 59 months	6095	1625	2768	4329	2843	7564	1053	26277
5. Women 15-24 years	9688	2522	4560	7252	4526	11356	1734	41638
6. Est. Pregnant pop. at given time	-	-	-	-	-	-	-	-
<b>B Number of Trained Health Workers</b>								
1. CHWs	88	17	28	30	30	111	29	333
2. TBAs	110	28	33	36	37	174	15	433
3. MCH volunteers				92				
4. No. Families per volunteer	97	147	147	56	136	101	49	91
<b>C MOH Personnel per District</b>								
1. MD - District Chiefs	1	1	1	2	2	2	1	10
2. Professional Nurses	1	1	1	1	1	1	1	7
3. Auxillary Nurses, total only available	-	-	-	-	-	-	-	77
4. Rural Health Technician	4	2	2	3	2	10	1	24
5. Sanitation Inspector	1	1	1	1	1	2	1	8
6. Number of Health Posts in District	5	3	2	2	4	8	3	27

FORMAT F: COUNTRY SCHEDULE OF ACTIVITIES

COUNTRY: Guatemala

SCHEDULE OF ACTIVITIES BY QUARTER - (check the box to specify quarter and year)

ORGANIZATION: Project Concern International

	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>1. PERSONNEL IN POSITION - specify eg.</b>																				
Project Manager	X																			
Technical	X																			
Community/Village Health Workers				X																
Support		X																		
Other																				
<b>2. DETAILED IMPLEMENTATION PLAN (DIP) (due 6 months after grant is signed)</b>																				
Design/Planning	X	X																		
Preparation of DIP		X																		
<b>3. HEALTH INFORMATION SYSTEM (HIS) - specify eg.</b>																				
- Design Preparation of HIS	X	X	X																	
- Consultants/Contract to design/assist with HIS	X																			
- Baseline Survey																				
- Design/Preparation																				
- Data Collection	X																			
- Data Analysis	X	X																		
- Report Dissemination & feedback to the community & Project Management	X	X																		
- Registration/Record System																				
- Design/preparation				X	X															
- Ongoing implementation				X	X															
- Dissemination & Feedback to the community & Project Management					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>4. TRAINING SPECIFY eg:</b>																				
Design and Preparation	X	X	X	X																
Training of Trainers					X	X	X	X												
Training Sessions									X	X	X	X								
<b>5. PROCUREMENT OF SUPPLIES</b>																				
	X	X	X	X					X	X	X	X								

21

SCHEDULE OF ACTIVITIES BY QUARTER - (check the box to specify quarter and year)

6. SERVICES DELIVERY INITIATED	YEAR 1				YEAR 2				YEAR 3				YEAR 4				YEAR 5			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	- Area 1 <i>Santiago Atitlan</i>																			
- ORT																				
- Immunization	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
- Nutrition																				
Growth Monitoring Promotion																				
Nutrition Education	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Other				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
- Vitamin A (specify)																				
<i>A.R.L</i>																				
- Child Spacing	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
- Area 2 <i>Salola</i>				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
- ORT																				
- Immunization									X	X	X	X	X	X	X	X	X	X	X	X
- Nutrition									X	X	X	X	X	X	X	X	X	X	X	X
Growth Monitoring Promotion																				
Nutrition Education																				
Other																				
- Vitamin A (specify)																				
- Child Spacing																				
7. TECHNICAL ASSISTANCE -specify eg:																				
HQ/HO Regional office visits																				
Local consultants <i>INCAP</i>			X				X			X				X					X	
External technical assistance	X	X	X	X	X	X	X	X												
8. PROGRESS REPORTS									X											X
Midterm Evaluation																				
Annual project reviews									X											
External Evaluations			X			X				X				X					X	
Annual Reports									X										X	
Final Evaluation/report			X			X				X										X

26

26

GUATEMALA  
 FORMAT G: ESTIMATED COUNTRY PROJECT BUDGET

APPENDIX 6

Country/PVO	Year 1		Year 2		Year 3		
	A.I.D.	PVO	A.I.D.	PVO	A.I.D.	PVO	
<b>I. PROCUREMENT</b>							
<b>A. EQUIPMENT</b>							
TRAINING			1875	625	525	175	
OFFICE/QUARTERS	8325	2775	525	175	150	50	
VEHICLES	31125	10375					
<b>B. SUPPLIES</b>							
TRAINING	6075	2025	10725	3575	11700	3900	
OFFICE	7500	2500	6000	2000	6000	2000	
MEDICAL	39000	13000	39000	13000	40500	13500	
<b>C. SERVICES (consultants/subcontracts) excluding evaluation costs</b>							
PRINTING/COPYING/ARTWORK	525	175	2025	675	2700	900	
<b>D. CONSULTANTS (exclude evaluation costs) distinguish between the following:</b>							
LOCAL	6375	2125	3600	1200	5250	1750	
EXTERNAL TECHNICAL ASSISTANCE							
HEALTH INFORMATION TECHNICAL ASSISTANCE							
OTHER							
SUBTOTAL	98925	32975	63750	21250	66825	22275	
<b>II. EVALUATION</b>							
CONSULTANT CONTRACT							
STAFF SUPPORT							
OTHER	1350	450	1200	400	1200	400	
SUBTOTAL	1350	450	1200	400	1200	400	
<b>III. INDIRECT COSTS</b>							
OVERHEAD GENERAL & ADMINISTRATIVE	85425	28475	73800	24600	31075	27025	
OTHER							
SUBTOTAL	85425	28475	73800	24600	31075	27025	
<b>IV. OTHER PROGRAM COSTS</b>							
<b>A. PERSONNEL (list each position separately, give total person months p.m. for each position) Asterisk all expatriate positions*</b>							
TECHNICAL	156 p.m.*	61500	20500	66825	22275	73275	24425
ADMINISTRATIVE	1590 p.m.	47100	15700	51000	17000	54375	18125
OTHER							
SUBTOTAL		108600	36200	117825	39275	127650	42550
<b>B. TRAVEL &amp; PER DIEM</b>							
<b>SHORT TERM</b>							
TICKETS/PER DIEM IN COUNTRY COSTS	6000	2000	6000	2000	6300	2100	
<b>LONG TERM</b>							
TICKETS/PER DIEM IN COUNTRY COSTS	19950	6650	13425	4475	20550	6850	
SUBTOTAL	25950	8650	19425	6475	26850	8950	
OTHER DIRECT COSTS	12000	4000	11175	3725	11850	3950	
SUB TOTAL	146550	48850	148425	49475	166350	55450	
GRAND TOTAL PER YEAR	332250	110750	237175	95725	315450	103150	

Note: For precise description and breakdown of personnel costs, see the project budget and personnel schedule.  
 These line items are for field costs only, not headquarters costs.

FORMAT G: ESTIMATED COUNTRY PROJECT BUDGET (Cont'd) GUATEMALA

Country/PVO	Year 4		Year 5		TOTAL		
	AID	PVO	AID	PVO	AID	PVO	TOTAL
<b>PROCUREMENT</b>							
<b>EQUIPMENT</b>							
TRAINING	375	125	225	75	3000	1000	4000
OFFICE/QUARTERS	375	125			9375	3125	12500
VEHICLES					31125	10375	41500
<b>SUPPLIES</b>							
TRAINING	8175	2725	4350	1450	41025	13675	54700
OFFICE	5250	1750	5250	1750	30000	10000	40000
MEDICAL	48225	16075	38925	12975	205650	68550	274200
<b>SERVICES (consultants subcontracts) excluding evaluation costs</b>							
PRINTING/COPYING/ARTWORK	1650	550	600	200	7500	2500	10000
<b>CONSULTANTS- (exclude evaluation costs) distinguish between the following:</b>							
LOCAL	4050	1350	525	175	19800	6600	26400
EXTERNAL TECHNICAL ASSISTANCE							
HEALTH INFORMATION TECHNICAL ASSISTANCE							
OTHER							
<b>SUBTOTAL</b>	<b>68100</b>	<b>22700</b>	<b>49875</b>	<b>16625</b>	<b>347475</b>	<b>115825</b>	<b>463300</b>
<b>EVALUATION</b>							
CONSULTANT CONTRACT							
STAFF SUPPORT							
OTHER	1275	425	1275	425	6300	2100	8400
<b>SUB TOTAL</b>	<b>1275</b>	<b>425</b>	<b>1275</b>	<b>425</b>	<b>6300</b>	<b>2100</b>	<b>8400</b>
<b>INDIRECT COSTS</b>							
OVERHEAD GENERAL & ADMINISTRATIVE	74325	24775	64800	21600	379425	126475	505900
OTHER							
<b>SUBTOTAL</b>	<b>74325</b>	<b>24775</b>	<b>64800</b>	<b>21600</b>	<b>379425</b>	<b>126475</b>	<b>505900</b>
<b>OTHER PROGRAM COSTS</b>							
<b>PERSONNEL (list each position separately, give total person months p.m. for each position) Asterisk all expatriate positions*</b>							
TECHNICAL	53550	17850	57600	19200	312700	104300	417000
ADMINISTRATIVE	58575	19525	49125	16375	260175	86725	346900
OTHER							
<b>SUBTOTAL</b>	<b>112125</b>	<b>37375</b>	<b>106725</b>	<b>35575</b>	<b>572875</b>	<b>191025</b>	<b>763900</b>
<b>TRAVEL &amp; PER DIEM</b>							
<b>SHORT TERM</b>							
TICKETS PER DIEM IN COUNTRY COSTS	6450	2150	3000	1000	27750	9250	37000
<b>LONG TERM</b>							
TICKETS PER DIEM IN COUNTRY COSTS	14625	4875	17325	5775	85875	28625	114500
<b>SUBTOTAL</b>	<b>21075</b>	<b>7025</b>	<b>20325</b>	<b>6775</b>	<b>113625</b>	<b>37875</b>	<b>151500</b>
OTHER DIRECT COSTS	12300	4100	9000	3000	56325	18775	75100
<b>SUB TOTAL</b>	<b>145500</b>	<b>48500</b>	<b>136050</b>	<b>45350</b>	<b>742875</b>	<b>247625</b>	<b>990500</b>
<b>GRAND TOTAL PER YEAR</b>	<b>289200</b>	<b>96400</b>	<b>252000</b>	<b>84000</b>	<b>1476075</b>	<b>492025</b>	<b>1968100</b>
<b>TOTAL PROJECT DURATION GRAND TOTAL</b>							

Note: For precise descriptions and more specific line items please refer to section H of Attachment II.  
 \* These line items are for field costs only, not headquarter costs.

Country: PVO	Year 1		Year 2		Year 3		Year 4		Year 5		Total PVO	Total	
	A.I.D.	PVO											
I. PROCUREMENT													
Supplies													
Equipment													
Services/Consultants													
CONSULTANTS TECH. ASSISTANCE	750	250			750	250			750	250	2250	750	3000
Subtotal	750	250			750	250			750	250	2250	750	3000
II. EVALUATION													
CONSULTANTS	1650	550			1650	550			1650	550	4950	1650	6600
Subtotal	1650	550			1650	550			1650	550	4950	1650	6600
III. INDIRECT COSTS	12600	4200	12000	4000	13875	4625	13500	4500	15375	5125	67350	22450	89800
Total Indirect Costs	12600	4200	12000	4000	13875	4625	13500	4500	15375	5125	67350	22450	89300

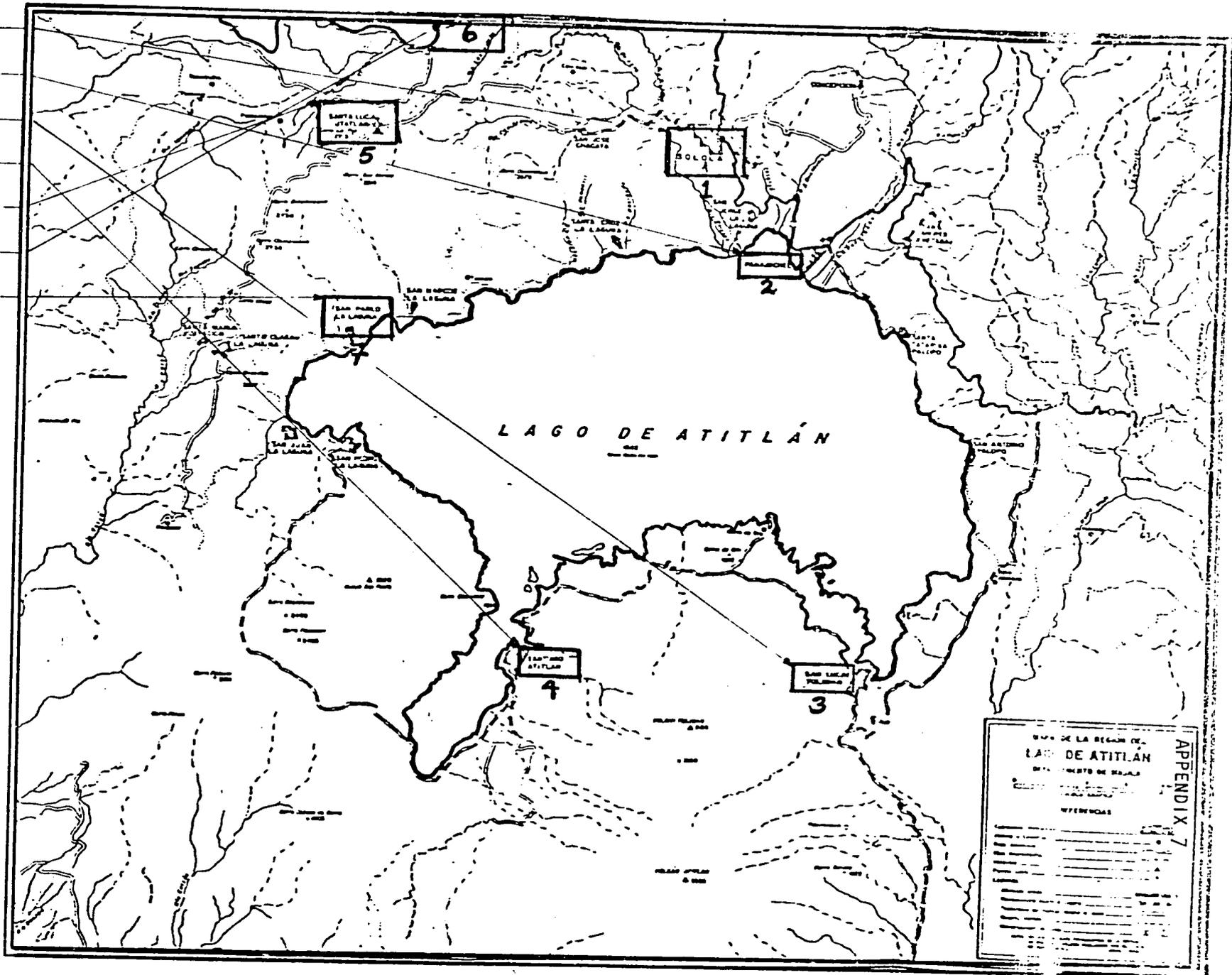
NOTE: For precise description and more specific line items please refer to Section H of Attachment II.  
These line items are for headquarter costs only, not field costs

Country PVO	Year 1		Year 2		Year 3		Year 4		Year 5		A.I.D.	Tot. J PVO	Total
	A.I.D.	PVO											
RECTHERIP PROGRAM COSTS													
A. Personnel													
Terminat													
SALARIES	14925	4975	15675	5225	16500	5500	17325	5775	18225	6075	82650	27550	110200
FICA, BENEFITS	4600	1500	4900	1600	5100	1700	5700	1900	6000	2000	26300	8700	35000
B. Administrative													
SALARIES	3925	2975	9450	3150	9975	3325	10500	3500	11025	3675	49375	16625	66500
FICA, BENEFITS	2900	900	2900	900	3100	1200	3400	1200	3600	1200	15900	5400	21300
C. Support													
Supplies	31350	10350	32925	10875	34675	11725	36925	12375	38350	12950	174725	58275	233000
B Travel Costs													
Post Costs													
HDQTS. STAFF	1725	575	1800	600	1875	625	2025	675	2100	700	9525	3175	12700
CONSULTANTS	1050	350			1125	375			1125	375	3300	1100	4400
B. Other	2775	925	1800	600	3000	1000	2025	675	3225	1075	12825	4275	17100
C. OTHER DIRECT COSTS													
B. Total	34125	11275	34725	11475	37675	12725	38950	13050	42075	14025	187550	62550	250100
Total Headquarters/ Home Office Costs	49125	16275	46725	15475	53950	18150	52450	17550	59850	19950	262100	87400	349500

NOTE: For precise description and more specific line items please refer to Section H of Attachment II. These line items are for headquarter costs only, not field costs

SOLOLA DEPARTMENT HEALTH DISTRICTS

- Solola —————
- Panajachel —————
- San Lucas Toliman —————
- Santiago Atitlan —————
- Santa Lucia Utatlan —————
- Nahuala —————
- San Pablo La Laguna —————



DEPARTAMENTO DE LA REGIÓN DE  
 LAZ DE ATITLÁN  
 DEPARTAMENTO DE SALUD  
 DISTRITOS DE SALUD  
 REFERENCIALES

APPENDIX 7  
 7

## 10 Principal Causes of Morbidity

All Ages - Solola %

Dianosis	Number	%
ARI	5492	23.99
Intestinal Parasites	4174	18.23
Protein-Calorie Malnutrition	3862	16.86
Diarrheal Diseases	2584	11.28
Skin diseases	1516	6.62
Anemia	1370	5.98
Bronchopneumonia	1342	5.86
Conjunctivitis	1014	4.43
Amebiasis	903	3.97
Amigdalitis	636	2.78

Source: Plan Operativo 1988, Area de Salud de Solola.

## 10 Principal Causes of Death

All ages Solola per 10,000

Cause	Number	Rate
Pneumonia	232	12.25
Fever of unknown etiology	197	10.40
Diarrheal Disease	169	8.92
Dehydration	136	7.18
Malnourishment	105	5.54
Stillborn	96	5.2
Undefined Causes	37	1.95
Old Age	35	1.85
Septicemia	32	1.69
Intestinal Infections	26	1.37
All other Causes Combined	747	39.43
TOTAL	1832	10.00