INTERNATIONAL EYE FOUNDATION
Ichilo Province, Bolivia
CS XV
"Capacity Building for Quality Child Survival Interventions: the CEPAC/IEF PROPOSAL"

Detailed Implementation Plan
&
First-Year Report

DURATION OF PROJECT:
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ACRONYMS AND ABBREVIATIONS

ARI	Acute Respiratory Infection
ARCH	Andean Rural Health Care
CD	Country Director
CEPAC	Centro de Promocion Agropecuaria Campesina
CORE	Child Survival Collaborative and Resource Group
CSSP	Child Survival Support Program, Johns Hopkins University
CSTS	Child Survival Technical Support Project
DIP	Detailed Implementation Plan
DOSA	Discussion Oriented Organization Self-Assessment Program
EDI	Understanding and Strengthening the Capacity of Intermediate Organizations (PVO's and NGO's) to Provide Integrated Community-Based Vitamin A Programs in Guatemala (Spanish acronym)
DHS	Demographic and Health Survey, Macro International
HFA	Health Facilities Assessment
IEF	International Eye Foundation
IMCI	Integrated Management of Childhood Illness
INCAP	Instituto Nacional de Centroamerica y Panama
IVACG	International Vitamin A Consultative Group
KAP	Knowledge, Attitudes and Practice
KPC	Knowledge, Practices and Coverage
MOH	Ministry of Health
MSH	Management Sciences for Health
NGO	Non-Governmental Organization (see PVO)
OMNI	Opportunities for Micronutrient Interventions
ORS	Oral Rehydration Solution
PROCOSI	Programa De Coordinación en Superviviencia Infantil Organizaciones No Gubermentales
PVC	Office of Private and Voluntary Cooperation
PVO	USAID Registered, Private Voluntary Organization
QA	Quality Assurance
QAP	Quality Assurance Project, Bethesda, Maryland
QHP	Quality Home Practices Survey
RPS	Community Level Health Volunteers
USAID	United States Agency for International Development
VAC	Vitamin A Capsule
VAD	Vitamin A Deficiency
7FF	Seven Day Food Frequency Survey

Table of Contents

Executive Summary

An innovative partnership of the International Eye Foundation (IEF) and the Centro de Promoción Agropecuaria Campesina (CEPAC) has been created to implement a high quality and sustainable child survival (CS) program. This partnership strategically matches the strengths of a highly technical PVO with over 10 years CS experience to a community based local NGO with strong community ties and an excellent reputation within the country. The partnership delivers the most effective and responsive health programming for child survival in Ichilo Province, Bolivia.

The goal of the project is to improve the delivery of child survival interventions and make these changes sustainable. The partnership will achieve this goal by: 1) improving the managerial capacity of CEPAC and 2) improving coverage and quality of each intervention. The project has clearly defined intervention, quality, managerial capacity, and sustainability indicators that will monitor the progress of the CS project. IEF will work with CEPAC to evolve their current clinical orientation to a more cost-effective, public health approach to delivering health services in Ichilo. Both partners participated in developing the project's design and thus have agreed to all of the goals of the project.

The project more than doubles the beneficiary population served by CEPAC prior to joining the partnership. CEPAC served a population of about 21,709 in the area of Yacaní. The project will now expand coverage to 62,153 people in the entire Province of Ichilo. A key to project success will be the ability of IEF/CEPAC to improve delivery of the highest impact interventions while maintaining low cost of services.

In the original proposal, the concept of integrating CEPAC's services with those of the local MOH was presented. Prior to receiving funding from USAID, CEPAC and the MOH began the process without outside assistance. Proposal and DIP reviewers (this is a revised DIP submission) have commended the partners for their innovative and thorough approach to sustainability and to capacity building. Cited as positive features of the proposal was the rationale for the site chosen, including high under 5 mortality and corresponding interventions selected to reduce under 5 deaths. Weaknesses cited by reviewers included a lack of detail in the BCC and training sections of the first DIP. All reviewer comments and feedback were taken into account in the development of this DIP and are addressed throughout the report and in the appropriate sections of the Annex. Also, Section 4 of the DIP includes the First Annual Report that details progress made in the first year of the project.

The Ichilo CS Project is in full agreement with the strategic objectives of USAID's Office of PVC and the objectives established by the local Bolivian Mission and its partners. The IEF further enhances the goals of the Agency's VITA initiative and brings over a decade of expertise in vitamin A to the proposed program and to Bolivia.

Section 1: PROGRAM DESCRIPTION

A. FIELD PROGRAM SUMMARY

PVO/Country: Bolivia Program Duration: September 30, 1999 – September 29, 2003

1. ESTIMATED PROGRAM EFFORT AND USAID FUNDING BY INTERVENTION

Intervention	% of Total Effort (1)	USAID Funds in $ (2)
Immunization	20%	$199,940
General Nutrition	20%	$199,940
Micronutrients (other than Vitamin A)	10%	$99,970
Vitamin A	10%	$99,970
Breastfeeding Promotion	10%	$99,971
Diarrheal Disease Management	15%	$149,956
Pneumonia Case Management	15%	$149,956
Control of Malaria	0	0.00
Maternal and Newborn Care	0	0.00
Child Spacing	0	0.00
STI/HIV/AIDS Prevention	0	0.00
Others (specify)	0	0.00
Total	100%	$999,703

(1) Estimate the percentage of total effort (from USAID and PVO match funding) the program will devote to each intervention to be implemented.

(2) Estimate in US dollars (not in percent) the amount of USAID funding (excluding PVO match funds) that the program will devote to each intervention.

2. **Program Site Population: Children and Women (3)**

Population Age Group	**Number in Age Group**
Infants (0-11 months)	1,927
12-23 Month Old Children	1,616
24-59 Month Old Children	5,780
Total 0-59 Month Olds	9,323
Women (15-49) years	14,917

(3) Estimate the number of people in the age group that the program expects to serve. Do not add annual births. If the program is phasing-in geographic areas over time, then estimate the population to be covered by the end of this funding cycle (after all areas have been phased-in).

(4) Estimate the number of women if the data is available.

- **Estimated number of live births in the Ichilo Province:** 1, 927
- Sources of the population estimates above: Total Population Statistics from Municipal Participatory Development Plans, 1997; Indicators for Determining Population Figures: Bolivian MOH Health Status, 1999.

B. **Program Location**

The project is being implemented in the entire Province of Ichilo (pop. 62,153), which is comprised of the Municipalities of Yacaní (pop. 31,464), San Carlos (pop. 18,156), and Buena Vista (pop. 11,933). The best estimates for population are from the *Plan Participativo de Desarollo* (Participatory Development Plan or PPD) that each municipality developed in 1997. The population figures were derived using the 1997 PPD figures, factoring in a 1.83% annual growth rate for 1998 and 1999:

Municipio	1997 PPD population plus annual growth through 1999
Yacaní	31,464
San Carlos	18,156
Buena Vista	11,933
Totals	**62,153**

(Source: CIA World Factbook)

Bolivia in general, and Santa Cruz in particular, has seen a large migration to urban centers over the last ten years (we are unsure why the national census did not take this into account). Santa Cruz de la Sierra, the departmental capital, is the fastest growing city in Latin America. The PPD statistics reflects this trend, i.e. the move out of San Carlos and Buena Vista, and the move into the larger urban area of Yacaní. Although Yacaní and San Carlos had a similar number of people 8 years ago, San Carlos' population was (and is) much more dispersed. Yacaní has established itself as the urban center for the area.

There are a total of 210 communities in the Province, with 110 communities in Yacaní, 55 in Buena Vista, and 45 in San Carlos. Please see the attached (Annex VII) for individual population figures for each community. Average community size is 250 people or about 50 families.

Ichilo Province is located in the northeastern region of the Department of Santa Cruz, bordered by the Yacaní River on the east and the Ichilo River and the Department of Cochabamba to the west. The area is considered part of the "*Faja Subandina*" or sub-Andean region that is between the mountains and the low lands. Ninety percent of the population has Quechua (indigenous) origins. The main language now spoken, however is Castellano, with Quechua still used in rural areas. According to the KPC, Quechua is the first language for 10.8% of the population in Yacaní and for 7.5% in San Carlos/Buena Vista. Most of the people of this area are involved in subsistence level agriculture. A large factor in migration to the area of Santa Cruz has been that male head of households are seeking employment after the closure or privatization of mines in highland areas. For this reason, the population in the project area is mixed with highland and lowland peoples. This is already taken into account in the development of interventions and the project will continue to utilize a mixed approach to BCC and other materials that are developed to best communicate to all communities in the area. The proposed community level census will also provide information regarding migration patterns that still exist in the project area as families move to access work and farming opportunities.

The predominant religion in the area is Catholic, but many other religions are represented in the area. Thirty-one percent of women and 23% of men are thought to be illiterate. Sixty percent of the population is rural with 40% living in the urban centers. Communities are organized at the grass-roots level into community groups (sindicatos) and agricultural cooperatives. Child caregivers are almost exclusively mothers, sisters and/or other female extended family members.

The current health system in the project area is facility-based with only limited outreach capabilities. CEPAC utilizes vehicles (Mobile Units) for outreach and emergency transportation of seriously ill patients. One doctor, one nurse, and an outreach worker and a driver generally staff the vehicles and they visit one community per day. Prior to implementation of the CS Project, CEPAC was able to reach 30 communities per month on this schedule, out of 210. MOH select the communities visited and pick those that are generally difficult to access, due to lack of infrastructure, poor quality roads, seasonal factors (monsoon seasons), etc. Other communities are served directly by the MOH, however outreach is not completed as scheduled in a majority of cases due to the limited resources of the MOH.

The CS project has added two vehicles that will add an additional 60 communities per month to the CEPAC schedule. CEPAC also maintains a clinic in Yacaní that primarily serves urban families. As the CS project is implemented, a key goal will be for all health services in the area to be better integrated between the MOH and CEPAC and other partners in the area, which is in-line with the strategic objectives of the MOH and their health partners in Ichilo.

The MOH operates a total of 5 hospitals and 19 health posts in the province. Despite this network of facilities, the KPC reported low coverage rates of the most basic child survival interventions: immunization, vitamin A capsules and health education for diarrhea and nutrition. Outreach is limited due to staffing shortages, lack of functioning equipment, lack of transportation, lack of focus on community based methods, shortage of outreach facilities, and, particularly, lack of medications and vaccinations. Despite these factors, CEPAC and MOH staff remain dedicated to improving the health status of the Ichilo province and are struggling to maintain the current coverage rates. The HFA survey that has been implemented documents these shortcomings and is attached as Annex II.

Summary of Population Served by MOH and CEPAC Health Facilities

Buena Vista	**Population Served**
Roque Aguilera First-Level Hospital	4511
Caranda Second-Level Hospital	1786
Huaytu Medical Post	1972
Villa Diego Medical Post	828
Espejitos Medical Post	808
San Miguel Medical Post	736
Arboleda Medical Post	860
Total Population	**11501**

San Carlos	**Population Served**
Ichilo Hospital	3685
Buen Retiro Medical Post	2382
Santa Fe Medical Post	5183
San Juan Medical Post	2507
Antofagasta Medical Post	2117
Ayacucho Medical Post	1141
Enconada Medical Post	999
Jochi Medical Post	620
Japanese Second-Level Hospital	936
Total Population	**19570**

Yacaní	**Population Served**
Yacaní Hospital	6781
CEPAC Medical Center	6781
San Germán Medical Post	2601
El Palmar Medical Post	1374
Puerto Palos Medical Post	1394
Puerto Greter Medical Post	1183
San Rafael Medical Post	1647
Nuevo Horizonte Medical Post	1544
Moiller Condor Medical Post	1385
Total Population	**24690**

Note: The population figures used by the MOH for these projections are lower than those reported by the CS project because of differing data sources. This data is from the National Census (INE, 1992).

RPS

An important component of the health system in Ichilo, and throughout Bolivia, is the network of RPS (*Responsable Para Salud* – Responsible for Health) volunteers. The RPS system in Bolivia began in 1983 following recommendation of the 1978 International Conference on Primary Health Care at Alma Ata, that established organized community participation in the health system as one of the pillars of primary health care. At its inception a total of 20,000 RPSs were trained nationally.

RPSs are elected by their communities and are, according to the MOH, responsible for community mobilization, community education, vaccination campaigns, and dispensing of ORS and limited drugs. There are a total of 145 RPSs in the province of Ichilo, serving approximately 80 communities. This project will increase the number of RPS to 210 to ensure that each community receives coverage.

RPSs are trained to utilized BCC materials and keep household level data regarding health interventions. The data is reported to an MOH Auxiliary nurse who complies the information and collects it in monthly statistics for the Province. RPSs also sell essential drugs from drug posts (generally the house of a trained RPS). Drugs sold include cotrimoxazol and ORS packets. On average, a single RPS is responsible for 20 families which is equivalent to one community.

CEPAC had a particularly active role in building and maintaining a strong corps of RPSs in Yacaní, and it was this corps of RPSs , with CEPAC's assistance, that held the inaugural National Congress of RPSs in March 2000 in Yacaní. Key outcomes of this meeting were the demands by the RPSs for credentials, more training and greater recognition. While CEPAC has provided an essential service in training RPS and in hosting this important national congress, supervisory visits by CEPAC staff to the RPSs has been very limited, with fewer than 5 visits being documented in the year 1999 by the Mobile Health Teams (CEPAC, Project Data).

The MOH credits RPSs with the reductions they report in maternal and child mortality rates, specifically citing their work in the provision of ORS to prevent diarrheal deaths. While the MOH is technically responsible for RPS supervision, little if any is executed and NGOs have taken on most of the training and supervisory duties. The strength of the RPS network has led the Bolivian MOH in the last two years to take a renewed interest in utilizing this resource. The MOH strategic plan for Ichilo (see Annex VIII) includes the RPSs as an integral component to outreach services.

As with volunteers everywhere, commitment among RPSs, as well as their health knowledge, varies greatly. Turnover is fairly high as many RPSs are young people who eventually move out of their community to seek greater economic opportunity. The CS project will add another 65 RPSs ensuring 100% of the communities have an RPS. The CS project will also conduct qualitative research into factors that positively and negatively affect RPS work and retention.

The health status of the under 5 year old population can be summarized as follows:

	Ichilo Province	Dept. of Santa Cruz	National
Under 5 mortality*	104	79	105
Prevalence of Diarrhea	38%	--	19%
Malnutrition (wt/age)	34%	24%	8%
Malnutrition (ht/age)	55%	22%	27%
Malnutrition (wt/ht)	15%	10%	1%

*per 1000 children

Note: Information from Ichilo Province and the Department of Santa Cruz is from locally obtained MOH data. National under 5 mortality rates were obtained from State of the World's Children, UNICEF. All other national data is from the Demographic and Health Survey (DHS) Preliminary Report for Bolivia, 1998.

Leading causes of death are pneumonia, diarrhea and malnutrition. Pneumonia is the leading cause of death in under 5 year olds in the Province. Malnutrition is likely responsible for over half of deaths and is an underlying cause of all the major causes of deaths. Lack of proper nutrition is also an important contributor to maternal deaths. The project will focus 50% of its effort on nutrition (including breastfeeding and micronutrients), 20% on EPI and 15% each to diarrhea and pneumonia interventions.

C. Summary of Baseline Assessments

Phase I (Pre-DIP):
KPC and an HFA surveys were conducted in Ichilo Province in preparation for the Detailed Implementation Plan (DIP). Full reports from both of these surveys are attached (Annex II). Methodologies and reporting for the two surveys were based on the Child Survival Technical Support Project (CSTS) and BASICS formats for the KPC and HFA respectively. An interventions workshop and a capacity building workshop also took place in preparation for the DIP.

The International Eye Foundation (IEF) contracted Mr. Nathan Robinson, Country Director for Andean Rural Health Care (ARHC), to conduct the KPC survey in the project area. Andean Rural Health Care has a long record of executing successful KPCs and has assisted IEF in all phases of development of the proposal. In addition, the IEF contracted Dr. Luis Amendola, formerly with Save the Children/Honduras, to assist the Project Advisor with the HFA survey and the baseline "Interventions Workshop" (see below). Dr. Amendola, MPH, has significant experience with DIP development, particularly in the KPC. His assistance was crucial in the design and implementation of both the intervention workshops and the HFA

An information dissemination plan to ensure results of the KPC and the HFA are shared in a meaningful way with communities, the MOH, Non-Governmental Organizations (NGOs) in the region, PROCOSI NGOs and other organizations has been developed, and dissemination has begun (see Annex IX). A copy of the educational brochure developed by CEPAC to share the results of such surveys is also attached as Annex X. A list of other NGOs working in Ichilo is included as Annex XXII.

As stated in the proposal, this project will require 18 months to complete all the baseline assessments. The formative baseline research is necessary to support the project through its initial four years and into a four-year extension, if granted. This level of intensive investigation is warranted because it is a New Grant and because IEF is new to the region. Elements of the data collection will also need to be continued throughout the life of the project.

Interventions Workshop: In preparation for the DIP, the IEF Project Advisor, Dr. Luis Amendola and CEPAC conducted a three day workshop which included MOH personnel to review each intervention proposed and to make joint recommendations for the DIP. Materials were collected in advance of the workshop to prepare for the three day exercise. Recommendations made during the workshop have been incorporated into the DIP. Indicators and Objectives were established during this workshop.

Another workshop was held in August 2000 to review the indicators and objectives for the DIP re-submission and to finalize the goals of the project.

Capacity Building Workshop: Also in preparation for the DIP, a workshop was conducted to review the capacity building strategy for the project. The basis of the workshop was the Management Sciences for Health (MSH) capacity assessment completed by CEPAC prior to the

development of the proposal, and the capacity plan as developed for the proposal. The capacity building objectives and indicators were developed at this time and were reviewed and finalized prior to submission of the DIP.

Knowledge, Practice and Coverage: The KPC was conducted in February 2000. It was based on the newest KPC released by CSTS in December of 1999. Only the modules related to the project were utilized. In order to obtain meaningful data from the province, that would allow a comparison of the areas previously covered by CEPAC and the areas new to CEPAC for the CS project, the entire KPC was conducted in Yacaní, and in San Carlos and Buena Vista, separately. All sampling and methodologies followed the standard UNICEF 30-cluster protocol and CSSP/CSTS KPC manual. A member of the CSTS staff, Donna Esput, visited the project during implementation of the survey.

Although the KPC was completed successfully, and CEPAC staff were fully involved, the component of formal staff training was somewhat weak, as noted by the CSTS staff member. This was due to several factors, including the late arrival of the Project Advisor at the field site. Although the formal training could have been improved, CEPAC received sufficient training to be able to complete the mid-term KPC without outside assistance, as evidenced by their ability to use the methodology twice since the CS KPC. Additional refresher training will occur during the midterm evaluation.

Results of the KPC are discussed under the appropriate intervention sections of this DIP (Refer to Section 3).

Phase II (Completed Before the End of Year 1)

Health Facilities Assessment Survey: An HFA survey was also conducted in February 2000, based on the BASICS HFA. Interviews with clinical staff were conducted as was the assessment of supplies and infrastructure. Observational interviews and exit interviews were not conducted at this time, will be included in subsequent HFAs along with mid-term and final evaluations. A total of 24 out of 25 health facilities in the entire Province were visited for the survey. Results of this survey are also presented in section 3, under the corresponding intervention.

Cost/Sustainability Assessment: The cost assessment was completed in July of 2000 by Mr. James Riva-Clement, MBA. Mr. Clement has conducted cost analysis for the IEF in the past in Guatemala and also conducted a regional training session for project administrators in Central America that was sponsored by CARE and IEF.

The objective of the cost analysis was to begin the process of assisting CEPAC to make managerial and strategic decisions on cost as well as health data. Of particular concern, from the time of the development of the proposal for this project, has been the cost-effectiveness of the mobile team approach. The analysis identified specific means of improving the cost-effectiveness of each of CEPAC's key outreach mechanisms as briefly summarized here:

1) Mobile Team: a) Less frequent visits to each community would allow the same resources to serve more than three times the number of people. This change alone could allow CEPAC to reach the 80% coverage targets for EPI/VA. Reducing the size of the team could reduce direct costs by nearly half. (Taken together these two changes would reduce the per unit cost of providing care by 85%, while greatly improving the health of the population.)

2) Festivals: a) A prospective analysis of the festivals suggests that approximately 78 individuals need to receive care at the average festival for their cost-effectiveness to match that of the mobile team. b)If festival attendance greatly exceeds 78 then moving resources from the mobile teams to festivals should be evaluated.

3) Clinic: a) Data from the clinic are not comparable with data from the mobile team because the clinic may serve a primarily urban population, while the mobile team serves a primarily rural population. However the results my be used to asses clinic efficiency on a year to year basis. b) Cost recovery in the clinic is very much a possibility.

Since completion of the cost analysis, IEF and CEPAC key personnel have met to discuss how to apply the information obtained in the cost/sustainability assessment. CEPAC acknowledged that a move to more cost-effective, broad-based public health approaches has been a goal of theirs for years. The IEF also recognizes that while CEPAC can realize cost savings by making the recommended changes, CEPAC is at risk of damaging the very important community relations it has built over time. Balancing the needs of all parties is very much a priority of the project and the effort to put a final outreach strategy that will meet the goals of the CS project, especially coverage indicators, is being lead by IEF. In order to move the process from that of recommendations to a specific plan for generating a new outreach strategy, the IEF requested a proposal to improve community coverage (which is now at about 30%) to meet the CS project goal of 80% coverage for the immunization and VA interventions. The proposal is attached in Annex XI, and is discussed in section 4, the Annual Report. **IEF considers assisting CEPAC through this shift in strategy a key outcome of the early stages of the CS project, which will lay the groundwork to successfully implementing all other interventions.**

Further, the data and preliminary analysis of these two types of surveys will lead to the development of a sustainability plan. David Green, IEF's Sustainability Specialist, has worked in this region previously and will visit the project shortly following completion of the cost assessment to analyze the data with the IEF Project Advisor and CEPAC. The outcomes of the data will determine the specific activities to be conducted by the project. However, interventions and objectives have been set to address the general goals of the sustainability planning (refer to interventions table). Examples of David Green's work in the area of cost recovery and sustainability planning include the development of paying clientele at hospitals and clinics to fund non-paying or reduced paying populations. He has experience in developing enterprises to fund health programs, including the establishment of intra-ocular lens and suture factory in India. The factory has had tremendous success and is now selling lenses worldwide at reduced cost. .

A market demand/customer satisfaction survey was also developed as part of the cost analysis consult. The survey will be administered in a 10% subset of all communities when the RRA (see below) is conducted and KPC results are disseminated in the province.

Phase III (To be Completed Before the End of Year 2)

Nutritional Assessment: The IEF with technical assistance from the Johns Hopkins Division of Human Nutrition has developed a plan for a nutritional assessment that will be conducted in the project area in the first quarter of 2001. The plan incorporates a biochemical assessment of VA in mothers and children, a biochemical assessment of iron in mothers, and a clinical assessment of maternal nightblindness. The assessment will also involve growth monitoring, a qualitative assessment of nutrient rich foods that are found in the area (and can be promoted), an assessment of the type of worms infecting children, and a qualitative data collection of health seeking and feeding behaviors around illness, particularly diarrhea and pneumonia. The plan is presented in Annex XII with sample size calculations. It is expected that a sample size of 90 mothers and their children under 5 years will be surveyed, utilizing a cluster sampling method within Ichilo Province. Outcomes of the survey will allow the project to refine and upgrade the nutrition intervention.

The IEF has particular experience with nutritional assessments, having recently completed a large-scale food frequency study in Guatemala. (The study found a 45% increase in retinol consumption over the five years of a CS Project in the Province of Coban.) IEF's experience will be further strengthened with technical assistance from Johns Hopkins Division of Human Nutrition.

Rapid Rural Appraisal (RRA)/Census: CEPAC has experience with RRA and PRAs and with community mapping. They have conducted PRAs in Yacaní which lead to development of the CS interventions. CEPAC is currently working with the MOH and the system of RPSs to conduct a complete census and RRA in all project communities. It will be necessary to conduct a very limited RRA in Yacaní that will introduce communities to the new CS project and discuss results of the KPC, as community mapping and PRAs were recently conducted in this area. The customer surveys developed during the cost analysis will also take place as part of the RRA exercise. In the areas of San Carlos and Buena Vista, the PRAs will be more extensive and will include community mapping. A community-based census will also be part of the baseline activities, in large part because there are serious underestimates of the population due to migration. The RRA will take place in the third trimester of the second year.

Capacity Assessment: In 1998, CEPAC completed a capacity assessment that quantified their skill level in a number of managerial and administrative areas. As a result of this assessment, CEPAC has worked to address weaknesses and improve on the strengths identified in the final report. It was originally determined that it would be necessary to contract MSH to return to Santa Cruz to re-assess CEPAC (establishing a baseline for this CS Project). However, in consultation with CEPAC it was agreed that a local consultant with experience in the MSH tool could be hired to perform the assessment in the final quarter of year 1. The assessment will then be performed, at mid-term and at final periods of the project to provide information for the evaluations and to monitor progress towards capacity building goals.

Interactive Meeting/Workshop with MCDI, ARHC and other PVOs: There are many PVOs with experience in CS programming which would be helpful to the IEF/CEPAC partnership. While IEF has extensive experience with CS programs, they have not had a project in Bolivia until now. CEPAC has had the opportunity to work extensively with PROCOSI NGOs through their

membership in the organization and have received funding in the past for PROCOSI funded CS projects. However, this is the first centrally funded CS program that CEPAC has been granted. By networking with PVOs in Bolivia this CS project will benefit from years of experience that exist in-country. In addition to informal means of networking and communication that have been important in the development of the proposal and the DIP, IEF and CEPAC are in the process of organizing regular quarterly meetings with CS PVOs.

D. Program Goals and Objectives

(Please refer to Annex XIII.)

E. Program Design

A partnership of the IEF and CEPAC was proposed for funding in December of 1998. The proposal, which was approved for funding in the spring of 1999, allows for the implementation of high quality and highly sustainable CS program. The partnership of CEPAC and IEF, strategically matches the strengths of a highly technical PVO with over 10 years CS experience, with a community based local NGO that has strong ties and excellent reputation within the country. The project design was based on existing activities carried out by CEPAC which were developed with community involvement. The goal of the project is to improve the sustainable delivery of child survival interventions. The partnership will achieve this goal by: 1) improving coverage and quality of individual interventions and 2) improving the managerial capacity of CEPAC and IEF. The project has clearly defined intervention, quality, managerial capacity, and sustainability indicators that will monitor the progress of the CS project.

1) Improving Coverage and Quality of Interventions
The project more than doubles the beneficiary population currently served by CEPAC from 31,464 in Yacaní to 62,153 in the entire Province of Ichilo (including Santa Cruz and Buena Vista). While CEPAC worked throughout Yacaní, in fact they only served a small percentage (30%) of the total communities and the urban center of Yacaní through their static clinic. Therefore, doubling the population served is a conservative estimate of the increases that will be realized by the project.

In order to achieve this greater population coverage, CEPAC understands the need to incorporate more broad-based intervention strategies (such as increasing the use of community education and campaign style strategies) into their overall programming. In addition, greater integration with the MOH and other local partners will assist the IEF/CEPAC team to achieve the CS goals. CEPAC and MOH began the process of better integrating services prior to submission of the original DIP, in March of 2000.

Since the proposal, no major changes have been made to the interventions. The project will address, EPI, Nutrition (including micronutrients), Breastfeeding, CDD and PCM. Pneumonia is the leading cause of death in under 5 year olds. Malnutrition is responsible for over half of deaths, is an underlying cause of all the major causes of deaths, and contributes to maternal

deaths. Diarrhea is a leading cause of death as well, which can be treated at home with ORS or home available fluids in most cases. Data from CEPAC shows 80% of diarrhea (reporting to the mobile clinic) is due to parasitosis, however, the causes have not been studied on a community level in the project area. Deworming in addition to EPI/VA campaigns will continue as programmed in the proposal.

Interventions not included are: 1.)Control of Malaria, 2.) Maternal and Newborn Care, 3.) Child Spacing, and STI/HIV/AIDS Prevention. These interventions were not selected primarily because it was felt that the project would be better served by concentrating on a small number of key interventions that directly relate to the leading causes of childhood mortality. By concentrating on these key interventions, the project will have the opportunity in the four year program cycle to lay the ground work for increasing coverage and quality for these interventions. Once this is successfully implemented with a few interventions, IEF and CEPAC can expand on this success and later add these other interventions which are affecting childhood mortality. It should be noted that CEPAC continues to work with all of these interventions not specifically chosen for CS project through their clinical work in the province.

Women of child bearing age and children to 60 months of age encompass the target groups for the CS project interventions. They will be accessed and incorporated into the program in a variety of ways. Of primary importance will be the community-based census that will allow CEPAC and the MOH to accurately assess the size of their target populations and understand where women and children are located. In addition, expansion of the RPS system will also be important to identifying and locating the target populations. RPS keep data on all families in their communities and report this information to both the MOH and CEPAC.

The following is a list of the target populations by intervention:

Immunizations	• 0-24 month olds • women of child bearing age
Nutrition (micronutrients)	• 0-60 month olds • women of child bearing age
Breastfeeding Promotion	• women of child bearing age
Control of Diarrheal Disease	• 0-24 month olds • women of child bearing age
Pneumonia Case Management	• 0-24 month olds • women of child bearing age

2) Improving the Managerial Capacity of CEPAC and IEF

In 1997, MSH was contracted by PROCOSI to conduct a baseline evaluation of its member NGOs. This evaluation was completed by CEPAC and is used as a baseline from which to evaluate CEPAC's growth.

The evaluation assessed CEPAC's level of performance in each of 6 management areas (mission and plans, leadership, organizational structure and lines of communication, financial management, human resource management and community participation). In summary, the report found CEPAC to be strong in the areas of community participation, leadership and decentralization of decision making, creation of an organizational mission and corresponding strategies, and in overall employee satisfaction. Areas of weakness included 1) documentation and dissemination of lessons learned, administrative and field operations, and personnel policies, 2) financial reporting that meets the needs of program management, 3) financial planning that is aligned with project goals and workplans, and 4) formalization and improvements of supervision and training systems. Of the 35 total management indicators examined, 3 were identified as being in an "initial" stage, 22 were recognized as in a "growth" stage, and 10 were identified as "mature." Please refer to Annex XIV for a list and a pictorial design of the 35 management indicators assessed by MSH.

The overall package of direct support by IEF and technical assistance will produce improvements in all areas of weakness as assessed by completing the MSH assessment prior to the mid-term and final stages of the project. Specifically, by midterm, 71 percent of the indicators will be in the "mature stage" (the 3 indicators at present in the initial stage will advance to the growth stage, and 11 of the 22 in the growth stage will evolve to the mature stage). By the final evaluation, 100 percent of the MSH indicators will be in the mature stage (the 3 indicators in the growth stage will evolve to the mature stage, and the remaining 11 in the growth stage will advance to the mature stage).

In-country Partnerships

The IEF has carefully read and adheres to the strategic objectives of USAID's Office of PVC and to the objectives of the local Bolivia Mission. The IEF further enhances goals of the USAID's VITA initiative and brings over a decade of experience and expertise in vitamin A to the proposed program and to the country of Bolivia.

The IEF met with the USAID Mission in Bolivia on several occasions throughout development of the proposal and the DIP. The Mission provided important guidance for the proposal, supporting formation of the IEF/CEPAC partnership and supporting submission of the proposal to USAID/Washington. The proposal meets the Mission's overall health objectives by ensuring the improvement of child survival services through CEPAC and by developing the capacity of CEPAC as a local NGO.

The proposed program also satisfies the objectives of PVC though : 1.) Increased capacity of IEF to manage CS programs (by expanding its operations to South America, expanding its expertise in sustainability from eye care to primary health care, and by allowing IEF to work with a new local NGO); 2.) Improved operational and technical capacity of IEF and CEPAC to carry out CS projects (especially through the use of Quality Assurance (QA) methodologies); 3.) Strengthened partnership between USAID and IEF by maintaining links to the Office of PVC; 4.) Development and strengthening of a partnership between IEF (PVO) and CEPAC (local NGO); 5.) Improved mobilization of resources by both IEF and CEPAC through their ability to secure local and non-USAID funding and USAID contractor resources to support core CS activities; and 6.) Increased US and Bolivian public awareness of CS programs through IEF and CEPAC public relations materials.

In the project area, CEPAC has developed relationships over years of work in Ichilo that include strong partnerships with the MOH, fellow PROCOSI NGOs, and with the Belgian Technical Cooperative. The latter has recently agreed to provide additional funds to the CS project to improve cold chain management

The project is planning an intensive baseline assessment period which will last between one year and 18 months. This period was programmed in the proposal and has not changed substantially. At this time, the KPC, HFA and cost analysis have been completed. Focus groups, Rapid Rural Appraisals (RRA's), customer satisfaction (including ability to pay), and the nutritional assessment, take place over the course of the next 6 months of the project. All information collected during the baseline assessment period will be shared within the province and with PROCOSI NGOs and should be of use to a variety of organizations. Of particular importance are the cost analysis which examined the cost effectiveness of the CEPAC mobile teams, a common strategy throughout Bolivia and the nutritional assessment which will provide important biochemical and growth monitoring data for the entire province. The USAID Mission in La Paz supported the use of both of these assessments because of their importance to the health of Bolivians.

F. Strengthening the Local Partners

The IEF is working to strengthen its local NGO partner in Bolivia, CEPAC. The overall objective of the partnership is to provide CEPAC with the means to improve its managerial capacity, and thus improve the coverage, quality and sustainability of the health services it provides. The IEF recognizes CEPAC's strengths and appreciates the fact that CEPAC has evolved as a grass-roots effort in the Region of Santa Cruz. The IEF/CEPAC partnership is one of equality and strong collaboration. The purpose of the partnership is to identify capacity area needs required to implement high quality CS programming, as well as increase CEPAC's organizational and financial sustainability. IEF's role is to facilitate the introduction of new concepts and options for improved health programming, and to manage CEPAC's transition to a higher performing organization. Among other things, the process will entail the identification, definition, and modification of capacity building and sustainability objectives and goals. For more details on the relationship between IEF and CEPAC, please refer to the partnership agreement in Annex III.

While working directly with CEPAC, IEF also works indirectly with the Ichilo District MOH to improve technical and managerial capacity. CEPAC and the MOH collaborate in a number of ways. This collaboration is manifested in joint workshops, participation of MOH auxiliary nurses in CEPAC's Mobile Health Teams, and coordination between MOH Area Supervisors and CEPAC Area Coordinators. Furthermore, the IEF Project Advisor maintains close contact with the MOH District Director and staff to ensure they are fully aware of project goals and objectives, and that they have an opportunity for programmatic input. In an effort to strengthen communication between CEPAC, the MOH, and IEF, monthly coordination meetings were established in September of 2000. Participants involved in the meetings include CEPAC's Executive Director and Co-directors of Health, the MOH's District Director and Supervisor,

IEF's Project Advisor, and the Belgian Technical Cooperation's Project Advisor. The agenda for each meeting centers on one issue (e.g. child survival, obstetric risks, etc.), and the participants produce a report focused on recent developments related to that topic in Ichilo Province. In essence, the monthly meetings allow for reflection on activities completed as well as planning for future activities.

Further steps will be taken to strengthen CEPAC's relationship with the MOH. Anecdotal reports from CEPAC and other NGOs indicate that the MOH's capacity to implement certain interventions is very low. One example, is cold chain management. MOH personnel at the Regional level (Santa Cruz) are indirectly involved in the improvement of the cold chain, and the flow of vaccinations from the Regional level to MOH health facilities. A baseline survey of the MOH's technical and managerial capacity has not been conducted. Nevertheless, this project will take steps to improve cold chain maintenance and vaccination flow. It should be noted that the Belgian Technical Cooperation is concurrently implementing a project to help the MOH improve its health system in Sara Province (a neighboring province), as well as Ichilo Province. The IEF Project Advisor and CEPAC are working closely with the Belgian Advisor, Dr. Patrick Van Dessel, to coordinate activities in the two Provinces. Dr. Van Dessel has agreed to provide funds for the purchase of cold chain equipment. This additional funding will allow for the completion of the cold chain and training of an MOH Vaccination/Cold Chain Coordinator. IEF and CEPAC have also agreed to allow three supervisors from the Sara Department participate in the QA workshop lead by Tom Davis in December of 2000 (See Annex XXII). Overall, it is hoped that the MOH will eventually commit on an intervention by intervention basis as the CS project progresses.

Aside from monthly coordination meetings and establishing an efficient cold chain, efforts will be made to improve CEPAC's managerial weaknesses as identified by Management Sciences for Health (MSH). In 1997, PROCOSI contracted MSH, based in Boston, Massachusetts, to assess the managerial capacity of its member organizations. The assessment reviewed six management areas within CEPAC, namely: mission and plans, leadership, organizational structure and lines of communication, financial management, human resource management, and community participation. The strengths of the organization, as reported by MSH, were: 1.) the ability to implement interventions; 2.) strong linkages with the MOH and local leaders; 3.) the presence of a well developed mission and long-term strategic plan; and 4.) the ability to meet community and staff needs in the design and implementation of programs. Of the 35 total management indicators examined, 3 were identified as being in an "initial" stage, 22 were recognized as in a "growth" stage, and 10 were identified as "mature." Please refer to Annex XIV for a list and a pictorial design of the 35 management indicators assessed by MSH.

In preparation for the original DIP, IEF and CEPAC held a one-day workshop to review the MSH report, the capacity building objectives submitted in the proposal, and to brain-storm about strategies to improve CEPAC's capacity. As a result of this meeting, IEF and CEPAC agreed to work together to transform CEPAC's management indicators from the "growth stage" to the "mature stage", and selected indicators to monitor the transition. They also agreed to depend on local consultants, Tom Davis, MPH, (for QA), and the IEF Project Advisor to strengthen weak areas. Relying on said individuals will be more cost-effective than re-hiring the MSH group.

Weaknesses of CEPAC's management capacity, as reported in the MSH assessment, along with plans for improvements, are detailed below:

1) *Documentation and dissemination of lessons learned, administrative and field operations, and personnel policies*. The IEF Project Advisor will work directly to improve this area with CEPAC. IEF will review all managerial documentation with CEPAC and work to upgrade and formalize materials as needed.

2) *Financial reporting/planning to meet the needs of project goals, workplans, and program management.* While CEPAC's donor reporting system is adequate, based on a new computerized accounting system, information useful for making management decisions is not always readily available. Furthermore, personnel do not have solid decision-making skills using financial documents or strong skills in developing financial tools (such as working budgets). The development of a long-term sustainability plan (with the assistance of IEF) and the completion of a cost analysis (July 2000, James Clement, MBA) will be key elements in improving CEPAC's procedures for financial reporting. Included in this upgrade will be an improvement of CEPAC's ability to make financial presentations to government personnel and departments (as specifically requested by CEPAC). The IEF Director of Finance and Administration will visit the project to work with CEPAC to improve overall financial reporting.

3) *Formalizing and improving supervision and training systems*. The need to establish a system that facilitates employee evaluation is a key concern for CEPAC and IEF. In addition, CEPAC would like to institute a system to reward outstanding employees and identify weak individuals for targeted improvement. IEF will contract Tom Davis, MPH,, an expert in quality assurance (QA), to review all supervisory systems. Special attention will be given to consistency and transparency as identified by the report. Checklists, formal feedback and a regular supervisory schedule will be implemented to monitor steps taken to improve the system.

CEPAC and IEF have developed a training plan to improve CEPAC's technical and managerial capacity (see Annex XVI). Improving managerial and general organizational capacity has been identified as a major priority. Attention will thus be paid to improving English proficiency, as well as boosting computer skills, such as the use of Microsoft Office, Microsoft Excel, and EPI-Info. Other areas targeted for training include: proposal writing, resource development, public relations development, web page development, and executive board development. Depending on the availability of resources, IEF would like to facilitate greater in-country training for CEPAC staff, as well as increase the interaction that CEPAC staff have with other Bolivian NGOs/PVOs. Visits to other project sites could coincide with PROCOSI meetings in order to reduce costs. Visiting projects outside of Bolivia would also be extremely beneficial for key CEPAC staff, but would depend on resource availability. Finally, IEF intends to introduce the steps needed to improve CEPAC's operational and financial sustainability. The first step in this process involves generating awareness about sustainability. CEPAC must define what it is they want to sustain and how they plan to move from a traditional, donor-driven organization, to a self-sufficient, income-generating organization. The second step will be to establish a solid business plan and improve cost management. Taking measures to improve productivity, lower costs, and diversify sources of funding will also be necessary to improve CEPAC's financial sustainability. The

third step will involve developing CEPAC's capacity to generate self-earned income. The more earnings that CEPAC can generate, the more flexibility, independence, and control they will have over resources, leading to more long-term sustainability

G. Strengthening the PVO

Strengthening IEF

The Child Survival project in Bolivia is the first CS program (centrally funded) for the IEF in a new country in over five years, and the first in Latin America. The experience and lessons learned from this experience will contribute to improving IEF's programs and enhancing IEF's capacity to assist NGOs and government institutions to design and implement sustainable child survival interventions. The project offers a variety of opportunities by which IEF can be strengthened, at both headquarters and the field office level.

The project supports the overall goals of IEF's strategic plan. It also supports IEF's strategic interest to establish a number of in-country programs for child survival and other eye care projects, providing a new programming experiences and potentially sources of funding. The project contributes to increasing IEF's capacity to implement child survival interventions by supporting CS staff, namely the Child Survival/Vitamin A Coordinator and the Project Advisor. IEF staff who are up-to-date on the latest technical developments in child survival interventions, in turn, increase IEF's technical capacity to implement child survival programs.

The project also supports IEF's endeavors to apply new concepts of sustainability to child survival and vitamin A programs. It provides the opportunity to apply best practices and lessons learned from previous vitamin A projects. During the development of the proposal in consultation with the USAID Mission, PROCOSI and other NGOs, IEF identified country needs to improve vitamin A coverage and strengthen the quality of vitamin A interventions. IEF will draw from its successful experience in Honduras providing management and advocacy support for the national vitamin A and iron supplementation program. It will also draw on CS project and other experience in Guatemala, "Understanding and Strengthening the Capacity of Intermediate Organizations (PVOs and NGOs) to Provide Integrated Community-Based Vitamin A Programs." Aside from vitamin A programs, aspects from other successful programs, such as BCC in Guatemala, and quality assurance efforts in Africa and Central America, will be consulted to bolster the Bolivian project.

The project also supports IEF's strategic objective of forming partnerships working with local NGOs and institutions to create sustainable, self-sufficient services. Specifically, the project allows IEF to continue developing skills in capacity building and sustainability planning with local NGOs. Three steps comprise capacity building for sustainability planning. The first step involves generating awareness about sustainability. In this project, IEF will help CEPAC to redesign their strategic plan to reorient themselves from a traditional donor-driven, dependent organization, towards greater self-sufficiency. Basic elements of this step require CEPAC define what sustainability and capacity building means to them, e.g., what is it (services etc) does CEPAC want to be sustained? How much will it cost? What are the capacities needed to develop state-of-the-art technical skills and efficient, cost-effective organizational capabilities?

How will financial, quantitative, and discrete indicators be defined to measure sustainability? These questions must be explored and answered in order to ensure a commitment to sustainability, as well as ensure that initial steps are taken to achieve it.

The second step to strengthening sustainability consists of addressing business planning and improving cost management. Setting up a business plan, improving productivity, lowering costs (by, among other things, focusing on fewer programs), diversifying funding sources, and improving fundraising are components of cost management that must be addressed with CEPAC. The third step, perhaps the primary objective of sustainability planning is to establish the capacity to generate self-earned income, will also be addressed with CEPAC. Reducing dependency on outside funding in turn fosters greater flexibility, independence, and control over resources. Greater self-sufficiency promotes a beneficial cycle: CEPAC becomes more attractive to outside investment, which will lead to more focused funding and, hence, greater growth and self-sufficiency.

Strengthening capacity building and sustainability planning is a process that requires time, quality staff, and solid leadership. In order to initiate the process, IEF will use materials from Sustainable Development Services (SDS), outside consultants, and lessons learned from previous experiences and projects. Many of IEF's SightReach® Management tools will also be applied, building on sustainability planning and financial self-sufficiency of eye care hospitals. The purpose of IEF's SightReach® Management program is to "enhance financial self-sufficiency of eye care providers leading to improved quality of service outcomes and sustainability of eye care services." The CS project in Bolivia will strengthen IEF's ability to utilize its expertise in eye care, and to explore options to add eye care services to CEPAC and other Bolivian NGOs.

Finally, the CS project allows IEF to support the establishment of a new Bolivian eye care NGO called "INTERVISION." Through the IEF National Representative, Dr. Fernando Murillo, a highly trained, Bolivian National Ophthalmologist (see Annex IV), IEF is supporting the establishment of INTERVISION. INTERVISION is the first Bolivian NGO dedicated exclusively to eye care. A number of eye care activities are proposed that will strengthen INTERVISION and hence IEF's ability to provide long-term support in Bolivia.

IEF Capacity and Monitoring

In late 1998, IEF Headquarters staff participated with several PVOs in the Discussion-oriented Organization Self-Assessment program (DOSA) developed by the Education Development Center, Inc. At the same time IEF moved toward addressing the issues of financial sustainability in its health programming. The DOSA exercise enabled IEF to identify technical and funding capacities that needed strengthening in order to move in the new directions.

IEF's general strengths and weaknesses identified in the DOSA capacity areas were the following: *Strengthens*: financial resource management, organizational sustainability, mission focus, and monitoring and evaluation; *Weaknesses*: external relations, strategic management, financial efficiency and diversification, staff stability, governance, and program realignment. Following this experience, Ms. Marsha Nelms, one of IEF's Board members and a hospital management consultant, assisted IEF over the course of several months. During these all staff

meetings IEF reviewed programming areas and the DOSA results, and began the process of strategically reorganizing IEF's purpose, objectives, and goals. The exercise resulted in the creation of IEF's SightReach® umbrella program, consisting of three components:

- SightReach® Prevention -- cataract, trachoma, "river blindness," and childhood blindness **(including child survival and vitamin A)**
- SightReach® Management -- financial sustainability planning
- SightReach Surgical® -- a social enterprise to reduce the cost of ophthalmic products

Later in 1999 and into early 2000, IEF developed a strategic plan with goals that specifically addressed the low-capacity/high-consensus areas of the DOSA mentioned above, as well as the objectives of IEF's new SightReach® umbrella program. The child survival grant from USAID fits within the plan because it allows IEF to address childhood blindness through nutritional and child health interventions as well as address organizational and financial sustainability planning.

The overall goals of the IEF strategic plan are:

1. Reduce avoidable blindness.
2. Create self-sufficiency within IEF to sustain core Sight Reach® programs.*
3. Create self-sufficient eye care services in partner developing countries.
4. Increase capacity within IEF to offer and expand SightReach® programming to partner NGOs and governments.*
5. Build IEF's image, credibility and reputation as a leader in blindness prevention and financial sustainability programming within eye care institutions.

In its strategic plan, IEF incorporated the high-consensus/ low-capacity areas from the DOSA (identified above with an asterisk).* IEF is monitoring progress in its capacity building through this strategic plan on a number of levels, including: incorporating elements into staff job descriptions, quarterly program and organizational review meetings, and annual work plan development and review. IEF will repeat the DOSA exercise in the first quarter of 2001. Following this, IEF will once again review the effectiveness of the strategic plan, including its strategies and indicators.

H. Sustainability

The IEF defines **sustainability as the ability of a program to meet its operational costs through funding from consumers/beneficiaries while maintaining its orientation to the poor**. This definition reflects the long-term overall goal of IEF for every eye and health care program it supports. While the long-term goal of this proposal is a fully self-sustained child survival program, the IEF recognizes that there are important intermediate steps that need to be achieved to build the way to future sustainability:

1. Continually assess and meet customer demand;
2. Improve and maintain high quality services;
3. Balance volume, cost and prices in a manner that keeps prices affordable for the majority, while allowing access to services for the poor.

In addition, the IEF recognizes that capacity building of its own organization, of local NGOs, MOH structures and community-based institutions is essential to creating the systems necessary for sustainable development to flourish.
The proposed project will address sustainability by:

1) Implementing QA: QA will provide the project with a strong customer orientation and commitment to quality that is necessary to generating trust, demand and revenues.

2) Conducting a cost analysis: The IEF has conducted cost effectiveness analysis in the past (EDI-Guatemala). Introduction of the cost analysis at outset of this CS project has been completed and is allowing IEF and CEPAC to establish systems for continually assessing the cost per intervention/activity. The cost analysis evaluated the costs of CEPAC's key outreach strategy which was hypothesized to be more clinical in orientation than other, more standard community outreach methods used in CS programs. Results of this analysis are reported in Annex XX.

3) Providing direct sustainability technical assistance: The IEF's Sustainability Specialist, David Green will review the existing project and the cost analysis to develop plans that will successfully generate revenues and increase volume. David Green's experience includes the establishment of an intraocular lens factory at the Aravind Eye Hospital that now markets low cost lens internationally. A formal sustainability plan will be developed and presented by mid-term to USAID. Mr. Green will evaluate both cost recovery within the CS project (such as the sale of drugs or microenterprise) as well as revenue generating projects that could exist outside the CS project and generate funds for the project (such as establishment of an eye glass factory).

I. Training

Data collected from the HFA survey indicate that training for health personnel to date has been good, reflected by the ability of the staff to respond to technical questions about illness management and CS interventions. The observational studies, which are part of the HFA were not conducted initially but they will be completed in year 2 of the CS project, yielding additional information about the quality of trainings.

The CS program will continue to train CEPAC and MOH staff and RPSs in the technical aspects of each intervention covered by the project. Training for these three groups of CS workers will focus on the following:

1.) Community based IMCI. The Bolivian MOH has recently disseminated an adapted community-based IMCI training manual to be used with all levels of health workers but to concentrate on community members and RPSs. These materials will be utilized by the CS

project that will host trainings for all RPSs in the province. Monitoring and follow-up are also outlined in the manuals that have been approved. The training schedule is yet to be finalized by the MOH with its provincial partners, however, it is expected that the trainings will take place on a quarterly basis.

2.) Clinical IMCI. Although knowledge and skills of health personnel were found to be high, a need was identified for IMCI training to improve integrated management of illness. The first clinical IMCI training took place on June 2000, for 47 Ichilo province health professionals, including MOH and CEPAC personnel. The training included the following modules:
a.) Integrated Consultations for Children under 5 years old; b.) Attention to Children from 2 months to 4 years of age; c.) Treatment of the Child; d.) Re-evaluation and follow-up; e.) Recommendations to the mother or guardian; f.) Attention to Children under two months old;
g.) Treatment of children under 2 months old and recommendations to the mother or guardian; h.) Methods of follow-up and re-evaluation of children under 2 months; i.) Registration forms; j.) Weight and Height for Age. Subsequent trainings and refresher trainings will be conducted on a yearly basis. Monitoring and follow-up are set by the MOH materials and will be utilized as recommended.

3.) CS technical training sessions. In addition to IMCI, which will encompass the majority of technical training for all staff, technical sessions regarding any area of weakness identified during IMCI, KPC or other monitoring activities will be incorporated into the training schedule as needed. Technical updates will take place at each IEF HQ visit with the HQ employee providing a half to one day session reviewing the current state of the art in a particular intervention or strategy.

4.) BCC training. CEPAC's BCC personnel have extensive experience developing educational materials and activities through their partnerships with LINKAGES and the Johns Hopkins Center for Communications Programs, in addition to formal training they have received in local universities. The BCC personnel have the responsibility for continually training and upgrading the skills of community members, teachers, mothers, RPSs and others who actually deliver messages at the lectures, exhibitions, and festivals they utilize. Training for these activities will continue on a monthly basis.

5.) Cold Chain Maintenance. The MOH of Ichilo Province has agreed to name a staff member (who will be known as the Cold Chain Technical Coordinator) as responsible for the technical maintenance of the new cold chain equipment that is being installed, as well as the functioning equipment that exists. The MOH has also agreed to have that staff member, the Departmental EPI supervisor, the Ichilo area supervisors and the Ichilo field health personnel participate in a TOT training on cold chain maintenance and supervision. This 3-day training will consist of the following elements and will take place December, 2000:

Day	Topics	Participants	Trainer(s)
1	Refrigerator Maintenance	Cold Chain Technical Coordinator, Ichilo Area Supervisors	Refrigerator Technician
2	Adherence to MOH cold chain norms, temperature registration, Emergency Plan development (in case of cold chain failure), supervision and reporting	Departmental EPI supervisor, Ichilo area supervisors, Cold Chain Technical Coordinator	Dr. Oswaldo Chavez (CEPAC), Abel Monasterio (Distict Director – MOH)
3	Refrigerator Maintenance, Adhering to the Emergency Plan, temperature registration	Ichilo field health personnel	Cold Chain Technical Coordinator, Ichilo area supervisors

6.) Quality Assurance/Quality Improvement. Details about this training can be found under the technical assistance section (section 2.F.). A technical consultant, Tom Davis, MPH, will visit the project on three occasions to train a QA team to assess and monitor the quality of the CS interventions. The team will consist of CEPAC and MOH personnel and will receive on-going assistance from IEF whose personnel have extensive experience in the area of QA.

7.) Technical visits to other NGO/PVOs. It has been determined that by sharing lessons learned and better understanding how other NGO/PVOs operate throughout Bolivia and Latin America is an important training experience for CEPAC. For this reasons, visits have been incorporated that take advantage of specific lessons that can be learned. Every effort will be made to cluster visits to reduce costs associated with multiple flights and transportation arrangements.

In addition to training for CS interventions, the project goals of improving capacity will focus on CEPAC HQ personnel and on key MOH counterparts. Those trainings will include the following:

1.) Resource Development and General Public Relations. The Project Advisor will draw on his successful NGO resource development experience to conduct this workshop for key CEPAC staff. The workshop will focus on donor identification, proposal writing, interinstitutional relations/partnerships with U.S. and European NGOs, corporate resources, and relations with the media. All of these areas have been identified as areas that need improvement in CEPAC, and CEPAC has not had any formal training in these areas. This training will take place in the first half of the second year of the project. Materials used will be developed by the Project Advisor from Internet resources, and Spanish-language resource development training materials developed during his time at International Planned Parenthood Federation/Western Hemisphere Region (1997-1999). The product of the training will be a Development Plan with specific objectives and measurable indicators. In the short-term, evaluation of the this training will be performed by a review of the Development Plan by two outside experts. In the long-term, achievement in relation to objectives and indicators will be considered.

2.) Proposal Writing. Although this topic will be addressed in the above workshop, CEPAC has indicated that there is a specific need for significant improvement of their proposal writing, and, based on his inspection of sent proposals, the Project Advisor agrees. For this training, as well as the above training, the Project Advisor will use Spanish-language resource development training materials developed during his time at International Planned Parenthood Federation/Western Hemisphere Region (1997-1999). The products of this training will be staff knowledgeable in proposal writing, and an actual completed proposal, written during the workshop, that will be submitted to donors. This training will take place in the first half of the second year of the project. The training will be evaluated by having two outside experts review the completed proposal, and whether it is accepted by any donors.

3.) Web Page Development. At present, CEPAC does not have a web presence, but recognizes the need to develop a bi-lingual (English/Spanish) web site to improve their ability to inform the public and generate financial resources. The Project Advisor will lead them in the process of identifying content, obtaining hosting services, developing a maintenance/update plan, and generating publicity for the site. Currently, no CEPAC staff have skills in this area, while the Project Advisor has helped in the development of webs sites for three NGOs in the United States. By the end of the training CEPAC will have developed a plan to establish a quality web page that will increase their public visibility and ability to generate resources. This training, and the actual establishment of the web site, will take place in the second half of the second year of the project. The training will be evaluated by the quality of the web site, as judged by professionals from other Bolivians and U.S. NGOs and potential donors, whom we will ask for feedback.

4.) Executive Board Development. Since its inception, CEPAC has had a Board of Directors consisting of four members plus the Executive Director. This Board was established largely to satisfy the Bolivian law and is not an active board in helping the Executive Director to make important long-range decisions about CEPAC's mission, or to develop resources. The Executive Director has expressed a need for Board assistance with these issues. The Project Advisor will lead the Executive Staff of CEPAC in developing guidelines for selecting, training, and managing an active Board of Directors consisting of nine members. This training will take place in the first half of the second year of the project. Training materials will be secured from other NGOS that have gone through the same process. The training will be evaluated in the short-term by the application of a questionnaire to the Executive Staff at its end. An outside expert will evaluate a summary of the training process.

5.) English Classes. Funding has been provided for key CEPAC staff to take intensive English courses, so that they are able to communicate with current and potential donors, a and as an incentive. This training began in the first year of the project and will continue through the second year. Evaluation of staff by the English teacher is ongoing, and will be reported at the mid-term of the project.

IEF HQ staff will also adhere to a training plan that will include: 1.) continued training in QA from Tom Davis, MPH, and from Johns Hopkins University, 2.) continued computer training in Access and EPI-Info, 3.) technical trainings primarily through USAID contractors such as CSTS, BASICS, etc.

J. Behavior Change Communications

The BCC strategies that are in use by CEPAC at this time revolve around the following activities:
1. Breastfeeding and Complementary Feeding Participatory Talks developed with expertise from LINKAGES
2. Health festivals developed with expertise from Johns Hopkins Center for Communications Programs
3. Cooking demonstrations and community "charlas" (informal chats)
4. Radio shows that transmit key health messages

Breastfeeding Activities
CEPAC has been able to access technical support for their BCC initiatives primarily as a result of their involvement with PROCOSI. In the past year, they have worked with LINKAGES to develop materials for the province as part of a national effort by LINKAGES to improve breastfeeding and complementary feeding practices. Materials developed for use by community based personnel include flip charts, banners, and radio messages. Two trainings were conducted by LINKAGES and administered to CEPAC and MOH personnel in April and November of 1999. The trainings averaged 5 days in length, the first of which concentrated on technical personnel (auxiliary nurses, educators and facilitators), while the second concentrated on training of community based facilitators. Two manuals were left by LINKAGES for use by staff in the trainings and presentations to the communities ("Manual for Nutrition, Health and Early Childhood Development in Under 3 Year Olds" and "Manual for Health Promoters"). LINKAGES is conducting on-going monitoring of the new materials and methods and will report progress to all PROCOSI NGOs.

Health Festivals
The community health festivals implemented by CEPAC were developed with the assistance of the Johns Hopkins Center for Communications Programs. Thirty annual health festivals are scheduled to take place in 120 communities of Ichilo Province (approx. 50% of communities per year). The festivals promote information, training, and education through interactive games and entertainment. The objective of festivals is to increase community awareness of health issues.

A Community Operating Team (COT), made up of local teachers, Community Health Volunteers, women's organizations, and leaders of local projects, are trained in the two days prior to the festival regarding how to organize, manage, and replicate health festivals. The two-day training session focuses on eleven health issues, of which 30% deals with concepts and theory, and 70% on the practice of using educational materials and communication techniques both during the festivals. During the second day of training, the COT produces a workplan for local educational activities.

The festivals are presented in three parts. The first part involves participation in the festival games and participatory evaluations, which lasts most of the day. This session ends with a simple evaluation completed by means of a roulette game (to determine questions about materials presented during the day) involving the entire community. In order to facilitate the participation of children and adolescents, schools will be involved in the planning of activities.

The children and adolescents will be encouraged to participate in activities such as games, drawing contests, singing, and dancing. These activities convey basic health information, and issues like self-esteem and self-respect. Health workers from the CEPAC Mobile Health Teams will also participate in these activities to ensure that members of the community and health workers are integrated.

In the evening the second phase of the festival begins, namely an analysis of community information (ACI). This activity involves the use of an epidemiology game board showing the impact of local health assistance. The objective of this activity is to generate an analysis within the community to learn about the advantages and disadvantages of existing health services, and the circumstances that impede or facilitate the use of health services. The thoughts, opinions, and needs expressed by community members are recorded in a document to be signed by the leaders, authorities, and health sector personnel after the festival.

The third stage of the festival is a cultural night during which each participating community group performs cultural or musical entertainment. The purpose of this activity is to provide the community with recreation time to socialize, interact with one another, and strengthen relationships.

Community Chats ("Charlas")
The CEPAC Mobile Health Teams carry out community discussions or chats in each community that they visit. Members of the Mobile Health Teams structure the chats according to an agenda previously agreed upon and determined by local needs. The same materials used in the community health festivals are used, such as flipcharts, laminated illustrations of positive health situations, posters, and various health-related games.

Mass Communication
Communicating with the public through programming initiatives of local radio stations is a highly effective means of informing communities about public health issues. Radio "novelas", the equivalent to daytime soap operas in the USA, are an extremely effective tool with which to communicate health messages, as are public service announcements and health "jingles." Using the radio guarantees that a large amount of practical health information will be reach the public. CEPAC conducts surveys to monitor acceptance and understanding of health messages.

Through the CS project, IEF will work with CEPAC to upgrade their level of capacity to implement BCC initiatives. To date, expertise has been acquired but the ability of CEPAC staff to replicate the process of developing a BCC strategy from its inception is limited. The first intervention to be evaluated will be the nutrition intervention. CEPAC staff will be aided to collect qualitative and quantitative data to determine the key factors influencing behavior within the intervention. IEF staff will then work with CEPAC to refine existing materials and health messages. IEF has already accessed the assistance of CSTS to review all health messages and is sharing this information with CEPAC. By the end of the CS project, CEPAC will be able to determine what BCC intervention strategies need review and will be able to develop a plan to improve the materials and methods without direct outside assistance. In addition, the Belgian Technical Cooperative has agreed to take on the task of developing new diarrhea and pneumonia

intervention BCC materials based on qualitative research and on IMCI guidelines. These materials will be available in early 2001.

Materials currently used by CEPAC are aimed at the variety of groups that live in the area, namely highlanders (transplanted) and lowlanders. Materials have been developed in a variety of languages to match the languages spoken by the target groups. As most of the target population, namely women of child bearing age, is illiterate, materials are mostly illustrative while discussion groups or educational sessions are held in local languages. Languages spoken include Quechua and Spanish.

Section 2: PROGRAM MANAGEMENT

A. Workplan: A project work plan is attached in Annex XVII.

B. Human Resources

The International Eye Foundation, as the prime grantee will work closely with CEPAC, the sub-grantee, to assure adequate procedures are in place for financial and programmatic management of the CS program. Sustainable working relationships will be formed between IEF, CEPAC, CEPAC's partners, and the Bolivian Ministry of Health. Details of the management lines of communication and reporting can be found in the "Partnership Agreement" (Annex III). This agreement was developed using a variety of resources including a sample agreement that was obtained from Counterpart International (PVO). The IEF HQ team worked with CEPAC staff during an initial team visit to Bolivia that took place in November 1999. The initial process of drafting the document took about one week. Following the site visit small changes and edits were made and the document was finalized in December of 1999.

CS Project Personnel:

Position, Program Affiliation, Name	Duties	Paid/ Volunt.	CS Time
Project Advisor, IEF/Bol. *Kirk Leach*	Provide project supervision and management and work in collaboration with CEPAC and the MOH.	Paid	100%
Project Assistant, IEF/Bol. (To be hired)	Provide administrative support to Project Advisor (translations, secretarial work, filing, etc.).	Paid	100%
Country Representative, IEF/Bol. *Dr. Fernando Murillo*	Establish networks, foster project advancement, support development of INTERVISION.	Paid	20%
Director of Programs, IEF/HQ *John Barrows*	Support Project Advisor and CS Technical Backstopper, and monitor QA.	Paid	15%
CS Backstopper, IEF/HQ *Gwen O'Donnell*	Provide CS technical assistance, facilitate communication/coordination between IEF field staff, IEF headquarters staff, and USAID, visit project, and submit timely reports to USAID.	Paid	35%
Technical Advisor, IEF/HQ *Lily Riva Clement*	Provide technical support on all aspects of CS project.	Paid	27%
Financial Manager, IEF/HQ *Ed Henderson*	Financial oversight of the project, including monitoring the IEF/CEPAC sub-grant budget, expenses, monthly fund transfers, and preparing USAID financial reports.	Paid	10%
Program Assistant, IEF/HQ *Ed Hedvall*	Provide administrative and technical assistance to the CS Backstopper.	Paid	15%
Executive Director, CEPAC/HQ *Widen Abastoflor*	Ensure organization fulfills its mission and that resolutions and agreements by Board of Directors are executed, direct staff, direct CEPAC's technical and financial activities, and serve as an inter-institutional liaison with other organizations.	Paid	20%
Project Administrator, CEPAC/HQ *Omar Miranda*	Oversee financial and administrative issues at both the field and headquarters levels.	Paid	69%
Project Accountant, CEPAC/HQ *Ana Maria Vargas*	Manage financial records of CEPAC's projects.	Paid	26%
Administrative Assistant, CEPAC/HQ *Joaquin Duran*	Provides administrative support (secretarial work, filing, etc.) to Project Administrator and Project Accountant.	Paid	100%
Bilingual Secretary, CEPAC/HQ *Paola Soliz*	Fulfill secretarial responsibilities (translations, filing, typing, receptionist, etc.) for the Executive Director.	Paid	100%
Co-Director of Health (Liaison to Partners/Public Health), CEPAC *Dr. Osvaldo Chavez*	Act as liaison with municipalities, health centers, district areas, etc. Supervise and direct municipal health boards, facilitate program implementation, monitor and evaluate indicators and project progress.	Paid	35%
Co-Director of Health (Field Operations/Reporting), CEPAC *Dr. Mabel Morales*	Monitor and evaluate epidemiological surveillance system, registry and analysis of information, write reports, and direct community health activities (community chats, health festivals, etc.) and project implementation.	Paid	35%
Area Supervisors (one each in San Carlos, Yacaní, Buena Vista), CEPAC	Coordinate, supervise, and participate in activities of Mobile Health Team (e.g. implement CS interventions, and conduct training of RPSs, health festivals, community chats, monitor data collection quality, etc.), and work directly with the MOH Area Supervisors.	Paid	50%

Mobile Health Teams (3), CEPAC	Provide community medical attention, organize community chats and health festivals, implement preventive health measures (educational sessions on infant and child care, etc.), and work with CEPAC Area Supervisors to monitor data collection quality.	Paid	75%
Medical Doctor (3), CEPAC	As part of a mobile unit, provide a range of care up to the level of minor surgery, vaccinations, and referrals to medical facilities.	Paid	50%
Sexual and Reproductive Health Promoter (3), CEPAC	As part of a mobile unit, provide SRH advice and supplies.	Paid	20%
BCC Promoters(2), CEPAC *Manuel Illanes, Pablo Colque*	As part of a mobile unit, provide BCC information, lead workshops, community chats, training of health festival facilitators.	Paid	100%
Integral Health Promoters (3), CEPAC	As part of a mobile unit, provide preventive services in various important health areas (e.g. immunizations, growth monitoring, infectious diseases, nutrition, acute respiratory infections, etc.).	Paid	100%
Area Health Supervisors (3), MOH	Supervise and monitor services provided by MOH health workers in MOH health centers and posts, assist CEPAC Mobile Team, work directly with CEPAC Area Coordinator to implement CS interventions and collect data.	Paid	50%
District Director, MOH *Abel Monasterio*	Manage staff, ensures organization fulfills goals, direct MOH technical and financial activities in the district, and serve as an inter-institutional liaison with other organizations.	Paid	50%
Medical Doctor (10), MOH	Provide a full range of care at hospitals and medical facilities.	Paid	50%
Nurses (15), MOH	Provide basic care and assist doctors in hospitals.	Paid	50%
Vaccination/Cold Chain Coordinator, MOH	Oversee cold chain maintenance, conduct monthly facility checks, train staff on cold chain maintenance protocols, and ensure adequate supplies of vaccines at health facilities to prevent stock outs.	Paid	100%
Auxiliary Nurses (40), MOH	Provide comprehensive care and make referrals when necessary in health facilities.	Paid	50%
Community Health Volunteers- RPS (120), MOH	Be knowledgeable about district and local health realities, laws, health policy, and community participation. Participate in community activities, educate communities on health issues, promote community health action plan, and provide basic medical advice, treatment, and referrals, if needed.	Volunt.	50%

IEF Field Staff

At the IEF field level, Kirk Leach, MPA, Project Advisor, provides direct supervision of the CS project in collaboration with CEPAC. Mr. Leach is a salaried employee working in Bolivia, and devotes 100% of his time to child survival activities as they relate to the project. Mr. Leach has past experience with fund raising from government and non government sources, NGO capacity building, and backstopping health projects. Mr. Leach has an office at CEPAC headquarters in Santa Cruz, enabling him to work collaboratively with the Executive Director, Widen Abastoflor, and other CEPAC personnel. He spends several days per month overseeing field activities in collaboration with the Co-Directors of health, Dr. Mabel Morales and Dr. Osvaldo Chavez. Dr. Morales is based at the CEPAC clinic in Yacaní, and Dr. Chavez is based in the CEPAC clinic in Buena Vista. Mr. Leach is responsible for ensuring that managerial and financial reports (refer to Annex XVIII) are received, reviewed, summarized, and forwarded to IEF Headquarters. He provides frequent reports to IEF Headquarters on project activities, milestones completed, barriers to activity completion, and administrative/financial updates. He makes funding requests to IEF Headquarters and provides any and all data required by IEF for compliance with the A-133 audit.

A project assistant will be hired in early 2001 to assist the Project Advisor with administrative and program-related duties in Bolivia. This position will be a paid position, dedicated 100 percent to facilitating the endeavors of the Project Director and the project's CS-related activities. The ideal candidate will be a Bolivian junior health professional who will be trained over the second and third years of the project to inherit the Project Advisor position in the fourth year. This person will maintain the position in the event of a project extension.

IEF Headquarters Staff

IEF headquarters provides important project support as a result of the organization's experience in the technical administration of CS interventions, vitamin A deficiency control, quality assurance, and expertise in sustainable eye care programs that can be applied to child survival. (Please see attached IEF, CEPAC, and MOH organizational charts, Annex XIX.)

At the IEF headquarter level, Ms. Gwen O'Donnell, MA, MPH, will provide technical backstopping for the project. Ms. O'Donnell serves as the Child Survival/Vitamin A Coordinator at IEF headquarters. She has experience in nutrition, micronutrients, food fortification, and fundamental IMCI interventions. She will be responsible for routine coordination and communication between IEF headquarters and the Project Advisor in the field, as well as USAID reporting. Ms. O'Donnell will also be responsible for ensuring that the project follows state of the art protocols for each intervention. Frequent contact with CSTS and other USAID contractors will be necessary to remain informed of the latest technical CS knowledge and innovations. Information must be obtained from meetings, conferences and fellow PVO/NGOs about best practices and lessons learned. Ms. O'Donnell will be expected to maintain at least weekly contact with the Project Advisor. She will be a salaried employee of IEF Headquarters, devoting 35 percent of

her time to child survival activities. She has visited the project site in November of 2000 for two weeks, and again in March of 2001. The visit in early 2001 will be a lengthy two to three month stay during which time Ms. O'Donnell will oversee and manage the nutritional assessment component of the project. Additional country visits will be made as needed for the duration of the project (e.g. midterm, final, and any other formal evaluations), lasting approximately two to three weeks in length. Monitoring project progress in view of objectives and scheduled activities will always be included in the scope of work (SOW) for visits. The SOW, at the request of project administration, may also encompass mini-workshops for project staff on specific topics to communicate innovative information.

Liliana Riva Clement, MPH, serves as Technical Advisor for the project. Ms. Clement was a key contributor and developer of the initial proposal. She participated in the original field visit to develop the partnership agreement with CEPAC. She continues to provide technical support regarding the CS interventions, with specific emphasis on the nutritional assessment and quality assurance activities. Ms. Clement also has primary responsibility for supporting the new CS Coordinator, Gwen O'Donnell. Ms. Clement has been contracted on an on-going basis at 27% time.

John M. Barrows, Director of Programs at IEF, is responsible for programmatic and administrative support to field personnel as well as headquarters staff, particularly the CS Backstopper. He periodically reviews field program budgets and expenditures with the Director of Finance, and serves as a conduit for information and policy from headquarters to the field. Mr. Barrows helps prepare major documents on field program activities, serves as a liaison between IEF and USAID, and oversees monitoring and evaluation activities of the program. The position is a paid position, dedicating 15 percent of work time to CS activities.

The Director of Administration and Finance, Edwin M. Henderson, carries out financial management at IEF headquarters. Mr. Henderson has responsibility for financial oversight of the project, including monitoring the IEF/CEPAC sub-grant budget, expenses, monthly fund transfers and preparing financial reports to USAID. Mr. Henderson is a salaried employee of IEF, spending approximately 10 percent of his time on child survival activities. The Child Survival Coordinator (Gwen O'Donnell), and the Director of Programs (John Barrows) assist him in the monitoring of program expenses.

CEPAC

CEPAC maintains its headquarters in the city of Santa Cruz in order to manage numerous projects, participate in fund-raising activities, have access to resources for the development of educational materials, and to maintain relations with other NGOs and government entities. All CEPAC staff are country nationals. The executive director of CEPAC, Widen Abastoflor, is responsible for legal representation of the organization, for ensuring that the organization is fulfilling its mission and that resolutions and agreements made by the Board of Directors are executed. He also directs and coordinates CEPAC's technical and financial activities, serves as an inter-institutional liaison with other

organizations, supervises CEPAC's administration and accounting, and produces CEPAC's annual report. Mr. Abastoflor spends 20 percent of his time on CS activities and receives 20 percent of his salary from this project.

The Project Administrator at CEPAC/HQ, Omar Miranda, oversees the financial and administrative issues at both the field and headquarters levels. Mr. Miranda spends 69 percent of his time on CS activities and is paid by the project. The Project Accountant, Ana Maria Vargas, manages CEPAC's financial records. She is paid by the project and spends 26 percent of her time on CS activities. Joaquin Duran, Administrative Assistant at CEPAC/HQ, provides administrative support to the Project Administrator and Project Accountant. He devotes 100 percent of his time to CS activities and receives compensation from the project. The Bilingual Secretary at CEPAC/HQ, Paola Soliz, fulfills secretarial responsibilities for the Executive Director, is paid by the project, and spends 100 percent of her time on CS activities.

CEPAC's Co-Director of Health, Dr. Osvaldo Chavez, works as an inter-institutional liaison between CEPAC, municipal and district authorities, health centers, training centers, and other local organizations. He facilitates program development and implementation, monitors and evaluates indicators and project progress, manages the budget, and negotiates for matching grants. He also acts as a representative before the PROCOSI lawyers' commission, is responsible for ensuring high quality performance of the health teams in Buena Vista and San Carlos, and manages the tuberculosis program. Dr. Chavez spends approximately 35 percent of his time on CS activities. He is currently paid through a separate tuberculosis project. In January of 2001, he will begin to receive funding from this project.

Mabel Morales, CEPAC's Co-Director of Health monitors and evaluates CEPAC's epidemiological surveillance system. She is also in charge of recording and analyzing data, producing reports, managing community health outreaches, evaluating CEPAC's performance, overseeing CEPAC Area Coordinators, and ensuring that the health teams in Yacaní and Jampikuna maintain high quality operations. Ms. Morales spends 35 percent of her time on CS activities and receives 35 percent of her salary from this project.

The role of CEPAC Area Supervisors is to coordinate and supervise the activities of the Mobile Health Teams, secure funds for the Mobile Teams, facilitate sector training activities, community health festivals, and community chats ("charlas"), and work in coordination with MOH Area Coordinators. The Mobile Health Teams provide medical attention and introduce prevention practices and behaviors in the areas of child health, reproductive health, and infectious diseases. The Supervisors spend 50 percent of their time on CS activities and are paid by the project.

The Mobile Health Teams provide community medical attention, organize community chats ("charlas"), implement preventive health measures (infant and child care, sexual and reproductive health care, infectious diseases, etc.), and work with area officials to design high quality community visits. The Teams are also instrumental in collecting

community data, visiting communities once a month. They spend 75 percent of their time on CS activities and are paid by the project. As part of a mobile unit, the medical doctors provide a range of care from vaccinations to minor surgery, as well as referring individuals to medical facilities when necessary (and feasible). They spend 50 percent of their time on CS activities and are paid by the project. The Sexual and Reproductive Health Promoters from the Mobile Teams provide advice and supplies, spending 20 percent of their time on CS activities, and receiving compensation from the project. The BCC Promoters work with the Mobile Teams to implement CS interventions, provide BCC information, conduct workshops, train health festival facilitators, and facilitate community chats ("charlas"). They are paid by the project and spend 100 percent of their time on CS activities. The Integral Health Promoters from the Mobile Teams provide preventive health services, devote 100 percent of their time on CS activities, and receive compensation from the project.

Ministry of Health

Mr. Abel Monasterio is the District Director for Ichilo Province at the Ministry of Health (MOH). He manages administrative and financial matters for the district and serves as a liaison with other organizations. He spends 50 percent of his time on CS activities and receives compensation from the Ministry. The MOH medical doctors provide a full range of care at hospital and medical facilities, spend 50 percent of their time on CS activities, and are paid by the Ministry. The MOH nurses are also paid by the Ministry, provide basic medical care, assist doctors, and spend 50 percent of their time on CS activities. Similarly, the auxiliary nurses spend 50 percent of their time on CS activities, provide comprehensive health care, and make referrals when necessary. The Vaccination/Cold Chain Coordinator at the MOH is responsible for preventing vaccine stock-outs at health facilities, training staff on protocols for cold chain maintenance, conducting monthly health facility checks, and overseeing cold chain maintenance. The Coordinator is paid by the Ministry and devotes 100 percent of his/her time to CS activities.

Local Communities

Community Health Volunteers, or RPS (*Responsible Para el Salud*), volunteer to promote community health action plans, provide basic medical care and advice, make referrals, and help facilitate community activities (e.g. health festivals, community chats, etc.). RPSs are also instrumental in collecting community data that is combined with Mobile Health Team data and MOH data to generate community, area, and Provincial statistics.

Community Committees and Groups

CEPAC has presented this project to each of the three municipalities involved (Yacaní, Buena Vista, and San Carlos). Each council has agreed to support the project. This is important for project success due to the fact that these councils control the distribution of medications to MOH health facilities from the National Basic Insurance System (Seguro Nacional Básico).

Another important community group is the Yacaní chapter of the National Congress of Community Health Volunteers (RPS). All active RPSs in Yacaní are members of this organization . It is expected that a chapter of this organization will be established in San Carlos and Buena Vista, especially as an additional 70 RPSs are recruited for the project.

Any basic sanitation activities that may be conducted in the future as part of a related project will involve the local Water and Sanitation Boards, as well as relevant local governmental officials.

Role of Country Nationals

Bolivians, with the exception of the Project Advisor, will implement the project in Bolivia. A qualified Bolivian national could not be found for the Project Advisor position, even after announcements were placed in local Bolivian newspapers and international publications. A U.S. citizen was thus hired for the position. A qualified Bolivian citizen will replace the current Project Advisor in the fourth year of the project.

The IEF Country Representative in La Paz is Dr. Fernando Murillo, a Bolivian ophthalmologist who studied medicine for over 10 years at Johns Hopkins University and Bascom Palmer Eye Institute. Dr. Murillo returned to Bolivia to develop public health programs and to establish a private practice. Dr. Murillo's network of contacts in the country has been crucial to establishment of IEF's offices in La Paz and Santa Cruz and to the development of the CS Project.

Health Worker Coverage

There are a total of 120 RPSs and 41 paid health personnel in Ichilo Province. With 62,153 beneficiaries, there is a ratio of 386 beneficiaries per health worker. The total number of families in Ichilo Province is 12,430, resulting in 77 families per health worker. The number of families per *paid* health worker is 303, and the number of families per RPS (volunteer health worker) is roughly 104. There are a total of 210 communities in Ichilo Province. The ratio of communities to paid health worker is 5, while the ratio of communities to health worker (paid and unpaid) is roughly one to one.

Resumes/CVs

New and updated curriculum vitae are provided in Annex IV. Ms. Gwen O'Donnell, MA, MPH, will be fulfilling the role as technical backstop for the CS Project in Bolivia.

Staff Training

Staff responsible for the implementation of the Bolivian CS project will be required to participate in training to maintain cutting-edge CS technical expertise. To ensure that staff are up to date on recent lessons learned, best practices, and technological innovations, training will take place through a variety of means.

IEF Headquarters

At IEF headquarters, staff will participate in all relevant CORE activities and join at least one CORE working group. CORE training will be required, such as the "M & E Update Meeting Managing for Results," which two IEF staff members attended, focusing on the KPC 2000, Rapid Catch, and LQAS training. Other workshops will also be required, such as the CSTS-sponsored IMCI workshop in 2001, the regional LQAS workshop in 2001 (in Ecuador), the regional Safe Motherhood Update in the spring of 2001, the CORE Annual Meeting in the spring of 2001, and CSTS capacity/sustainability workshop(s) in 2001. Headquarters staff will also receive quality assurance training, comprised of both formal classroom instruction as well as hands on field experience with an expert (e.g. Tom Davis, MPH,). Staff will be expected to complete KPC training though the use of self-explanatory field guides (currently under development at CSTS), as well as hands-on field experience with a skilled trainer. Additional training opportunities with USAID, or PVO sponsored workshops on CS interventions, best practices and lessons learned, financial management of CS projects, etc., will also be required.

Staff computer skills will be updated via participation in computer workshops, such as the CSTS/CORE sponsored workshop in December 2000 entitled "Using the Internet to Access Child Survival Resources." IEF staff will also receive formal training in Team Technology Planning and log frame planning. Headquarters staff will also continue to work with key resources from the IEF Board of Directors on strategic planning skills and developing critical partnerships. It is expected that staff trained at headquarters will share new information with IEF field counterparts, as well as staff from partner organizations.

In order to keep on top of latest developments in the field of nutrition, the CS Backstopper, Ms. Gwen O'Donnell, will join the CORE Nutritional Working Group and actively participate in as many educational opportunities as possible. Ms. O'Donnell will take advantage of all conferences, workshops, training sessions, and educational materials offered by organizations such as the International Union of Nutrition Sciences (IUNS), the Food and Agriculture Organization (FAO), UNICEF, WHO, the Micronutrient Initiative (MI), BASICS, and FANTA. She will also attend the annual IVACG Meeting in February 2001 in Vietnam. The purpose of attending the IVACG Meeting will be to learn about effective and up-to-date policy and program recommendations to reduce vitamin A deficiency, as well as to discuss innovative techniques and indicators for assessment, surveillance, and evaluation to improve future vitamin A interventions and programs.

IEF Field

A training exchange between IEF headquarters and field staff will be expected on a regular basis; headquarters staff will be expected to share information with field staff. Field staff will also be required to participate in the same quality assurance training as headquarters staff, namely formal classroom instruction as well as hands on field experience with an expert. They will also be expected to complete KPC training though

the use of self-explanatory field guides, as well as hands-on field experience with a skilled trainer. Qualitative research training will also be provided in order that IEF field staff be able to fully participate in qualitative assessments. Any training that can not be obtained in the field (at regional workshops, etc.), particularly for the Project Advisor, will be scheduled during annual trips to the United States.

CEPAC Headquarters and Field Staff

Numerous training sessions have been planned to assist CEPAC staff in the implementation of child survival activities.

In June of 1999, CEPAC staff were trained in community IMCI. The training focused on three areas, namely: integrated health for children less than 5 years of age, attention to children 2 months to 4 years of age, and attention to children less than two months of age. Within each age group, the methodologies and protocols used to evaluate, classify, and treat specific illnesses were discussed.

In regard to BCC, CEPAC has requested particular training workshops. Specifically, CEPAC would like to participate in workshops on communication strategies in order that they be able to develop innovative materials for communities in Ichilo Province. In addition, CEPAC would like to train one individual to be a technical specialist in the design and application of BCC monitoring systems. Ideally CEPAC would like to develop a monitoring and evaluation system to measure the impact of mass media campaigns and activities related to the training of BCC facilitators. CSTS, Porter Novelli, and other organizations will be contacted to explore these questions. IEF and CEPAC will also discuss the possibility of hiring a local consultant to conduct a training workshop, or, alternatively, requiring the designated specialist to attend a course on BCC monitoring and evaluation.

Since its inception, CEPAC has had a Board of Directors consisting of four members plus the Executive Director. The Board is largely honorary and is not particularly active in helping the Executive Director to make long-range decisions, or to generate resources. The Executive Director has expressed an urgent need for assistance in defining a qualified executive board to assist in strategic planning for CEPAC. The Project Advisor and a Bolivian consultant will therefore lead a training workshop to develop guidelines for selecting, training, and managing nine individuals who will serve as an active Board of Directors. The training will take place in the first half of the second year of the project. CEPAC staff will evaluate the performance of the Project Advisor based on their expectations at the beginning of the training.

Funding has been provided for key CEPAC staff to take intensive English courses. The purpose of English training is to facilitate communication with current and potential donors. The training began in the first year of the project and will continue through the second year. A Bolivian National with extensive English training in the United States conducts regular English classes at CEPAC. Evaluation occurs on an ongoing basis through participant testing. Results will be noted in the mid-term report.

At present, CEPAC does not have a web page, but recognizes the need to develop one and to become "virtually active." The Project Advisor will lead CEPAC in developing the content of the web page, identifying host services, developing a maintenance and update plan, and generating site publicity. The training will produce a plan to establish a quality web page to increase public visibility and CEPAC's ability to generate resources. The workshop will take place in the second half of the second year of the project. The training will be evaluated by the quality of the web site, as judged by at least two experts. CEPAC staff will evaluate the performance of the Project Advisor based on their expectations at the beginning of the training.

CEPAC has indicated a specific need for significant improvement in proposal writing abilities. In this workshop, the Project Advisor will use proposal-training materials he developed at International Planned Parenthood Foundation/ Western Hemisphere Region (IPPF/WHR). The purpose of the workshop will be to upgrade CEPAC's capacity in proposal writing by producing a proposal to be submitted to donors. The training will take place in the first half of the second year of the project. The product of the training, the proposal, will be evaluated by at least two experts before it is submitted to potential donors. CEPAC staff will evaluate the performance of Project Advisor based on their expectations at the beginning of the training.

The Project Advisor will draw on his NGO resource development experience to conduct a workshop on resource development and general public relations for CEPAC staff. The workshop will focus on donor identification, inter-institutional relations/partnerships with U.S. and European NGOs, corporate resources, and media relations. This training will take place in the first half of the second year, and will rely on resource development materials designed by the Project Advisor. The product of the training will be a Development Plan with specific objectives and measurable indicators. The Development Plan will then be evaluated and revised, if necessary, by at least two experts. CEPAC staff will evaluate the performance of the Project Advisor based on their expectations at the beginning of the training.

C. Financial Management

A "Financial Status Report" and " Federal Cash Transaction Report" will be completed quarterly by the IEF Headquarters office and submitted directly to USAID in compliance with the Cooperative Agreement and CFR 226.52.

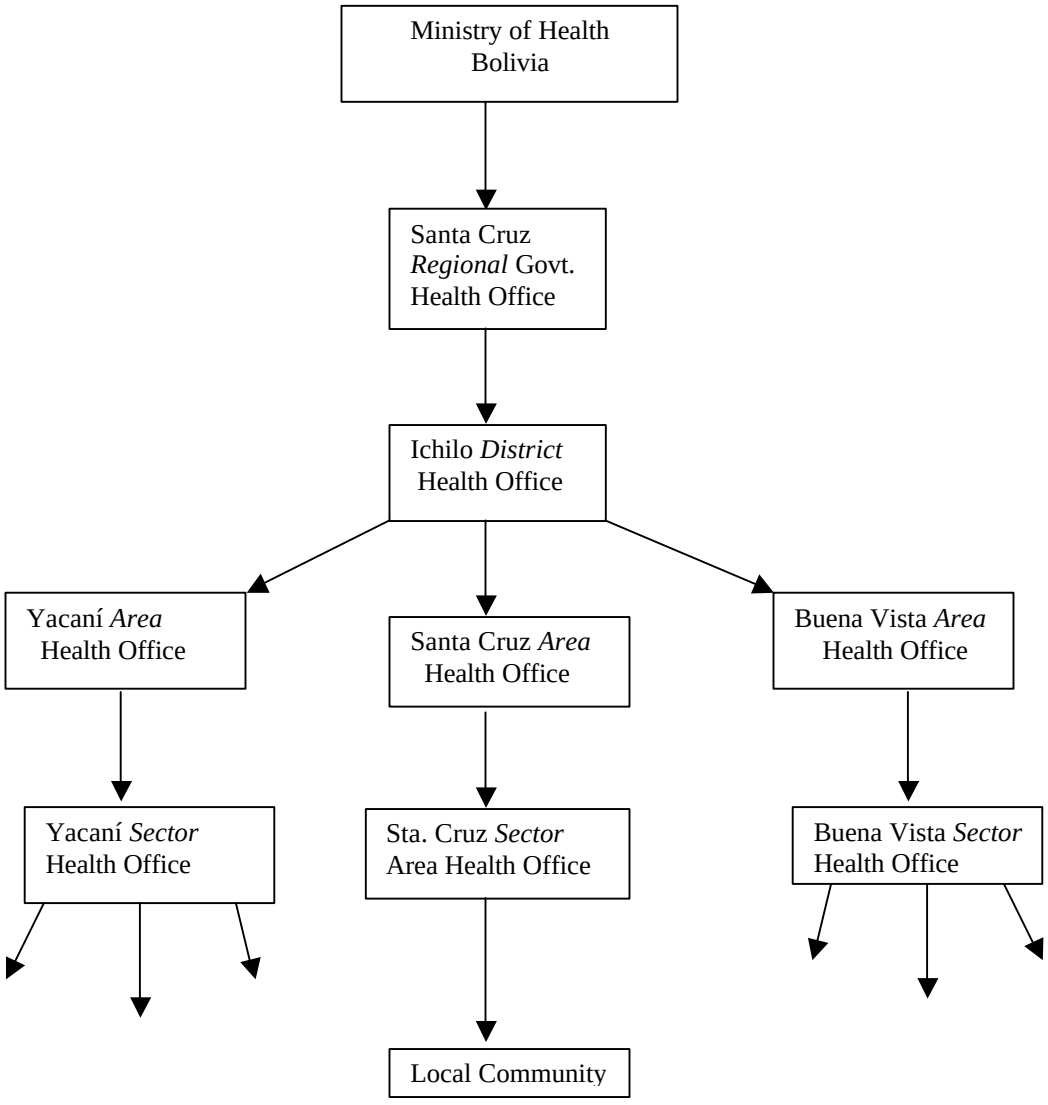
CEPAC will report to IEF on a quarterly basis, reporting on project activities and corresponding expenditures. Funds are requested and disbursed on a quarterly basis, based on justified projections. This quarterly report has been used in the past by CEPAC, and is the standard report used by PROCOSI which includes a numerical report of activities (i.e. number of children vaccinated) and a brief narrative summary describing the development of activities. Audits are done on a yearly basis. This will continue unless otherwise required by a donor. (Refer to Annex XVIII for a copy of the reporting form to IEF.)

D. Monitoring and Evaluation

Structure of Health Reporting System

At present, CEPAC uses a data collection system that corresponds to national MOH protocols. The project will support this system, focusing on strengthening CEPAC's capacity to collect data. A joint effort between CEPAC and IEF will reduce some of the burdens associated with paper-based data collection by focusing on ways to maximize computer usage.

CEPAC designed a data system to fulfill multiple report requirements, namely those made by the Bolivian National Health Information System, (SNIS- Sistema Nacional de Información de Salud), the four levels of health offices that fall under the Ministry of Health (namely, sector, area, district, and regional levels), and international donors. The structure of the health reporting system in Ichilo Province is as follows:



Process, Monitoring, and Evaluation of Data Collection

At the community level, there are three principal actors in the data collection process. Community Health Volunteers (RPSs) are the first link. The RPSs must fill out a monthly report and turn it in by the 10th of each month for the previous month's work to a sector or area level CEPAC representative, or the area RPS director. The forms are then given to the CEPAC Area Coordinator to combine and create statistics for the Province. In the report, the RPSs must describe the number of children (younger than 5 years of age, and older than five years of age) that are treated with diarrhea, acute respiratory infections (or symptoms there of), tuberculosis, and infectious diseases. Additionally, they must record the following: the number of house visits made; group educational sessions conducted (noting the number of participants); births attended (noting the weight and height of each newborn); the number of deaths among children less than 5 years of age; the number of deaths in children greater than 5 years of age (noting the sex, child's age, and cause of death for both); and the number of maternal deaths (noting age and cause of death). The forms are simple in design and include illustrations to guide those RPSs who are illiterate.

CEPAC Mobile Health Teams make up the second link in the data collection process. Comprised of a chauffeur, three trained CEPAC health workers, the CEPAC Area Coordinator, and the MOH Area Supervisor (when he/she is available), the Mobile Health Teams are required to complete hand-written reports after each community visit. At the end of the month, the team compiles their data, the RPS data, and the MOH data. The CEPAC Area Coordinator enters the data into a form (a standardized spreadsheet) on her computer. CEPAC designed the form in such a way as to make report writing for each health level (sector, area, district, and regional), as well as international donors, less time-consuming. For example, the form has a column that automatically tabulates the percentage of time that the mobile health teams spend on each activity, a USAID-required statistic. The three CEPAC Area Coordinators give the handwritten form and a disk with the information on it to Dr. Morales. Dr. Morales then combines data from the three areas on her computer to generate overall statistics for Ichilo Province.

In addition to health statistics, the CEPAC Area Coordinator also collects management data for reporting purposes. A separate form is used to record a tally of medical supplies and equipment, as well as monthly activities, such as the number of staff trained, educational sessions conducted, etc. The CEPAC Area Coordinator is responsible for tracking this data on a monthly basis and giving it to district level authorities who combine it with MOH data and compile statistics for the Province.

The third link in the data collection process is comprised of the MOH health workers. Each month, MOH health workers report the data collected at MOH health posts and facilities to the MOH Area Supervisor. It is important to note that both MOH personnel and CEPAC personnel use the same SNIS-formatted records. The MOH Area Supervisor then works with the CEPAC Area Coordinator to tally the CEPAC and MOH data for their respective area.

Monitoring and Evaluating Health Worker Performance

Each area (San Carlos, Buena Vista, and Yacaní) has an RPS Board, made up of an RPS President, Vice President, and Secretary. The purpose of the Board is to represent the RPSs as well as monitor their performance. The Board will meet with a worker who does not consistently hand in reports, for example, to get an explanation of his/her problem in order to devise a solution. With the help of the CEPAC Area Coordinator and the MOH Area Supervisor, the Board also monitors the performance of each RPS by filling out an evaluation form entitled "RPS Monitoring Instrument" ("Instrumento de Monitoreo de los RPS"). Weaknesses are identified and addressed in monthly RPS training sessions sponsored by the Mobile Health Teams. The RPS Board tracks progress made by the RPSs, as well as chronic problems and/or challenges faced by RPSs. The CEPAC Co-Directors of Health, Dr. Mabel Morales, and Dr. Osvaldo Chavez, monitor and evaluate the performance of the RPS Board members.

The three trained CEPAC health workers in each Mobile Health Team maintain their skills through periodic updates with the CEPAC Area Coordinator (each of whom is a registered nurse). The MOH Area Supervisor also works closely with the CEPAC Area Coordinator to learn specific skills and intervention protocols. The CEPAC Area Coordinators are required to take courses to upgrade their skills in Microsoft Excel, Word, and other useful computer programs. Dr. Morales and Dr. Chavez monitor the CEPAC Area Coordinator in each area, ensuring that they receive the most up-to-date information received from IEF Headquarters. This information includes updated materials and information on the latest protocols and recommendations provided by child survival experts.

The routine monitoring and evaluation of RPSs and CEPAC Area Coordinators performance complies with the first IMCI evaluation protocol, namely to determine the impact of training in the practices of health personnel. Additionally, standard periodic checks on the availability of medicines (i.e. number of RPS with medicine kits, Vaccine/Cold Chain Coordinator's monitoring activities, etc.) complies with the second IMCI evaluation protocol: to determine the provision of medicine and equipment for the integrated management of childhood illness in children less than 5 years of age. Training health workers to evaluate, classify, and treat children less than 5 years of age (e.g. via RPS training), to optimize advice given to a child's caretaker (e.g. via health festivals, Mobile Health Team visits, RPS home visits, etc.), and to help caretakers recognize the signs that signal a need to seek professional help (e.g. via health festivals, Mobile Health Team visits, RPS home visits, etc.) also coincide with IMCI evaluation protocols. Similar to the overall IMCI philosophy, CEPAC aims to decrease infant and childhood death by implementing CS interventions that have strong curative and preventative components.

Data Dissemination and Analysis

Every month a news bulletin containing local results is disseminated to local communities in each area. This information is analyzed by the Community Information Analysis Committee (Comité de Análisis de Información Comunitaria, CAIC), made up of the local RPSs and the Mobile Health Team. The analysis takes place during a

community health festival as the majority of community residents, if not all, are guaranteed to be in attendance. The monthly results are displayed in graphs on a giant chart, indicating specific indicators with drawings for illiterate community members. CAIC members systematically go through each indicator and ask, for example, how many mothers had children who suffered from diarrhea in the preceding month. The number of affirmative answers is compared with the figure initially reported from the combined RPS, CEPAC Mobile Health Team, and MOH data. If the number is higher than the initial figure, members of the CAIC solicit explanations from community members as to why they did not visit the Mobile Health Team, call upon an RPS, or visit a CEPAC or MOH health post (e.g. "We live too far," "The MOH health worker is never at the health post," etc.). The new information is recorded during the discussion. CAIC members also facilitate a discussion among community members to identify why they believe they are ill (e.g. "We drink polluted water"). The purpose of this is to encourage communities to analyze their problems based on local data in order to develop a sustainable action plan to improve their health. Throughout the year, the information that is collected is prominently displayed on community data boards in order that trends can be effectively examined and proactive measures identified.

With the new statistics collected from the CAIC analysis, the Mobile Health Team revises the monthly report. They also summarize the information learned from the community, including the demands, needs, and challenges identified by the community. These two components are used to create a document that is turned over to the Community Information Analysis team (CAI) at the area level. The Mobile Health Team and the MOH Area Supervisor participate in the analysis of the information at the area level in order to plan more effective interventions. Dr. Morales, Dr. Chavez, and Mr. Widen Abastoflor of CEPAC also analyze these reports in order to monitor the progress of CEPAC's efforts in the Province. The information is then handed over to the CAI team at the district level. The function of the district CAI is to compile information from the three areas. At this level, not much data analysis actually takes place although it is hoped that this will change in the future.

Dr. Morales of CEPAC assists in generating the monthly reports for the four health levels, as well as the statistical report for the SNIS (National Health Information System). She also produces reports for international donors on a trimester basis. Dr. Morales, along with Dr. Chavez and Mr. Abastoflor, present annual reports to CEPAC's board of directors, as well as monthly reports to MOH personnel at the district level.

CEPAC/IEF Monitoring and Evaluation of Project Progress

The Project Advisor, Kirk Leach, will attend monthly meetings held by Dr. Morales and CEPAC Area Coordinators to write CEPAC reports. Mr. Leach is responsible for relaying CEPAC's reports to IEF Headquarters on a quarterly basis. Mr. Leach will use a form that adapts CEPAC's monthly reports into quarterly summaries (see Annex XVIII). These reports monitor project indicators, providing descriptive text on progress achieved toward attaining identified targets. Numerical statistics are provided for indicators that can be monitored quantitatively, that is those indicators for which the MOH collects information on a quarterly basis. Those indicators that can not be monitored quarterly are

measured at mid-term and final. Refer to the table below for a description of which indicators will be monitored quarterly, and which will be assessed at the midterm and final evaluations (via the KPC, HFA, or Project Records).

Aside from the quarterly reports, project staff will routinely perform lot quality assessments in Yacaní, San Carlos, and Buena Vista. Community members will be chosen at random and interviewed on a regular basis to assess the health information they have learned from RPSs, the Mobile Health teams, and/or health workers at health posts or centers. The qualitative information will be evaluated to ensure that appropriate and accurate health messages are reaching local communities.

*Note: Y = Yacaní; SC = San Carlos; BV = Buena Vista

Indicator	**Measurable on Quarterly Basis?**	**How Often**	**Midterm Target**	**Final Target**
EPI Intervention: **1**. Increase % of children 12- 24 months of age fully immunized from 40% (Y) & 25% (SC/BV) to 85% in all areas.	Yes	Quarterly, Midterm, Final, (KPC)	• 54% Y • 43% SC/BV	85% in all three
2. Increase % of children fully immunized before one year of age (<13 mo.) from 14% (Y) & 12% (SC/BV) to 50% in all areas.	No	Midterm, Final, (KPC)	• 25% Y • 23% SC/BV	50% in all three
3. Increase % of WCBA with at least two TT vaccinations reported on maternal health card from 30% (Y) & 25% (SC/BV) to 60% in all areas.	Yes, but not "on cards."	Quarterly, Midterm, Final, (KPC)	• 39% Y • 36% SC/BV	60% in all three
4. Increase availability of all vaccines at health facilities to 80% (current levels: TB—22%, Polio—42%, DPT--42%, Measles--29%, and TT--42%).	Yes	Quarterly, Midterm, Final, (KPC)	• TB: 39% • Polio: 53% • DPT: 53% • Meas:44% • TT: 53%	80% in each
5. Increase from 66% to 100% the number of facilities that have a community vaccination registry.	Yes	Quarterly, Midterm, Final, (KPC)	• 100% in all three	100% in all three
6. New MOH Vaccine/Cold Chain Coordinator visits each facility monthly and reports checklist data to Ichilo Province partners (IEF/CEPAC, Belgian Technical Cooperation).	Yes	Quarterly, Midterm, Final, (Project Records)	• 100%	100%
Nutrition/VA Micronutrients Intervention **1.** Increase coverage of VA (2 doses) of 12-24 month olds from 3% (KPC) to 85% as verified on health card.	No	Midterm, Final, (KPC)	• 28%	85%
2. Increase coverage of VA to post-partum women (1 mo.) from 0.7%(Y) and 2%(SC/BV) to 50% in both areas as verified on the health card.	Yes, but not for less than 1 month.	Quarterly, Midterm, Final, (KPC)	• 15% Y • 16% SC/BV	50%

Indicator	Measurable on Quarterly Basis?	How Often	Midterm Target	Final Target
3. Increase % of pregnant mothers receiving iron tablets from 15.6%(Y) & 12.7%(SC/BV) to 50% as verified on health card.	No	Midterm, Final, (KPC)	• 26% Y • 24% SC/BV	50%
4. Increase % of children 6-24 months of age who consume vegetables rich in VA from: (a.) at least twice in 24 hours, 43% (Y) and 29% (SC/BV) to 70% (Y) and 60% (SC/BV). (b.) at least five times in 7 day period, 43% (Y) and 48% (SC/BV) to 70% in both areas.	No	Midterm, Final, (KPC)	(a.) 51% Y, 38% SC/BV (b) 51% Y, 55% SC/BV	(a.) 70% Y, 60% SC/BV (b.) 70% in all three
<u>Breastfeeding Intervention</u> **1.** Increase exclusive breastfeeding from 43% (Y) and 17% SC/BV in children 0-6 months of age, to 70% (Y) and 50% (SC/BV).	No	Midterm, Final, (KPC)	• 51% Y • 27% SC/BV	70% Y, 50% SC/BV
2. Increase % of women continuing to breastfeed at 12-24 months from 40%(Y) and 40%(SC/BV) to 60% in both areas.	No	Midterm, Final, (KPC)	• 46% Y • 46% SC/BV	60% in all three
3. Increase % of children initiating breast-feeding immediately post-partum from 64% (Y) and 45% (SC/BV) to 80% (Y) and 65% (SC/BV).	No	Midterm, Final, (KPC)	• 69% Y • 51% SC/BV	80% Y, 65% SC/BV
<u>Diarrheal Disease Management</u> **1.** Increase % children < 2 yrs. w/diarh. That receive more breastmilk from 24%(Y) & 16% (SC/BV) to 50% (Y) and 40% (SC/BV).	No	Midterm, Final, (KPC)	• 32% Y • 23% SC/BV	50% Y, 40% SC/BV
2. Increase % of children < 2 yrs. W/diarh. that receive more food from 17% (Y) & 19% (SC/BV) to 40% in both areas.	No	Midterm, Final, (KPC)	• 24% Y • 25% SC/BV	40% in all three
3. Increase the % of mothers that give increased fluids from 39% (Y) & 44% (SC/BV) to 80% (both sites).	No	Midterm, Final, (KPC)	• 51% Y • 55% SC/BV	80% in all three
4. Increase use of ORT from 27%(Y) & 17%(SC/BV) to 60%(Y) and 50% (SC/BV).	No	Midterm, Final, (KPC)	• 37% Y • 27% SC/BV	60% Y, 50% SC/BV
5. Increase % of mothers taking child to health facility for prolonged or bloody diarrhea from 56% (Y) 58% (SC/BV) to 80%.	No	Midterm, Final, (KPC)	• 63% Y • 65% SC/BV	80% in all three

Indicator	Measurable on Quarterly Basis?	How Often	Midterm Target	Final Target
6. Increase % of health workers accurately treating diarrhea from 30% (est.) to 60%.	No	Midterm, Final, (HFA)	• 39% in all three	60% in all three
<u>Pneumonia Intervention</u> **1.** Increase the number of RPSs with a pharmacy kit with cotrimoxizole from 15 to 200.	Yes	Quarterly, Midterm, Final, (HFA)	• 71	200
2. Increase % of mothers seeking care from a trained provider when child has signs of pneumonia from 44% (Y) and 47% (SC/BV) to 80%.	No	Midterm Final, (KPC)	• 55% Y • 57% SC/BV	80% in all three
3. Increase % of health workers accurately treating pneumonia from 30% (est.) to 60%.	No	Midterm, Final, (HFA)	• 39%	60% in all three
<u>Cross-Cutting Indicators</u> **1.** Increase the coverage of communities w/RPS from 40% to 80%.	Yes	Quarterly, Midterm, Final, (HFA)	• 52%	80% in all three
2. 100% of CEPAC health and MOH counterparts trained in clinical IMCI.	Yes	Quarterly, Midterm, Final, (HFA)	• 100%	100%
3. 100% of RPSs trained in community-level IMCI.	Yes	Quarterly, Midterm, Final, (HFA)	• 50%	100%
Capacity Building Indicators **1.** Advance CEPAC's abilities as measured by the 35 MSH management categories to the "mature stage" (3 in the "initial" stage, 22 in the "growth" stage).	Yes	Final (Project Records)	• 71% mature • 3 in initial to growth • 11 in growth to mature	• 100% mature • 3 in growth to mature • 11 in growth to mature
2. Improved financial systems in place: a. no cash shortages for monthly payments in one year period and, b. no duplicate entries between field and HQ.	Yes	Quarterly, Midterm, Final, (Project Records)	(a.) 30% (b.) 30%	(a.) 100% (b.) 100%
3. Implement QA system for continuous improvement and monitoring of CS project; at least 3 QA assessments completed by end of project.	Yes	Quarterly, Midterm, Final, (Project Records)	• 30%	100%
4. Increase the average number of visits made by a supervisor (MOH or CEPAC) from 2 per 6 months to 5 per 6 months.	Yes	Quarterly, Midterm, Final, (HFA)	• 100%	100%
5. CEPAC uses financial data in managerial and technical/CS decision-making.	No	Midterm, Final, (HFA)	• 100%	100%

Indicator	Measurable on Quarterly Basis?	How Often	Midterm Target	Final Target
6. Improve CEPAC's ability to present information and proposals to donors as follows: a. CEPAC website in place b. At least one proposal submitted and accepted by new donor At least one partnership developed with private corporation that provides funding or in-kind assistance.	Yes	Quarterly, Midterm, Final, (Project Records)	• 30%	100%
Sustainability Indicators **1.** Percentage of operating costs recovered from user fees/micro enterprise or other resource-generating scheme increased from unknown to 30%.	No	Midterm, Final, (Project Records)	• 30%	100%

Data Collection Technical Assistance

Although the focus is not to make sweeping systematic changes, the project will work to upgrade the data collection system, and strengthen management decision-making based on programmatic input from communities. Through PROCOSI, CEPAC is receiving technical assistance to review and improve their information systems. For example, a more effective, efficient computer system will be introduced that will hopefully reduce the paper-based reporting. Computerization will allow for data to be automatically compiled, improving the efficiency and quality of data collection. The effort to further improve the data collection system will be a cooperative effort between CEPAC and IEF.
In November of 1999, the IEF headquarters team met with MSH consultants conducting the review of the PROCOSI NGOs monitoring and evaluation systems. The outcome of the survey indicated problems with the quality of data based on unreliable data collection methods (lack of precise definitions, consistency, etc.). The problems identified were consistent with observations made by IEF staff during the development of the proposal and DIP. The Monitoring and Evaluation component of the CS project will therefore focus on improving the quality of record keeping through quality assessment exercises by IEF staff. These exercises will focus on the health information system to monitor effectiveness at the field level, making use of checklists, focus groups, exit interviews, and monitoring supervisory visits and customer satisfaction.

Midterm and Final Evaluations

The Project Advisor will complete evaluations and reporting from CEPAC to IEF headquarters on project progress on a quarterly basis.

For the midterm and final evaluation, standard USAID guidelines will be followed. (See Annex V.) It is expected that the midterm evaluation will take place in September of 2001.

E. Budget

The attached budget (Annex XXVI) represents a combined report on the first year's expenditure, and the budget for the remaining three years of the Cooperative Agreement.

The total amount by source of the Cooperative Agreement is $1,333,174 (USAID $999,703 and $333,471 matched by IEF) over four years. Out of this amount IEF has provided CEPAC $373,520 over four years.

During the first year of operation the total booked expenditure through June 2000 (IEF's fiscal year), and the estimated expenditure for the remaining three months of the first year, is $343,527 (USAID $199,064 and $144,463 matched by IEF). This expenditure rate is approximately 80% of the USAID budget for one year and 43% of the total matching requirement. The balance remaining is re-budgeted for the remaining three years of the project.

The budget is attached as Annex XXVI. The following is a detailed narrative of the budget by organization:

IEF Headquarters Budget

This narrative accompanies the detailed budgets for both USAID and IEF/CEPAC matching contributions found in the attached spreadsheets. The detailed budget spreadsheets are provided for IEF Headquarters, IEF/Bolivia, and CEPAC (sub-agreement). IEF will provide the match for both the IEF and CEPAC portions of the budget. The IEF overhead is applied to the entire budget less capital expenses.

A. Personnel:

1. Salaries: International Office staff: Headquarters backstopping staff for technical and administrative support include the Child Survival/Vitamin A Coordinator (40 percent @ $46K PA), responsible to daily backstopping and technical visits to the project. Additional administrative support includes the Director of Administration and Finance (10% @ 51K PA) who has ultimate responsibility for financial reporting, the Director of Programs (10% @ 52K PA) who provides additional technical support to the Backstopper, and the Program Assistant (15% @ 29K PA) provides administrative support to the Backstopper and the Director of Administration and Finance. All positions are split between the USAID and IEF portions of the budget. Costs are based current salary levels with a 3% escalator per year.

2. Insurance & Taxes: Headquarters backstopping staff fringe benefits are calculated at 33% (10% pension; 7.65% social security; 6.5% medical; 0.85 unemployment insurance/other; 8% vacation/sick leave).

B. Travel & Per Diem:
Costs include international airfare ($1200 RT) for the Child Survival Coordinator to visit the project site twice per year and one visit for the Director of Administration and Finance ($1200 RT). Related travel costs are also included ($100/day for each visit, per diem). Per diem costs are based on an historical average cost.

C. Consultancies: *N/A.*

D. Procurement:
1. Supplies: Costs include a percentage of the general office supplies.
2. Equipment: none
3. Training: Costs include fees and other costs to attend meetings. Yearly trainings are budgeted for the CS Coordinator, these would include sessions sponsored by CSTS and other USAID contractors, Johns Hopkins University, and other sources to maintain CS technical skills. Funds for QA training for the Project Advisor have also been budgeted (Johns Hopkins University, summer 2001).

E. Other Direct Costs:
1. Communication: Other costs include a percentage of telephone/fax/email expenses to communicate to Bolivia and USAID in support of the project; postage and courier costs and a portion of the costs (approximately 15%) for the annual A-133 audit. (See Form 424A for most recent NICRA rate.)

F. Indirect Costs:
1. Indirect costs (15.33%) have been computed on all IEF project costs except capital equipment. IEF's most recent indirect cost rate agreement for both headquarters and field operations may be found in Annex XXVI.

The majority of the IEF match is made on salaries, and other direct costs.

IEF Bolivia Budget

A. Personnel:
1. Salaries: Bolivia Office staff: The IEF Country Director (20 % @ 60K PA), housed in the office in La Paz, will provide direct support to the field office in Yacaní and will report directly to the HQ in Bethesda. The Project Advisor (100% @ 45K PA) and the Assistant to the Technical Advisor (50% @ 15K PA for year 1, 66% @ 15K PA for year 2, 100% @ 15K PA for year 3), provide additional assistance to the Director and CEPAC staff. Salary levels are based on actual and estimated salary levels.

2. Insurance & Taxes: Fringe benefits are calculated at a rate of 15% for field personnel. This is budgeted for all Bolivia office positions and will cover appropriate local insurance, taxes, health and other benefits.

B. Travel & Per Diem:

1. Travel costs include one international air fare ($1,200) for the Project Advisor to visit the IEF HQ. The corresponding per diem is calculated ($100/day x 10 days). Additional travel and per diem are calculated for local travel expenses between Santa Cruz and La Paz at (4 trips x $200) and per diem expenses estimated at $25 per day.

C. Consultancies: A total of 6 consultancies are budgeted for the project. The subtotal of the consultancy category has been lowered from $99,500 to $65,350 primarily through the use of more local consultants.

1. Quality Assurance: Tom Davis, MPH, a specialist in QA methods with a close relationship to IEF provides assistance needed to train and design protocols for the project. Three trips per LOP are budgeted including RT airfare, and per diem for 30 days total.

2. Cost Analysis: Jim Clement, MBA, completed a cost analysis report, providing a cost per intervention and establishing a system for monitoring cost per intervention through the life of the project. This consultant was budgeted for 13 days in Year 1 at $375/day with $100/day per diem. (Spent in year 1.)

3. IMCI Training: costs include two training sessions of 11 days each at an estimated $200 per day. Refresher trainings are also included at 3 days each. This training was specifically requested by the MOH.

4. Baseline Survey: The IEF contracted a consultant to execute the KPC survey and one to complete the HFA survey in advance of the DIP. The total cost for both consultants was $10,000 including per diem and airfare.

5. Management Capacity: An IEF Executive Board member, Ms. Marcia Nelms, will provide technical assistance in general management strategies and development. She is budgeted for a one week training and will provide off-site follow-up. Ms. Nelms is providing her services free of charge as a service to IEF.

6. Evaluation: Consultants are budgeted for the standard USAID evaluations at mid-term and final phases of the project. Amounts include per diem, airfare and consulting fees.

7. Sustainability: Sustainability planning: an IEF associate, David Green, will provide assistance to train and assess feasibility and develop plans for financial sustainability. Travel support is covered under this grant, while all other costs will be covered by another grant.

D. Procurement

1. Supplies: Costs include an estimate of general office supplies, intervention supplies not covered in the CEPAC budget (timers, refrigerator accessories, etc.) and printing.

2. Equipment: Costs include the purchase of two 4x4 vehicle for transportation within the project area. One vehicle will be purchased for CEPAC's use but will remain the property of IEF. Other equipment includes printers and modems for IEF and CEPAC. The majority of procurement is on IEF's matching side. (Spent in year 1.)

3. Training: Costs for trainings are for the CEPAC staff to improve their managerial capacity. Trainings include Microsoft software, web design software, etc.

4. Contractual Services: The IEF will conduct a nutritional assessment in the project area. The survey will be conducted with the assistance of Johns Hopkins Division of Nutrition and other USAID CAs. Total cost for the baseline pre-assessment and assessment is estimated at $16,550. The final assessment, to evaluate impact of the nutrition interventions will take place in Year 4 and is estimated at $8,000. A pilot study to sell multivitamins in the project area is also planned with PSI. Start-up funds for the project are $2,400.

E. Other Direct Costs:

1. Vehicle operations: costs are historical estimates from other projects of the costs for fuel, maintenance, insurance and registration fees etc.

2. Office operations: costs are historical estimates from other projects of the costs for rent, utilities, telephone, postage, and shipping.

3. CEPAC subgrant: the project is designed to strengthen the capacity of a local NGO. A subgrant is budgeted for CEPAC in the amount of $373,520 and is further outlined below.

F. Indirect Costs*:*

1. Indirect costs (15.33%) have been computed on all project costs except capital equipment.

2. The majority of the IEF match is made from equipment, evaluation, vehicle and office operations, and the CEPAC subgrant.

CEPAC Field Budget

A. Personnel*:*

1. Salaries: All salaries are based on current levels.

2. Overall direction, management, and administration will be provided by:
The Executive Director (20% @ $1500/month) has overall responsibility for all aspects of the project. The Project Administrator (69% @ $1100/month) has responsibility for the technical implementation of the project, including administrative and financial aspects. The Project Administrator receives support

from the Administrative Assistant (100% @ $429/month). Finally, the Project Accountant (100% @ $500/month) is responsible for book keeping, purchasing, and inventory control.

3. Technical: The Medical Doctor (50% @ $1100/month) has responsibility for medical direction and training; Nurses (3) (100% @ $250/month) are responsible for daily out reach and implementation; the Educator (100% @ $300/month) is responsible for all education, training, and communication in coordination with the Mobile Health Team.

4. Fringe Benefits: Are calculated at the 13th and 14th month of each employee's salary as is customary in Bolivia. Excluded are stipends and incentive payments.

B. Travel & Per Diem:

1. Travel: costs include two international airfares over the LOP to attend professional meetings (e.g., IVACG) based on an airfare at $1200, and per diem at $100 per day for 10 days. Local travel is budgeted for four RT airfares @ $200 per trip for staff to travel between sites and per diem for local travel between sites for all levels of staff reflecting different daily rates ($5, $15, $80).

C. Consultants*: None*

D. Procurement*:*

1. Supplies: costs include general office supplies; medical supplies for iron tablets, immunization supplies, de-worming medication, VACs and educational materials. Costs are estimates for supplies based on local and estimated procurement internationally.

2. Equipment: costs include three motorcycles; establishing a revolving funds for bicycles; cold chain equipment; health post medical equipment; computers, printers, and a photocopier; and office furniture. Costs are based on estimates to purchase locally and internationally. The majority of costs are budgeted on the IEF matching side.

E. Other Direct Costs:

1. Vehicle operations: costs are local estimates for a portion of the costs for fuel, maintenance, insurance and registration fees etc.

2. Office operations: costs are local estimates for a portion of the costs for rent, utilities, telephone, postage, printing, and equipment maintenance.

3. The majority of IEF match is made from equipment, supplies, and vehicle and office operations.

F. Cost per Beneficiary*:*

Dividing the total cost of the USAID portion of the budget by the number of total number of direct beneficiaries (21,000 women and children) and by four years, the average yearly cost per beneficiary is $10 per beneficiary per year. (Calculation based on total USAID project funds of $999,703, and 24,240 children under 5 and women in fertile age. Final total is $41.24 per beneficiary for the life of the project, or $10.31 per year.) This figure may seem a bit high, but it is survey intensive and deals with two NGO/PVOs. It also must be taken into consideration that this is a start up project with high costs for capital investments and for costs that will go directly to capacity building of the local NGO, CEPAC. Costs for equipment and direct capacity building total, $167,000 of the total budget (USAID and IEF match). Additionally, it should be noted that CEPAC will directly receive all project level field funds for personnel, equipment and supplies for the project. This amount of $393,740 will be managed by CEPAC in the form of a sub-agreement. Calculating the cost per beneficiary for the CEPAC budget (USAID and IEF) the combined costs are $5.70. While CEPAC is being asked to fund parts of the match, the IEF will maintain responsibility for matching the majority of both IEF and CEPAC sub-agreement portions.

F. Technical Assistance Plan

NGO Country Office Support

CEPAC's field personnel will be primarily responsible for overseeing the implementation of child survival interventions in the project area.

Dr. Mabel Morales, Co-Director of Health, CEPAC. Dr. Morales received medical training as a surgeon in Colombia and also completed a Masters degree in epidemiology. She has served as the director of a provincial hospital in Bolivia where she was responsible for the design and implementation of primary health care prevention strategies. Dr. Morales also has extensive experience in collecting and analyzing data, identifying problem areas, and designing community education programs to meet local needs. She previously worked on child survival issues and projects in Bolivia, particularly the design, development, and implementation of programs at the local level. Dr. Morales has previously worked on USAID-funded projects.

Dr. Osvaldo Chavez, Co-Director of Health, CEPAC. Dr. Chavez received medical training as a surgeon in Bolivia. He completed a masters degree in public health, specializing in health systems management, with a focus on tropical medicine and disease control. He has participated in numerous workshops, conferences, and courses related to child survival issues. He has years of clinical hospital experience, in both urban and rural areas. Dr. Chavez has five years experience working directly with local communities through a primary health care project that focused on agricultural workers and their

families. At CEPAC, Dr. Chavez has worked on the majority of CEPAC projects with a maternal and child health component. He has also previously worked on USAID-funded projects.

Widen Abastoflor, Executive Director, CEPAC. Mr. Abastoflor has extensive experience with project implementation at the local level. He has accumulated an impressive repertoire of health projects, including Infant and Child Development, Sexual and Reproductive Health, Municipal Health System, Community Health Education, Nutritional Improvement, and Food Security Education. With Mr. Abastoflor's leadership and skills, over the past ten years, CEPAC has grown to be a well-recognized NGO among the Bolivian government and other Bolivian NGOs, as well as among international donors (e.g. from Germany, Holland, Belgium, and North America). Mr. Abastoflor has previously worked on USAID-funded projects.

Technical Assistance Committed/Received for NGO Country Office
A number of activities have been planned to support CEPAC staff.

Behavior Change Communication is the first area where the project seeks technical assistance. Reviewing and updating BCC radio messages, as well as other means of mass communication, is necessary. In an effort to strengthen breastfeeding messages, Linkages and La Leche League will be contacted. For technical assistance with nutrition messages, Anne Henderson at Facts for Life will be contacted, in addition to a representative from the Fanta Project. Phyllis Piotrow, Ph.D., at the Johns Hopkins Center for Communication Programs will also contacted. Dr. Piotrow has worked for many years in Bolivia and has established a strong network there. Other person(s) from the JHU Center for Communication Programs also working in Bolivia will be identified in order to request access to their information clearinghouse, educational materials, and pop line base data on health communication.

CEPAC has specifically requested training workshops on communications strategies in order that they be able to develop innovative materials for communities in Ichilo Province. In addition, CEPAC would like to train one individual to be a technical specialist in the design and application of BCC monitoring systems. Ideally CEPAC would like to develop a monitoring and evaluation system to measure the impact of mass media campaigns and activities related to the training of BCC facilitators. CSTS, Porter Novelli, and other organizations will be contacted to explore these questions. IEF and CEPAC will also discuss the possibility of hiring a local consultant to conduct a training workshop, or, alternatively, requiring the designated specialist to attend a course on BCC monitoring and evaluation.

IMCI is a second area where technical assistance has been requested. Two IMCI training sessions are planned in the project. The first, consisting of clinical IMCI training for CEPAC and MOH staff, took place in June of 2000. It involved 47 Ichilo Province health professionals, representing both the MOH and CEPAC. The training focused on three areas, namely: integrated health for children less than 5 years of age, attention to children 2 months to 4 years of age, and attention to children less than two months of age.

Within each age group, the methodologies and protocols used to evaluate, classify, and treat specific illnesses were discussed. The general objectives of the workshop were to reduce the risk of death in children less than 5 years of age, and provide incentives for the use of health services in hospitals and health centers. Specific objectives included training health workers and technicians from Ichilo Province in the protocols of treating children less than 5 years of age, developing standards for service quality in communities, and developing standards to manage training instruments and methodologies in communities. An evaluation report of the training was completed and is stored in the Project Records.

The second session consists of local, community IMCI training. This training will take place in the third trimester of the second year. It will entail the training of trainers, namely training local health workers to train mothers to evaluate, classify, and treat children less than 5 years of age. It will focus on optimizing advice given to caretakers and helping caretakers recognize the signs that signal a need to seek professional help.

A workshop in training in resource development and general pubic relations for CEPAC staff will take place in the first half of the second year of the project. The IEF Project Advisor, Kirk Leach, will lead the workshop, drawing on his experience in NGO resource development. The workshop will focus on donor identification, proposal writing, inter-institutional relations/partnerships with U.S. and European NGOs, corporate resources, and relations with the media. CEPAC has identified that each of these areas need improvement. The product of the training will be a Development Pan with specific objectives and measurable indicators. Mr. Leach will also conduct a workshop on web page development. The Project Advisor will lead CEPAC in the process of obtaining host services, developing a maintenance/update plan, and generating publicity for the site. By the end of the training CEPAC will have developed a plan for a quality web page that will increase public visibility and the organization's ability to generate resources. The training and establishment of the web site will take place in the second half of the second year.

Training in cold chain/vaccination maintenance and supervision is a third area where technical assistance has been requested. The Project Advisor and a refrigerator technician will conduct the training in the second trimester of the second year. They will train all relevant CEPAC staff as well as the new MOH Vaccines/ Cold Chain Coordinator.

Technical assistance will be received with regard to the organization of breastfeeding support groups. Ichilo Province is host to numerous breastfeeding support groups. Exploring ways to link groups together in order to facilitate an exchange of information and experiences would be beneficial to mothers, infants, and project coordinators alike. The Project Advisor will talk to other NGOs in Bolivia to find out how they organize breastfeeding groups. At the same time, the Child Survival Coordinator will contact Linkages, CSTS, and other organizations for information.

Technical assistance will also be sought and received on how to adapt IMCI protocols to pneumonia case management. Dr. Chris Drasbeck at PAHO headquarters in Washington, DC, and Eric Starbuck at Save the Children in Washington, DC will be contacted. Ned Olney from the Save the Children field office in Bolivia, and Dr. Jose Antonio Pages in PAHO's field office in Bolivia will also be contacted.

Finally, technical assistance will be sought and received with regard to the effectiveness of using ORS to treat diarrhea. UNICEF has raised concerns about giving mothers ORS packets as opposed to selling it to them for a small fee. Their research has demonstrated that mothers who are given packets are less likely to know how to use them and are, consequently, more likely to improperly make the solution, or use the packet contents for something completely other than diarrhea treatment. A second issue related to diarrhea is the frequency that parasites cause diarrhea. Some CEPAC field staff argue that parasites cause the majority of diarrhea cases and that mebendazole is ineffective in treating children with multiple parasites. Experts in diarrhea case management from the Johns Hopkins University School of Hygiene and Public Health will be contacted to address these issues.

PVO Headquarters Support

IEF headquarters personnel and the field Project Advisor will provide the majority of the technical support needed by CEPAC and the project. The majority of IEF project staff has extensive experience with child survival projects and interventions

John Barrows, Director of Programs, IEF. Mr. Barrows has over 16 years experience in international primary health care programming. He has served on the QA Working Group for Child Survival Collaborative and Resource Group (CORE) and provides technical support to all of IEF's programs in Latin America, Asia and Africa. Mr. Barrows served at the CS Coordinator at IEF prior to taking his position as Director of Programs in 1993.

David Green, Consultant/IEF Sustainability Specialist. David Green is contracted by IEF on a permanent basis for 30% of his time. Mr. Green has worked in the area of eye care and health for over 20 years. Examples of David Green's work in the area of cost recovery and sustainability planning include developing enterprises to fund health programs, including the establishment of an intra-ocular lens factory in India that is now selling reduced cost lenses (about 1/10 of the leading lens sold) worldwide. He was also responsible for the development of paying clientele at hospitals and clinics in India to fund non or reduced paying populations. Mr. Green will provide primary support in the development of the sustainability plan, and will work with CEPAC to monitor sustainability progress until the end of the project.

Liliana Riva Clement, Technical Advisor, IEF. Ms. Clement is also contracted on a permanent basis by IEF for 27% time to the CS project. Ms. Clement has specific experience in the area of VA with a background in International Nutrition from Johns Hopkins University. Ms. Clement provided technical support to CS projects as an IEF employee for 5 years, and during the last two years has provided support to many PVOs

as an independent consultant. Ms. Clement also has specific expertise in Quality Assurance, having served on the CORE QA Working Group. Ms. Clement will work with the Johns Hopkins Division of Nutrition to develop the nutrition intervention for this project and will assist the program Backstopper.

Ed Henderson, Director of Finance and Administration, IEF. Mr. Henderson has worked as a financial administrator for IEF for over 10 years. Prior to joining IEF, Mr. Henderson worked with microenterprise development in Africa. Mr. Henderson will assist CEPAC to upgrade and formalize their accounting and managerial systems, develop an operations manual, improve reporting to donors and the government, and revise personnel policies.

Dr. Fernando Murillo, Country Director, IEF. Dr. Murillo has extensive experience in the field of ophthalmology. He completed his training at the Johns Hopkins School of Medicine with a specialty in ophthalmology. He also completed extensive coursework at the School of Hygiene and Public Health, and conducted research (including research in Peru and Bolivia). Dr. Murillo will take a leading role in transferring IEF's expertise in sustainable eye care delivery to Bolivia. He has already made progress in this area, including establishment of a surgical office at a ProSalud Center in El Alto.

Kirk Leach, Project Advisor, IEF. Mr. Leach will be located at the project site. Mr. Leach has extensive experience as a development officer, for Casita Maria and for International Planned Parenthood (both based in New York City). He also has experience as a health project backstopper at International Planned Parenthood. Mr. Leach also has experience working to improve the capacity of local NGOs, including the ability to generate a wider spectrum of funding sources for organizations. Mr. Leach will work closely with the Backstopper to provide technical information to CEPAC staff about the interventions. He will be required to upgrade his CS intervention skills on an annual basis. When his travel plans to the US do not coincide with training opportunities, information will be disseminated through headquarters staff.

Gwen O'Donnell, CS Backstopper, IEF. Ms. O'Donnell has experience in nutrition, micronutrients, food fortification, and fundamental IMCI interventions. As part of an orientation plan, IEF has organized basic training to take place during the next few months to ensure that Ms. O'Donnell's skills are up to date. The plan includes formal coursework and hands on training to learn about the KPC survey, Quality Assurance, and Pneumonia Case Management. The latter will take place though correspondence and collaboration with experts in the field, such as Dr. Chris Drasbeck at PAHO and Eric Starbuck at Save the Children.

The project will also utilize a variety of US based and local consultants to support the skills of the HQ personnel:

Nutritional Assessment and Impact Analysis: The project will work with the Johns Hopkins Division of Nutrition to conduct a preliminary nutritional assessment of the program area. This assessment will determine how to structure the nutritional

intervention itself. Gwen O'Donnell will organize and conduct the nutritional assessment, with support from Liliana Clement (IEF) and Dr. Kerry Schulze (JHU Division of Human Nutrition). Gwen O'Donnell will then assist in the planning and implementation of the nutrition intervention. (Dr. Schulze can be contacted at the Johns Hopkins School of Public Health, kschulze@jhsph.edu)

Quality Home Practices Survey: The Quality Home Practices Survey (QHP) will be developed primarily by Ms. Clement (IEF), Gwen O'Donnell (IEF), and CEPAC staff. A recent review of formative research completed by Dr. Peter Winch, Johns Hopkins School of Public Health, will be utilized to help develop the survey. Dr. Winch or one of his colleagues from the Department of International Health will be contracted to review the final survey questionnaire. Dr. Joel Gittelsohn (JHU Division of Human Nutrition) will also be contacted for recommendations and/or suggestions.

Cost/Sustainability Assessment. A cost-analysis of health services delivery in Ichilo Province was completed in July of 2000. The report can be found in Annex XX. As a follow-up to the cost-analysis survey, a cost recovery consultant will be hired to work with David Green in the development of the sustainability plan. A manual developed by IEF will be used in combination with newer cost tools as the basis for the evaluation. The consultant will also work closely with CEPAC's accounting staff and with Ed Henderson from IEF.

Capacity Assessment The capacity assessment completed by MSH will be repeated at three points during the project. A local consultant who has worked with all PROCOSI NGOs, as well as MSH during the survey, will be hired for this work.

Section 3: DETAILED PLANS BY INTERVENTIONS

A. Immunizations

1. Incidence and Outbreaks

Disease surveillance data for the area is from the 1998 Epidemiological Profile of Yapacaní (EPY) completed by CEPAC in collaboration with the MOH for that calendar year. Although data for Buena Vista and San Carlos are not available, it can be surmised that indicators are below that of Yapacaní as they are for most other health interventions. Key information from the report is presented here:

Measles	• 22 suspected cases of measles presented with 5 confirmed. • 77% were among children under 5 years of age. • Of those 77%, only 4% had received a measles vaccine.
Neonatal Tetanus	• 2 reported cases
Polio	• No reported cases
Tuberculosis	• Yapacaní is considered one of the areas at highest risk in Bolivia. • 3% of the population in Yapacaní had respiratory symptoms for TB. • Incidence of TB in all its forms at 7.32 per 1000. • 85% of cases were reported to be Bacillscopic positive. • 9.6 % of the TB cases were in children 0-14 years old.
Diphtheria	• No reported cases.

2. Baseline Coverage Estimates (KPC data)

The KPC indicates that the percentage of children 12-23 months fully vaccinated is about 40% in Yapacaní and 25% in the SC/BV area. Measles vaccination rates in this same age group are 47% for Yapacaní and 39% for SC/BV. Polio coverage is 55% for all three doses in Yapacaní and 40% in SC/BV. Rates for all three doses of DPT are 53% in Yapacaní and 40% in SC/BV. The corresponding dropout rate for DPT in Yapacaní is 10%, and 50% in SC/BV. BCG coverage is a bit better, as would be expected, with 57% and 50% in Yapacaní and SC/BV respectively.

In women of child bearing age, coverage with two doses of TT is the priority of the MOH. Thirty percent of the mothers had received two or more doses. Only 23% of women had received the complete schedule of 5 doses.

Over half of mother's could produce for verification, the child health card (65% Yapacaní, 57% SC/BV). Far fewer mother's possessed their own TT card (13% Yapacaní, 16% SC/BV). Interviewers were able to locate and verify additional TT records (reflected in TT rates reported here) by referring to health center logs.
Vitamin A coverage was low. About 30% of mothers reported verbally that their child had received VA in Yapacaní, and 27% in SC/BV. Only 14% of the 0-23 month olds in Yapacaní and 12% in SC/BV had received at least one dose as verified on the child health card. CEPAC health workers thought rates reflected were very low in comparison to what they believed to be accurate, reflecting a potential problem in data collection and record keeping.

Key findings from the HFA include:

Quality of Cold Chain

Refrigerator present:	Yes [88%]	No [13%]
Of those with refrigerators, were they functioning?:	Yes [72%]	No [29%]
Of those with refrigerators, do they have internal thermometer?	Yes [79%	No [14%]

In the last 30 days: the temperature is registered and updated? Yes [62%] No [39%]
Are there vials of DPT or TT congealed in the refrigerator? Yes [8%] No [92%]
Percentage of refrigerators with any temp. recorded out of range: Yes [70%] No [30%]

Quality of Supply Chain

	Vaccinations Available		**Expired**	
BCG	Yes [41.7%]	No [58%]	Yes [0%]	No [100%]
Polio	Yes [75.0%]	No [25%]	Yes [11%]	No [89%]
DPT	Yes [75.0%]	No [25%]	Yes [11%]	No [89%]
Measles	Yes [41.7%]	No [58.3%]	Yes [0%]	No [100%]
Tetanus Toxoid	Yes [66.7%]	No [33.3%]	Yes [0%]	No [100%]

Quality of Record Keeping

Is there a vaccination register?	Yes [63%]	No [38%]
Of those with register, is it updated?	Yes [80%]	No [20%]
Are there graphics of vaccination coverage?	Yes [73.3%]	No [26.7%]

3. MOH National Policies and Current Services in the area.

The MOH currently conducts national EPI/VA campaigns every 6 months that last for one month. All vaccinations are included in the campaigns. All health organizations in the country participate including NGOs. Each campaign has a theme (the last one was to eradicate measles), but all vaccinations are included. CEPAC indicates that there is much better coverage during the national campaigns, although we don't have any data to support this position.

The national norms for vaccinations for children under one year are the same as WHO/UNICEF guidelines. In epidemic situations, the first dose of measles is required by the MOH by 6 months of age. In the case of the TT vaccination the MOH strategy is to target women in high school and the last years of junior high school, 12-18 years of age. Unfortunately, this excludes women who live in rural areas and/or are not in school. CEPAC's program has focused and will continue to focus on rural women to address this gap.

The MOH currently conducts immunizations in the project area from fixed sites. CEPAC provides community education, notification/mass publicity for upcoming campaigns and community outreach of vaccinations (mother and child) through their mobile team. The MOH provides all materials such as vaccines and syringes to the CEPAC team to conduct outreach.

The quality of the vaccinations at clinic sites and during campaigns is suspect. The HFA found the cold chain to be lacking although personnel knowledge levels for both CEPAC and the MOH are high. Existing barriers to full coverage include problems at the local level with the cold chain, due to lack of refrigerators, problems with access to health center due to geographic and climatic issues, lack of sufficient vaccinations, and

restrictions on campaigns that include a minimum of ten children to attend. Discrepancies with data collection found during the proposal and DIP writing process also indicate there are errors in reporting.

The supervisory system of the provincial immunization intervention was greatly lacking. On average, personnel interviewed in the HFA had been visited twice in the six months prior to the interview. The content of the supervisory visits fluctuated with no clear single objective standing out as a priority of the visit. While over half did report having been given some form of feed-back, this was usually in the form of an unstructured, oral response.

Distribution of vaccines is done on a quarterly basis from the national level MOH to the districts. The health centers then receive vaccines monthly. In Ichilo Province the problem of under estimation of the population, due primarily to migration, leads directly to shortages of vaccines and other medications. During the HFA it was revealed that there had been periodic deficits of polio and measles vaccines during the last three years. Reuse of needles without sterilization, is a common practice as anecdotally reported during the HFA.

The MOH and CEPAC currently work throughout Ichilo as described, by dividing responsibility for the health needs of the province. Prior to implementation of the CS project, CEPAC directly served 30 communities that the MOH assigned, determining them to be hard to reach. Communities not assigned to CEPAC or covered by the MOH were considered essentially unreachable and were given little attention by either group. As IEF works with CEPAC and the MOH to achieve greater integration of services and higher coverage rates, reaching these previously ignored communities will be a focus of the overall improvements to the intervention. Large scale strategies such as campaigns will be the likely be the most cost-effective means of reaching the more remote communities, rather than including them in CEPAC's regular mobile outreach schedule.

Barriers to vaccination coverage also include addressing the issue of cultural beliefs. For example, mothers are often afraid that vaccinations will make their children ill, particularly because there is a fever response in some children after vaccination, reinforcing this fear. Other obstacles include waiting time, health workers not communicating completely with mothers, and lack of understanding (55% of the mothers were not aware when to get vaccinations). Access to vaccination sites is often limited due to rain. There are three or four months in a row when some villages are inaccessible. CEPAC estimates that 30% of the population is affected by access problems.

A lack of resources, including vehicles to access all parts of the Province, affect both the MOH and CEPAC. There have been times when communities have lost trust in CEPAC when they have not arrived at a specified location for a vaccination day due to vehicle break-down. Communication from the personnel to the health centers is also limited.

Program Approach

The first step to improving the immunization intervention will be to improve the quality and infrastructure of the cold chain. In order to meet this goal, CEPAC and IEF initiated a monthly meeting with the MOH and the Belgian Technical Cooperative (BTC). The partners developed a list of equipment needed to make the most basic improvements to the cold chain (please see list of upgrades in Annex XXI). The CS project and the BTC will fund improvements made in the cold chain. Identified improvements were based primarily on the results of the HFA survey conducted by IEF and CEPAC and shared with the partners at their first meeting. The partners will continue to meet on a monthly basis to monitor improvements and to make recommendations for further changes.

The second phase of improving immunizations will be to take a very critical look at the current process of campaigns and other mechanisms being employed to vaccinate children. Given that coverage across the board is very low, it is assumed that there is room for improvement in a variety of areas. To examine the vaccination process, the project has first completed a cost analysis of CEPAC's mobile team approach to determine the cost per child vaccinated (please refer to complete report, Annex XX). Next, the project will complete a similar, albeit simplified version of the analysis of the MOH 6 monthly campaigns. The latter will be completed in early 2001. Comparison of the data will allow partners to review their overall strategies for vaccinating children.

It should be noted, that CEPAC has already responded to the cost analysis of the vaccination methods employed by their mobile team, by decreasing the visit schedule to each community from a monthly visit to a visit every other month, CEPAC is able to reach twice the number of communities initially programmed. While the cost analysis recommended quarterly visit so that the mobile team in Yapacaní could reach greater than 90% of communities in each three month period, the shift to reaching double the number of communities was an important first step to improving vaccination coverage. CEPAC's own experience reviewing the cost data of their intervention strategy and implementing changes based on the recommendations will assist the Ichilo partners when the MOH strategies are reviewed and reported. CEPAC will be able to assist the MOH to adapt to the changes in order to realize improvements.

Another important aspect to the second phase improvements will be to evaluate the quality of current strategies. This will be accomplished using Quality Assurance (QA) methodologies and IMCI (for a discussion of IMCI, please refer to Section 3. F.). A series of 3 QA trainings will be conducted in year 2 and 3, with Tom Davis, MPH who has worked with IEF in the past and has collaborated with IEF HQ staff in the Quality Improvement Working Group of CORE. All trainings will include IEF, CEPAC and MOH personnel. The first training will focus on immunizations and VA, with particular emphasis on the quality of data collected, improving supervisory systems and improving coverage by identifying missed opportunities, opportunities to improve turnout at campaigns, etc. (Please see Annex XXIV for an example of the preliminary QA checklist to be used for data collection.)

The use of QA is favored by the project because it allows CEPAC and the MOH to self-evaluate the intervention as it currently operates. CEPAC's use of a mobile team, which has strong clinical elements that may be less cost effective than more community based approaches and the MOH's month-long campaigns which yield coverage of about half the target population will be part of the analysis taking place during the QA exercises. The QA exercises provide a frame-work and a philosophy (team oriented, self-evaluation) for the examination which can be combined with data collected by the cost analysis to provide a rich level of detail for CEPAC and the MOH to make final determinations for improvements. The data that will be used in the examination will include KPC data, HFA data, cost-analysis data, and data collected specifically for the QA exercises. The result will be that CEPAC and the MOH will be able to evaluate different strategies using actual project data to make decisions based on cost and on project objectives. Thus the data will be used to adapt program planning to problems noted in the surveys.

The QA exercises will also include periodic assessment of health worker knowledge to assure skill levels remain high, however trainings will focus on a the reveled lack of clinical/interpersonal skills, customer focus and supervisory skills. In addition, the QA exercises will include a cooperative analysis of the current supervisory system to create a system that functions on a routine basis, which incorporates feed-back and checklists and which includes data collection to monitor its success.

The third phase of the improvements to this intervention, will actually take place concurrently with phase two improvements, and involve a community based census for the entire Province of Ichilo. The Ichilo partners have agreed upon the census, but a final determination on the level of detail to be ascertained has not been completed. At this time, it is likely the census will be conducted by each community's RPS, with a simple map of the community along will all houses and family members detailed on each map. The age of each family member and their migration status will also be collected. IEF has committed to collecting data from PROCOSI NGO's regarding the community-based census protocols they have successfully used in Bolivia. This information will be reported to the Ichilo partners to assist with the final decision making process.

To date the MOH is attributing many of the shortages in vaccines at the provincial level to population underreporting. The census is part of an effort to assist the MOH to better calculate actual supply needs. The provincial partners group will monitor the progress of the MOH once the census is completed.

The fourth phase of improvements involves the increased use of RPS to promote vaccination at campaigns, at mobile team outreach visits and at static sites. This approach will be part of the decisions made by CEPAC and the MOH in reviewing the QA and cost data that will be made available, however, as IEF sees complete coverage of communities with RPSs as central to the success of community-based CS programs, this particular aspect of increasing coverage has been specifically recommended by IEF. The project will therefore, increase the number of RPS from 145 to 200 to cover

approximately 80% of communities. RPS living near remote communities will be tapped for special occasions (such as campaigns) to provide education and motivation for getting these communities to the event.

In order to sustain a growing group of highly effective volunteers the IEF and CEPAC acknowledge that a satisfactory incentive system will need to be maintained for the RPS. Focus groups, with existing RPS will be conducted prior to expansion of the system to develop the best long-term strategy for recruiting and maintaining the RPSs in Ichilo.

5. Individual Documentation: Health cards (including immunization forms) for mothers and children are attached (Annex XXV).

6. Drop-outs and Missed Opportunities: The drop out rate was lower in the areas that CEPAC covers indicating that quality of coverage is high here. Both drop-outs and missed opportunities will be assessed and addressed as part of the QA exercises being proposed for the intervention. The census will also help to make overall record keeping and tracking more effective.

7. Vaccine and Equipment Supply and Cold Chain Support: As discussed, the first priority of the intervention is to ensure that the cold chain is in place at all health centers in the project area. Purchases of equipment such as refrigerators will be based on the results of the HFA and with additional consultation with the MOH (Annex XXI).

8. Vitamin A: Vitamin A is an important component of this CS project. It will be addressed separately under the nutrition interventions (section 3.B.). VA will be given in conjunction with EPI campaigns, as well as through midwives and other community level workers and volunteers. Those individuals who administer vitamin A will be trained not to give more than one tablet per six months.

9. Knowledge, Practice and BCC: Cultural barriers to immunization will be further evaluated in the baseline qualitative research to be conducted as part of the Nutrition and Health Behaviors (NHBS) Survey. BCC materials currently in use will be evaluated during the NHBS Survey, however a preliminary review has found these materials to be adequate. It is more likely that messages and materials do not need to be changed, simply they need to be utilized more often and need to reach a higher percentage of the population.

B. General Nutrition (including VA and other Micronutrients)

1. Nutrition Status

The MOH reports in 1998, that 1231 of 2952 (41.7%) children under the age of two in the province are moderately malnourished or worse based on weight for height. Other data from 1999, also obtained from the MOH shows similar, although slightly better measures of malnutrition.

	Ichilo Province	Dept. of Santa Cruz	National
Malnutrition (wt/age)	34%	24%	8%
Malnutrition (ht/age)	55%	22%	27%
Malnutrition (wt/ht)	15%	10%	1%

2. Micronutrient Status:

Iron and VA deficiency are severe problems in the project area. National data reports that about 50% of women have iron deficiency anemia. Oral reports from CEPAC based on their mobile outreach activities suggest that this figure is greater than 90% in rural areas in the province, and only slightly lower in urban areas. CEPAC reported 100% of pregnant women in their target communities received iron tablets, but the data is not distinguishable between pre and post-natal supplementation nor is there information on compliance. Nightblindness has been anecdotally reported in the area, a strong indication that there is a severe VA problem although no national or provincial data exists. According to the KPC, about 63% of children less than two years old had eaten a VA rich food in it in the last 7 days in SC/BV and Yapacaní. Only about 20% of children under two had received a VA capsule in the six months prior to the KPC survey. The latter is suspected to be both a coverage and quality of data reporting issue. Complementary feeding is a particular concern for CEPAC based on their own data and indicators.

HFA data was consistent with that found for the immunizations intervention. Health worker knowledge is very high, with the exception of VA's use in the treatment of measles and malnutrition. Outages of both VA and iron are a problem. Almost half of mothers (42%) could correctly read their child's health card to determine proper growth.

3. Current Beliefs and Practices.

Current practices include withholding cheese, colostrum, peanuts, and egg yolk from children because they are thought to cause the child to become mute. Egg yolk is also thought to make a child's teeth go bad. Mother's are often concerned with eating too much for fear their children will be born large. After the birth, mother's avoid "fresh" foods. This is a local expression, "comidas frescas", which refers to particular foods, such as certain potatoes. During lactation women believe they should not eat garlic but they do specifically consume "sopa de la nariz de baca" (cow nose soup) believing it will help them produce more milk.

In the household the father eats first and is given the largest portions. The woman is the last one to eat, with children eating after fathers. Poor nutrition is complicated by heavy media advertisement campaigns of soft drinks and sweets.

4. MOH Policy

Fortification programs include the fortification of flour with iron and sugar with vitamin A. These programs do not directly affect the project area (these were OMNI pilot projects that are not operating at a national level). Iodine fortification has been a major priority of the government and is successfully implemented at the national level. The MOH gives VA according to WHO/UNICEF guidelines and expects VA to be integrated

with EPI during campaigns. There are no specific iron programs by the MOH for women or children, although standard guidelines for supplementation are listed in the MOH protocols. The MOH operates a clinic for malnourished children (in-house feeding program with education for mothers), but there is little focus on prevention. The state does give two kilos of milk to mothers and children of government officials. The MOH expects growth monitoring to be done monthly to one year of age and quarterly thereafter. The KPC found 67% of children had at least one weigh-in recorded on their health card.

The MOH does not operate any food programs. CEPAC and other NGOs promote and provide technical assistance for home gardening and other small-scale agriculture. CEPAC also has a food credit program where they provide small animals to a family. The family raises the animals, uses the offspring and passes on the older animals to another family so they may do the same thing. CEPAC has programs to help production, conservation and education. Production of fruits is also encouraged. Currently 600 families within Yapacaní have home gardens.

5. Program Approach

Of vital importance to this intervention will be the in-depth evaluation of current practices, though the Nutrition and Health Behaviors (NHB) Survey . The NHB Survey is discussed in detail in the baseline assessments section and is outlined in Annex XII. The purpose of this survey is to assess the current levels of VA and iron deficiency in mothers and children, and to determine actual levels of malnutrition (MOH data is inconsistent) based on weight for height, weight for age, and height for age. With this information, care taker responses to malnutrition and illness will be better understood. The goal of the survey is to generate data that can be used to develop the most effective nutrition intervention and that can also improve the immunization, diarrhea and pneumonia interventions.

The HFA revealed that as in the immunization intervention there is a problem of stock-outs of supplies. As stated in the immunization section, the project will hire a consultant to address this issue. IEF/CEPAC have determined that Tom Davis, MPH, (see immunizations section 3.A.) will be hired to cover QA training and logistics and supply chain management. The latter issue will be addressed as part of a QA exercise and will focus on the supplies needed for the immunization, nutrition and PCM interventions.

The IEF will secure donations for VA from private donations from the Task Force Sight and Life, however the IEF recognizes that improving the MOH distribution systems is a more sustainable approach to this intervention. Regular training activities which are an on-going part of current MOH and CEPAC health programs will include a new focus on utilization of VA for treatment of measles and malnutrition Coverage of VA will also be addressed in conjunction with the QA exercises for immunization.

Additional technical assistance for complimentary feeding will be obtained through LINKAGES through their connection to PROCOSI (see also Breast Feeding section 3.C.). Data from the baseline assessments will also be used to develop BCC materials for

nutrition. CEPAC has experience from their work with LINKAGES and PROCOSI developing and evaluating effective BCC materials. Additional technical support may be obtained from JHU for the BCC development.

During development of the proposal the IEF was in contact with PSI regarding a multivitamin program underway in the country. IEF offered to test the multivitamin in the area of the child survival project. PSI will be contacted again to confirm plans for pilot testing multivitamins. The information that will be gathered for the cost analysis should be of specific value to setting prices for the vitamins and to assess demand.

During the team visit of the IEF HQ staff to the CEPAC field site in November of 1999, a concept paper was submitted for working with the USAID Mission to develop a national fortification strategy for iron and VA fortification. The work proposed is a continuation of work initiated by OMNI/USAID. The IEF has experience working at a national level on the issue of fortification in Honduras with OMNI/USAID and with the Honduran USAID Mission. In Honduras, IEF played a key role with the government, with INCAP (technical support), UNICEF and USAID to maintain stakeholder interest and ensure stakeholder obligations were met to the fortification workplan. At this time the Mission is not ready to move forward with the continuation of the fortification plans in Bolivia, however, IEF and CEPAC will continue to stress the importance of VA fortification with key stakeholders in the country and will look for outside funding for the work.

C. Breastfeeding Promotion

1. Knowledge and Practice

Breastfeeding practice is relatively high in the project area. The KPC reports 76% of women in Yapacaní and 69.5% in SC/BV with children under two are currently breastfeeding. In Yapacaní, 61.5% of children are breastfed exclusively to six months, while in SC/BV 79.7% are exclusively breastfed to six months.

2. MOH Protocols and Breast-feeding Activities in the Area

The MOH promotes exclusive breastfeeding to 4-6 months in under two year olds, consistent with WHO guidelines.

3. Approach

CEPAC has recently completed development of new BCC materials for this intervention with the technical support of LINKAGES. LINKAGES provided this support to several PROCOSI NGOs and will give continued support with on-going monitoring and evaluation. The CS project will take advantage of this support, using the materials and methods that have been specifically developed for the area.

The objectives and indicators for this intervention remain modest, given that overcoming long-held beliefs is particularly difficult with respect to breast-feeding. The Nutrition and Health Behaviors Study may provide additional information to support and/or improve this intervention. All information obtained in the NHB Survey will be shared with Linkages and with PROCOSI NGOs.

D. Control of Diarrheal Disease

1. Incidence and distribution

According to MOH statistics, in 1999 there were 4326 new cases among 7664 children under 5 in the entire district . In Yapacaní, in 1998 Epidemiological Profile of Yapacaní (EPY) indicates only 24% of the children under 5 that came to the hospital had diarrhea in the year. There were no cases of cholera in Yapacaní, in 1998. According to the KPC survey, 41% of under two-year-olds had an episode of diarrhea in the two weeks preceding the survey in Yapacaní and 47% in SC/BV, 47%. The MOH estimates that the average child under 5 in the district **has three cases of diarrhea per year**, or approximately 22,992 cases per year in the district. According to the EPY, in the Yapacaní hospital in 1998 diarrhea was not a cause of death in any of the eleven deaths at the hospital among children. CEPAC, however reports that in other years, 80% of diarrhea deaths in homes and in hospitals was due to parasitosis and 20% was from dysentery. There is no known problem of antibiotic resistance.

Higher rates of diarrhea are reported during the dry seasons, April through June, and November-December. During these months, access to water is very limited causing people to utilize more unsafe sources. Seasonal migration is also an issue as migrant workers tend to live with their families in temporary houses that lack adequate water supplies.

2. MOH Protocols:

The MOH uses the following warning signs for mild and sever dehydration:

Severe dehydration	Lethargy/unawareness, sunken eyes, when pinched, the skin returns to its previous state very slowly (more than two seconds).
Mild dehydration	Warning signs include irritability, sunken eyes, when pinched the skin returns to its previous state somewhat slowly.

For diarrhea without dehydration, ORS/ORT is recommended. Diarrhea more than 14 days, with or without dehydration or diarrhea with blood in the feces is treated with cotrimoxazol and deworming (Mabendazol).

2. Knowledge and Practice

Over 90% of mother's knew warning signs calling for a referral for medical treatment in cases of diarrhea. Most mothers also reported knowing how to prepare ORS and that they had in fact used ORS at some point. Health workers had excellent knowledge of signs of diarrhea and types of treatment. The HFA did, however, reveal that supplies (ORS, antibiotics) were often lacking. Little focus has been given to ORT, specifically to appropriate fluids that could be prepared in the home.

3. ORS and Home Available Fluids

ORS seems to have been well promoted and well accepted in communities, while home based fluids have not.

4. Approach

This intervention will focus on treatment of the child in the home to avoid death from dehydration. The percentage of diarrhea from parasitosis and dysentery will continue to be monitored by CEPAC (microscopic evaluation in the mobile unit). Deworming will be provided with EPI/VA campaigns to address this issue.

The Nutrition and Health Behaviors Survey will further evaluate mother's knowledge of diarrheal illness, and their experience and perceptions of the current health system. The nutritional assessment will include an evaluation of foods and liquids to be promoted as home based fluids to avoid dependency on ORS.

The QA/logistics and supply consultant, Tom Davis, MPH, will evaluate with staff, problems related to keeping antibiotics and ORS supplied at health posts and through RPSs. In addition, other QA exercises (although not dealing directly with the diarrhea intervention) will indirectly support this intervention, by examining customer satisfaction with clinical services and improving client-health worker interactions. The HFA revealed little need to improve worker knowledge of the intervention, however, observational studies will be incorporated into future trainings to continue to improve worker knowledge. Further, community and clinical IMCI will play a key role in assessing ill children and treating them for any illness episode. IMCI is discussed in Section 3.f. of the interventions.

5. Prevention

While prevention activities have not been included in the CS project, the staff will develop a proposal to incorporate a water and sanitation project in the province. A proposal will be developed and submitted to at least two potential donors by the mid-term.

6. Health Education

New BCC materials are being developed by the Belgian Technical Cooperative, a key partner in the health strategies of the CS project and MOH provincial efforts. These materials will be available in early 2001. Additional information gathered in the NHB Survey may lead to the development of supplemental materials if the need is determined.

E. Pneumonia Case Management

1. Incidence and Distribution

Pneumonia is the primary cause of death for children under 5 year olds in the province, according to hospital based data (1998). District level statistics indicate that only 20% of children under 5 years of age contracted pneumonia in the 1624 cases out of 7669 children under 5 years of age (1999). Data from the KPC, indicated 32% of mothers brought their children to health providers for treatment for pneumonia

2. MOH Acute Respiratory Infection (ARI) case management policies

There are 24 combined MOH and CEPAC facilities (hospitals, health centers, and health posts) in the region of varying quality, along with 3 CEPAC mobile units. Also approximately 60 pharmacies and 25 RPSs are considered providers of treatment for ARIs since they provide antibiotics for treatment. Respiratory infections that reach the acute stage are usually seen in the health center or hospitals, although the ill child is generally taken first to the health post. The post often simply refers to the next level facility because of the severity of illness or because of a lack of medications. Only the hospitals and health centers are equipped for in-patient care.

The standard treatment for ARI is cotrimoxizole.

3. Use of Case Management in the Program Area

In the province/project there are the following type and numbers of personnel trained to treat pneumonia:

	Yapacaní	SC/BV
Doctors (MOH)	6	4
Doctors (CEPAC) current/new	3/0	0/1
Nurses (MOH)	12	8
Nurses(CEPAC) current/new	4 /0	0/4
Nurse Auxiliaries (MOH)	25	20
Nurse Auxiliaries current/new	8/0	4/4
RPS	25/25	20/20

It should be noted that the 45 Nurse Auxiliaries represent over 95% of all the Nurse Auxiliaries in the area, and that most of the Community Health Volunteers have also been trained. There has been no training for the few doctors and nurses in the area, other than the training received during medical or nursing school.

All personnel have been trained in clinical level IMCI except for the RPSs. Community outreach personnel will be the focus of community level IMCI that has already been approved by the MOH and will be implemented in the project area.

4. Quality of case management services in the program area.

As with the other CS intervention, health workers were very knowledgeable about proper treatment for pneumonia. However, the project did not conduct the observational module of the BASICS HFA survey. These will be incorporated into future training activities and will be conducted in full during the mid-term evaluation.

Also, as has been indicated in the other interventions the area of supervision is very week in the province at this time. Few supervisory visits are made, there are no standard checklists for the visits, feedback is verbal and supplies needed are not always administered.

Eleven of 16 (68.8%) facilities reported having cotrimoxazole syrup in stock on the day of the HFA. Of those 11, none reported stockouts in the last three months. Only 5 of 16 (31.3%) of facilities reported having pediatric cotrimoxazole tablets, due to the insecurity of supply from Seguros Basicos. Of those 5, none had any stockouts in the last three months.

In addition to qualified health workers, pharmacies and small shops carry antibiotics. Over half of mother's reported giving the child an herbal medication or other remedy for the case of pneumonia. About 30% of mothers reported taking the child to a health center or hospital.

5. Involving workers who do not currently treat pneumonia.

The community level worker, RPSs are already are stocked with cotrimoxizole. The problem is that stock-outs for the volunteers are more common than at the health posts/centers and the number of RPSs is minimal. The project will more than double the number of RPSs and will ensure quality training of this level of worker. Supervision will include observational visits at specified times during the year. The drug kits currently managed by the RPSs (about 30%) will be reviewed in the cost analysis and in the sustainability planning which will take place in the first year of the project to determine their potential for success from a small business point of view.

As mentioned community level IMCI has already been approved at a National level in Bolivia, placing greater emphasis on treatment of the child with the RPS and the caretaker.

6. Program protocols for pneumonia case management.

The project will utilize IMCI protocols for case management of pneumonia. All workers (to the community level RPSs) will be equipped with appropriate timers to assess fast breathing. In accordance with MOH and IMCI protocols/guidelines, cotrimoxizole will continue as the drug of choice for children suspected of pneumonia. Because there is malaria in the project area this antibiotic is particularly warranted.

7. Counseling for antibiotic use, home care and referral.

RPSs will be trained at the community level to detect pneumonia according to IMCI approved guidelines. If a case is identified, RPSs will have antibiotics for immediate treatment. Referral will be based on fast breathing and/or chest in drawing. Mother's will also receive training and will be asked to visit an RPS or a health post at the time that the child is suspected of having pneumonia.

8. Follow-up of children treated for pneumonia

The MOH currently calls for a child to receive a follow-up examination two days from the first examination and treatment. The child should be evaluated for general danger signs, as well as the specific symptoms of cough and breathing difficulty. The provider should ask specific questions regarding respiration, fever, and appetite.

Treatment protocol:

- If there is a general danger sign, sunken chest or elevated pace of respiration, provide the first dose of the appropriate intramuscular antibiotic y refer URGENTLY to the hospital.

- If the respiration has normalized, complete the treatment of 5 days of cotrimoxazol, and arrange to see the child regularly during that time.

- If the child is not brought to the health center for follow-up, it is suggested the provider make a home visit.

Follow-up will be addressed with observational evaluations of health workers, which will be included in trainings, select supervisions and the mid-term and final HFAs.

9. Assessment of access and increasing access.

There are currently 24 health posts/centers in the entire project area. Travel times to the centers can range from 10 minutes to a day's travel (in dry season) by foot or public transport. In order to increase access, the project will place an emphasis on the quality training of RPSs to provide cotrimoxizole.

10. Beliefs, practices and vocabulary

The KPC evaluated beliefs and practices to a small extent. Based on this data, we estimate that most mother's do not seek medical attention for pneumonia rather they visit a pharmacy (possibly obtaining the proper antibiotic) and give home remedies. The Quality Home Practices Survey will collect in depth qualitative data to further evaluate the cultural beliefs and practices associated with this intervention. Elements of QHP survey and of the customer satisfaction survey will also collect data on the quality of services at the health centers that may deter mothers from seeking care. There are also issues to explore concerning the quality and/or appropriateness pharmacy's prescriptions.

11. Communications for recognition and care seeking

The Belgian Technical Cooperative has arranged to develop BCC materials for both the diarrhea and the pneumonia interventions. As will be done with the diarrhea intervention, the project will use data collected in the various baseline assessments to further develop BCC materials as needed.

F. IMCI

1. MOH Strategies, Activities, and Training Materials.

The Bolivian MOH has developed and approved both clinical and community-based IMCI materials. Unlike other countries in Latin America, clinical IMCI was introduced prior to community-based IMCI in Bolivia. The materials are consistent with materials found throughout South America and provide a protocol for examination of all ill children for a range of problems that may be associated with the reason for the visit to the health clinic. In addition to the protocol or flow chart, training materials and follow-up evaluation criteria have been established. The CS project will use all MOH materials as they have been developed and will not change any of the materials.

IMCI will positively affect each of the other CS interventions planned in this project as follows:

1. Immunizations. a) Increase coverage by ensuring all health cards are examined for needed vaccines, and given, when the child arrives at the health center (elimination of missed opportunity), and b) increase quality of the intervention by monitoring the performance of health workers.

2. Nutrition. a) Increase counseling and nutrition education for all children found to be malnourished and at a preventive level in the community and b)increase the quality of counseling through an increased focus on this issue in training and evaluation components of IMCI.

3. Diarrhea. a) Increased use of home-based fluids by caretakers (community IMCI), b) increased prevention of dehydration at home due to improved counseling and improved training of RPSs, c) increased quality of community-based education by RPSs and other field staff, and d) improved management of children with diarrhea as a primary or non-primary illness when reporting to the health center.

4. Pneumonia. a) Increased use of appropriate diagnosis and treatment of children with pneumonia by community and clinical level personnel, and b) improved community-level counseling and education.

2. Role of the child survival program in IMCI.

The CS project is taking a lead role in the development of IMCI in the province. At this time the first clinical level IMCI training had taken place for all appropriate CEPAC and MOH staff and the HFA survey has been completed and shared with the MOH. In addition, the CS project took the initiative to form the Ichilo partners group, which consists of the MOH, IEF, CEPAC and the Belgian Technical Cooperative. This group meets on a monthly basis to plan priorities for the province. As the immunization intervention has been the first focus for the groups efforts, improvements to this intervention as a result of the HFA and IMCI training fall under the role of the group to monitor its progress.

The CS project will continue to support IMCI refresher trainings and community IMCI trainings. IEF and CEPAC will conduct HFA surveys, including observational studies at midterm and final phases of the CS project.

SECTION 4: FIRST ANNUAL REPORT

1. What are the main accomplishments of the program? What has the project done well? What factors have contributed to these accomplishments?

A. CEPAC/IEF Relationship Strengthened

One of the achievements during the past year has been the establishment of a solid relationship between IEF and CEPAC. A strong relationship is crucial for the program's success. Both IEF and CEPAC must be willing and committed to working together and sharing information in order for the project's objectives to be achieved. Both organizations signed a Partnership Agreement (see Annex III) in which they agreed to maintain a spirit of partnership based on cordiality, participation, transparency, respect, and cooperation. The purpose of the partnership is for CEPAC and IEF to jointly:

a. Provide the management, technical support and other resources necessary to support the implementation of the project;
b. Participate fully in all key project cycle events including development of detailed implementation plan, baseline and other surveys, annual workplans, and annual reports;
c. Participate directly in the mid-term and final evaluations of the project; and
d. Provide outputs and reports as required by AID and IEF, in conjunction with the IEF to document its support activities.

Both organizations agreed to use joint interests and talents to focus on:

1. Enhancing organizational capacity building and effectiveness; and
2. Providing effective child survival and other community based health programming benefiting those in need.

The IEF Project Advisor, Kirk Leach, works at an office in CEPAC headquarters in Santa Cruz. This proximity strengthens the IEF/CEPAC relationship, facilitating a daily exchange of ideas and information. Mr. Leach also spends several days per month overseeing field activities in collaboration with the Co-Directors of health, Dr. Mabel Morales and Dr. Osvaldo Chavez. Dr. Mabel is based at the CEPAC clinic in Yapacaní, while Dr. Chavez is based at the CEPAC clinic in Buena Vista. Mr. Leach has developed a very good rapport with the field staff and thus has access to community-based activities and information.

IEF Headquarters staff visited CEPAC several times during the first year to establish a relationship with CEPAC staff as well as work on different project components. In November of 1999, Lily Riva Clement, MPH, Project Technical Advisor, and Dr. Fernando Murillo, Country Representative, traveled to Bolivia to establish relations with CEPAC personnel, and draft the Partnership Agreement. During the trip, IEF and CEPAC developed a Partnership Agreement along with a one-year workplan and

organogram for IEF/CEPAC interactions. In June of 2000, Ms. Clement, Dr. Fernando Murillo, and Jim Clement, MBA, visited CEPAC to conduct the cost analysis study, discuss options for expanding CEPAC's coverage from Yapacaní to the entire Ichilo Province, and identify CEPAC's strengths and weaknesses. Achieving the objectives of the trip strengthened the IEF/CEPAC relationship. Collecting and analyzing the data necessary for the cost analysis was done in a collaborative manner. In November of 2000, Ms. Clement, Dr. Murillo, and Gwen O'Donnell, MA, MPH, traveled to Santa Cruz to gather information for the DIP rewrite as well as have CEPAC develop an EPI/VA coverage proposal. IEF staff collaborated with CEPAC's Executive Director, Co-Directors of Health, Project Accountant, Project Administrator, and other staff, to achieve project objectives. The endeavor led to a strengthening of the CEPAC/IEF relationship.

B. CEPAC/MOH Relationship Strengthened

Strides have also been made during the first year in strengthening the relationship between CEPAC and the MOH. Substantial coordination between ministry officials and CEPAC field staff has taken place, especially in Yapacaní. Workshops and training sessions for health workers (RPSs) as well as district officials have taken place in the project's three municipalities (i.e. Yapacaní, Buena Vista and Santa Cruz). CEPAC's Executive Director, Widen Abastaflor, characterizes the relationship between CEPAC and the MOH as "good." There are inherent challenges to working with the MOH, however these challenges are not insurmountable, especially due to improved relations over the past year.

C. CEPAC/IEF/MOH Working Relationship

Another major accomplishment of the project during the past year has been the establishment of a working relationship between IEF, CEPAC, and the Bolivian Ministry of Health (MOH). The often-difficult task of integrating personnel from different organizations has proceeded smoothly due to the formation of the Ichilo Partners Group (IPG). The IPG consists of representatives from IEF, CEPAC, the MOH, and the Belgian Technical Cooperation, and meets on a monthly basis. The Belgians have been working with the MOH to improve the health system in Ichilo Province as well as in the neighboring province of Sara. The IPG monthly meetings have facilitated an efficient means to share information, resulting in improved coordination and planning between the four actors. An important outgrowth of these meetings has been an agreement by the Belgian Technical Cooperation to provide funding for the improvement of the cold chain, over and above the USAID funding already budgeted in the project.

The IPG has made a list of all the equipment and supplies needed to improve the cold chain (Refer to Annex XX). All partners are also in the process of agreeing to a workplan for cold chain maintenance and improvement. IEF/CEPAC have agreed to repair the cold chain in Ichilo Province with the financial and technical assistance of the Belgian Technical Cooperation. Quotes have been obtained for equipment purchase, and a plan to install, maintain, and supervise the cold chain is being developed by CEPAC and the MOH, with assistance from Belgian Project and the IEF Project Advisor.

Preliminary agreements with the MOH were reached in November 2000 during a half-day workshop entitled "Improving the Flow of Vaccinations to Ichilo Province", and a workshop has been scheduled for January 2001 to train the new Cold Chain Supervisor and the field health personnel in maintenance and emergency measures. This training is being incorporated into a larger MOH supervision-training workshop. The equipment will be bought just before the workshop so that installation may begin immediately afterwards.

Seven refrigerators for use with electricity and 8 for use with solar panels will be bought. Although the up-front cost for the solar systems is high, the problems that health personnel face obtaining gas make them necessary for a working cold chain. Cold Boxes for the Mobile Units will also be purchased. Total cost for all equipment will be approximately $15,000. This project will cover $6,000 of that cost, while the Belgian Cooperation will pay $9,000.

The IPG has also agreed to conduct a census in Ichilo Province. Preliminary work was completed on the census, but the initial information collected by RPSs was of low quality and was therefore not reliable. The census strategy must thus be re-evaluated. Each of these activities, cold chain improvement and the census undertaking, reflect a strengthening of relations between the members of the Ichilo Partners Group.

D. Completion of Knowledge, Practices, and Coverage Survey

A third major accomplishment during the first year was the completion of the Knowledge, Practices, and Coverage Survey (KPC) in February 2000 (see Annex XXI). Andean Rural Health Care (ARHC) and CEPAC performed the survey. The KPC team ensured all communities were investigated, even those remote communities that were initially inaccessible due to rain. The team implemented the survey in a systematic, thorough manner to ensure high quality results. The KPC report provides excellent baseline data on the age and sex of children, growth monitoring, immunizations, vitamin A, tetanus toxoid, breastfeeding/nutrition, diarheal diseases, acute respiratory infections, maternal health, quality of water and hygiene, access to health programs, child death rate, and the rate of miscarriage. The data from the KPC define what and where the major problem areas are, and have facilitated the definition of concrete indicators. Due to time constraints, consultants from ARHC were not able to extensively train CEPAC staff to perform the midterm KPC. In order to compensate for this, prior to the midterm, CEPAC will present a plan to ARHC on how they intend to conduct the KPC. ARHC will then critique the plan and help CEPAC design a quality instrument. In addition, a consultant from ARHC may be hired to be present on site during implementation of the midterm KPC.

E. Completion of Health Facilities Assessment

The second baseline survey successfully completed during the first year was the Health Facilities Assessment (HFA). Dr. Luis Amendola, a consultant with extensive experience in baseline surveys, CEPAC staff, and Kirk Leach, IEF Project Advisor, carried out the survey during March and June of 2000. Due to the fact that Mr. Leach and Dr. Amendola were working on the DIP, only 16 of the 24 health facilities were analyzed in March.

The remaining 8 health facilities were investigated in June. Both parts of the survey were carefully and thoroughly conducted to ensure quality results. The HFA report produced at the completion of the assessment provides quality data about all 24 health facilities in Ichilo Province. The results have illustrated that more emphasis must be placed on supervisory, equipment, and supply issues, rather than health worker knowledge.

F. *Improving the Cold Chain*

A fifth achievement during the past year was the agreement reached regarding the necessity of improving the cold chain, as well as the agreement between CEPAC and the Belgians to fund the changes. The MOH has committed to providing a staff person to become the Vaccines/Cold Chain Coordinator for the Province. The fact that the cold chain and adequate vaccine supplies have been recognized as important, and that steps have been taken to institutionalize this concern, is promising. For the first time a specific person will be responsible for making sure that the cold chain is functioning, and that every health facility has adequate vaccine supplies. This is crucial for reaching a goal of 85% complete vaccination coverage.

Cold chain data from the HFA demonstrate that nine communities have a functioning refrigerator with a temperature control knob. Of seven additional communities with electricity, five do not have a functioning refrigerator, and two have refrigerators without temperature control knobs. In the remaining eight communities, four have refrigerators that run on gas, and four have no functioning refrigerator of any kind. Due to insufficient funds, or a lack of access or supply of gas, the refrigerators do not work nor do they have temperature control knobs. Thus, Ichilo Province needs a total of 15 refrigerators, seven that function on electricity and eight that function on solar energy. CEPAC decided it would be better to replace the gas refrigerators with refrigerators that run on solar panels. They arrived at this decision due to the fact that gas trucks do not come often, if at all, to these communities, nor are funds consistently available to purchase gas. CEPAC also recognized the usefulness of ensuring that the municipalities sign an agreement to replace batteries in the solar refrigerators when necessary.

The HFA data also demonstrated the need for three vaccine storage cold boxes for the mobile teams. Up until now, the mobile teams have been using a thermos to transport vaccines. The inside of the thermos is divided into four sections according to vaccine type, and each section has an ice pack. The ice packs only last for eight hours, however, and thus using a thermos decreases vaccine effectiveness by 50 percent. The cold boxes do not rely on ice packs and will therefore maintain vaccines for much longer, significantly improving the quality and effectiveness of vaccines.

CEPAC staff, the IEF Project Advisor, and the Belgian Technical Representative completed a plan for the purchase and installation of cold chain equipment during the first year of the project. Price quotes have been obtained for equipment to correspond with the purchase plan. Although the plans were completed, the purchase and installation of equipment stalled due to the civil unrest that occurred in September and October of 2000 in the project area (see question 2). CEPAC plans to have the refrigerators installed

within the first trimester of the second year. CEPAC and the MOH will also develop a maintenance and supervision plan within the first trimester of the second year. This plan will include training for the MOH's district Vaccines/Cold Chain Coordinator.

F. Design of the Rapid Rural Appraisal (RRA)

Another accomplishment during the first year was the design of the Rapid Rural Appraisal (RRA) by CEPAC and the IEF Project Advisor. Dr. Osvaldo Chavez and Dr. Mabel Morales worked with Kirk Leach to develop a survey for Ichilo Province. The objectives of the RRA were to provide IEF and CEPAC with:

- census information for the nutrition component of this project;
- mapping information for water/sanitation proposals development and general use by area health personnel; and
- an opportunity to disseminate the results of the KPC.

The census is particularly important in this project because there are issues concerning an underestimation of the population by the MOH. Producing definitive community maps for all health personnel is also a priority. The maps will help to assess community water systems for the development of a district-wide water/sanitation proposal that would address one of the main causes of childhood illness in the area, namely unsanitary water. The census also provides an opportunity to disseminate the results of the February 2000 KPC. The census and the dissemination of KPC were supposed to be carried out in September and October 2000. Civil strife resulting in blockades of the highway leading to the project area prevented this from happening, however. The blockades were recently lifted, and activities will thus resume in November.

A first phase of this work has nearly been completed. The MOH has already solicited simple censuses from the RPSs (*Responsables Para Salud*, or Community Health Workers). The Buena Vista RPSs have concluded theirs, and Yapacaní and San Carlos are nearing completion. The results of this preliminary work will simply be the names, ages, and occupations of all individuals in a given community. Randomly selected censuses will be checked for accuracy by CEPAC staff.

Implementation of the RRA was delayed due to the civil strife that occurred in September and October. Protestors blocked access to the project area preventing implementation of the assessment. (Please refer to question 2 for more detail concerning the civil strife.) CEPAC plans to implement the RRA in the first trimester of the second year.

G. Completion of the Cost Analysis

A final achievement during the first year was completion of the cost analysis in July by James Clement, MBA. (See Annex XXI) The purpose of the study was to assist CEPAC in understanding health service delivery costs in Yapacaní in order to efficiently expand services in Ichilo Province. CEPAC currently delivers services through three channels: clinics, mobile teams and health festivals. The cost analysis systematically explored each

of these channels. Additionally the study examined CEPAC's data collecting and reporting practices. It also evaluated the strategies employed to deliver health services with a retrospective and a prospective component. Mr. Clement designed the survey to be 'user friendly' and also informally trained certain CEPAC staff in order that they be able to repeat a similar analysis in the future.

Key findings from the cost analysis were the following. First, a reduction in visits by the mobile team to each community would allow the same resources to serve more than three times the number of people. This in addition to a reduction in the size of the mobile health team would reduce the per unit cost of providing care by 85%, while greatly improving the health of the overall population. Second, for their cost-effectiveness to match that of the mobile team, 78 individuals must receive care at a health festival. Thus, if the number of people treated at a festival meets or exceeds 78 individuals, shifting resources from the mobile teams to the festivals should be considered. Third, clinic cost recovery mechanisms should be explored to improve clinic efficiency and sustainability. And fourth, data collection and reporting systems of CEPAC should be updated and standardized for optimal, efficient use.

The results from the cost analysis initiated a shift in the thought process of CEPAC staff. For example, CEPAC has taken steps to double the number of communities visited by the mobile health units. This will lead to a more efficient use of resources and improved coverage rates. CEPAC has also begun to consider ways to change the composition of mobile team staff while maintaining a high level of service quality. Similarly, they are considering implementing potential cost recovery mechanisms, and improving their data collection and reporting systems. For quite some time, CEPAC has wanted to be more "public health oriented," but they have not had guidance on how to shift from being clinically-oriented to preventive-oriented. A major accomplishment, however, was the decision to double the population they serve. Two months of careful, well-thought out planning resulted in a proposal to double the number of EPI/VA beneficiaries, raising coverage to 85 percent. The plan will be implemented before the end of the second year.

Despite significant delays due to the circumstances described in Question 2, the project has produced solid results in the activities achieved thus far. During the second year of the project, implemented activities will continue to produce quality results in a timely fashion.

2. **What factors have impeded progress towards achievements of the overall goals of the program and what actions are being taken by the project to overcome these restraints?**

A. Personnel Issues

Several factors impeded progress toward the overall goals of the program. First, IEF personnel issues proved to be a serious impediment. A Project Advisor with sufficient qualifications to supervise the project in Bolivia was not found until the end of February of 2000. Kirk Leach accepted the position and immediately traveled to Bolivia to write the DIP in a month with the help of a consultant, Dr. Luis Amendola. The lack of time

resulted in an "incomplete" DIP, as described during the June 2000 DIP Review. As a result, although many activities were implemented in the first year, much of the second half of the first year has been spent gathering information for the DIP rewrite.

The Child Survival Coordinator position at the IEF HQ level also was not staffed from February to October of 2000, due to the lack of a qualified candidate. The absence of a Child Survival Coordinator with technical expertise proved to be a major impediment in the progress of the project. The role of the CS Coordinator is to provide routine coordination and communication between IEF headquarters, IEF field staff, CS experts, and USAID. The role is also to ensure that the project follows state of the art protocols for each intervention. In short, the CS Coordinator position is vital for the support of CEPAC and IEF field personnel. We are confident that the person hired for this position, Ms. Gwen O'Donnell, will be instrumental in the group effort to get the project back on schedule.

A final personnel issue was the absence of the Program Assistant for the IEF Project Advisor in Bolivia, due to higher than expected initial project costs. As the Child Survival Project is the first IEF project in Bolivia, the lack of a Program Assistant proved detrimental. Mr. Leach, the Project Advisor, lost valuable time performing many administrative tasks while he worked to set up project infrastructure upon arriving in Bolivia. A Program Assistant will be hired in January 2001 to assist the Project Advisor with administrative and program-related duties in Bolivia. The ideal candidate will be a Bolivian junior health professional who will be trained during the second and third years to inherit the Project Advisor's position in the fourth year of the project. This person will maintain the position in the event of a project extension.

B. Civil Strife in Bolivia

A second major issue affecting project progress at a crucial time was the civil strife that took place in Bolivia in September and October of 2000. Excerpts from the United States Department of State travel warning for Bolivia (issued 10/23/00) describe the situation:

"Violence and civil unrest, primarily associated with anti-narcotics activities in the Chapare region between Santa Cruz and Cochabamba, and the Yungas region northeast of La Paz, periodically create a potential risk for travelers to those regions. Violent confrontations between area residents and government authorities over coca eradication occasionally result in the use of tear gas and stronger force by government authorities to quell disturbances. U.S. citizen visitors to the Chapare or Yungas regions are encouraged to check with the Consular Section of the U.S. Embassy prior to travel."

"In April and again in September 2000, civil unrest became more generalized, spreading to regions throughout the country, both in urban and rural areas. Protestors blocked roads with stones, trees, and other objects, and reacted violently when travelers attempted to pass through or go around roadblocks. U.S. citizens should avoid roadblocks and demonstrations at all times. U.S. citizens considering a visit to Bolivia should keep apprised of current conditions and monitor local news sources before considering overland travel within the country."

The protests prevented CEPAC staff and the IEF Project Advisor from accessing the project site. As a result, several project activities were delayed including, installation of the cold chain, completion of the census, and implementation of the Rapid Rural Appraisal. It should be noted that protesting "campesinos" (rural farmers) removed the roadblocks only after the Bolivian Government promised that various concessions would be fulfilled by the end of December. The U.S. Consulate and the Bolivian populace are concerned that these promises will not be kept.

Despite these impediments, IEF and CEPAC fully expect to complete all scheduled activities. Significant progress towards attaining the project's proposed indicators will be achieved by the time of the mid-term evaluation.

3. In what areas of the project is technical assistance required?

We have identified several areas where technical assistance is needed.

A. Effectiveness of ORS Packets

Technical assistance is also requested with regard to the effectiveness of ORS. Concerns have been raised about the problems associated with giving mothers ORS packets to treat diarrhea. Mothers who are given ORS packets for free often become dependent on the packets, believing that they have "secret" ingredients that will cure their child. As a result, they overlook and forget the fact that fluids at home can be used just as readily to treat diarrhea. Technical assistance will thus be sought with regard to managing ORS usage.

B. Parasites and Diarrhea

A second issue related to diarrhea is a disagreement about the frequency that parasites cause diarrhea. CEPAC field staff argue that parasites cause the majority of diarrhea cases and that mebendazole is ineffective in treating children with multiple parasites. IEF technical staff do not agree with this argument. While it is true that the majority of children under 5 years of age in Ichilo Province have parasites and/or worms, the presence of parasites does not cause the majority of diarrhea. Health workers should give children mebendazol as well as pursue an aggressive deworming strategy, especially when anemia and malnutrition are also an issue. To mediate the dispute, technical assistance will be sought. Experts in diarrhea case management from the Johns Hopkins University School of Hygiene and Public Health will be contacted to address these issues.

C. Nutritional Assessment

The project has been and will continue working with the Johns Hopkins Division of Human Nutrition to design the nutritional component of the project. The purpose of the nutritional assessment is to obtain data on the type, origin, and quality of foods consumed, as well as cultural beliefs about supplementation and feeding children. The assessment will also evaluate which intervention (Hearth model, etc.) would be most effective in the project area. Dr. Kerry Schulze (JHU Division of Human Nutrition) will help structure the instrument to be used in the assessment, as well as the nutritional intervention itself. Dr. Joel Gittelsohn (JHU Division of Human Nutrition) will also be contacted for recommendations during the development of the Nutrition and Health

Behaviors Survey, as will Dr. Peter Winch or one of his colleagues (JHU Department of International Health). The QHP survey will provide in-depth qualitative information about caretaker responses to malnutrition, feeding practices, and illness.

D. Breastfeeding Support Groups

A fourth area identified in need of technical assistance has to do with organizing breastfeeding support groups. Ichilo Province is host to numerous breastfeeding support groups. Exploring ways to link groups together in order to facilitate an exchange of information and experiences would be beneficial to mothers, infants, and project coordinators alike. The Project Advisor will talk to other NGOs in Bolivia to find out how they organize breastfeeding groups. At the same time, the Child Survival Coordinator will contact Linkages, CSTS, and other organizations for information.

E. Behavior Change Communication

Behavior Change Communication is the final area where the project seeks technical assistance. Reviewing and updating BCC radio messages, as well as other means of mass communication, is necessary. In an effort to strengthen breastfeeding messages, Linkages and La Leche League will be contacted. For technical assistance with nutrition messages, Anne Henderson at Facts for Life will be contacted, in addition to a representative from the Fanta Project. Phyllis Piotrow, Ph.D., at the Johns Hopkins Center for Communication Programs will also contacted. Dr. Piotrow has worked for many years in Bolivia and has established a strong network there. Other person(s) from the JHU Center for Communication Programs also working in Bolivia will be identified in order to request access to their information clearinghouse, educational materials, and pop line base data on health communication.

In regard to BCC, CEPAC has also specifically requested training workshops. Specifically, CEPAC would like to have training workshops on communication strategies in order that they be able to develop innovative materials for communities in Ichilo Province. In addition, CEPAC would like to train one individual to be a technical specialist in the design and application of BCC monitoring systems. Ideally CEPAC would like to develop a monitoring and evaluation system to measure the impact of mass media campaigns and activities related to the training of BCC facilitators. CSTS, Porter Novelli, and other organizations will be contacted to explore these questions. IEF and CEPAC will also discuss the possibility of hiring a local consultant to conduct a training workshop, or, alternatively, requiring the designated specialist to attend a course on BCC monitoring and evaluation.

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Response to Reviewer Comments
IEF responses in italics around original text.

Summary of USAID/BHR/PVC FY99 Detailed Implementation Plan Review for International Eye Foundation/Bolivia (IEF) New Grant
Held June 2000

Organizations and Participants Represented:
USAID/Global Bureau: Francis Davidson (FD)
Academy for Educational Development (AED): Serena Rajabiun (SR)
Andean Rural Health Care: Sara Lewis Espada (SE)
Plan International: Jennifer Luna (JL)
Basics II: Karen Le Ban (KL)
Child Survival Technical Support: Eric Sarriot (ES)
Most: Roy Miller (RM)
External Reviewer: Fannie Fonseca-Becker (FB)
Manoff Group: Mike Favin (MF)

Strengths:

General
Reviewers were impressed with the project design, objectives and indicators, stating that they were well thought out and articulated. Reviewers were also impressed with description of efforts to build CEPAC capacity, emphasizing partnership and cooperation. The fact that IEC will concentrate efforts in the promotion of home based ORT fluids, another sustainable intervention, was also identified as a major project strength. Special attention is recommended in the identification of cereal-based fluids that are already traditionally given to children with diarrhea in some areas of Bolivia. It is also recommended that close attention be paid to specific cultural beliefs and practices surrounding project interventions.

Quality of the Writing
Many of the project reviewers mentioned that the DIP was well written. Information was presented in a concise, organized, and logical manner, clearly laying out plans for IEF/CEPAC collaboration. (FB, SE, RM, SR, KL) One reviewer also commented on the fact that the information presented in the DIP was well researched.(SE)

Selection of Interventions (Immunization, General Nutrition, Breastfeeding, ARI, and Diarrhea)
A general consensus exists among reviewers that the interventions chosen are appropriate given existing epidemiological data and community needs. One reviewer also noted the fact that the interventions chosen address the major needs of children under five years of age. It was also noted that CEPAC has experience in some of the interventions and will therefore bring a wealth of experience to strengthen the project.(FB) Furthermore, according to one reviewer, “given

CEPAC's strength in agricultural production, it was interesting to see the strong investment in nutrition programming."(SR) Finally, coordination and collaboration between CEPAC and the MOH on identifying interventions was recognized and commended.(SR)

Emphasis on Partnership and Coordination
IEF's efforts in establishing a solid partnership in order to promote coordination with CEPAC were noted by several reviewers.(FB, SE, RM, ES, SR) These reviewers noted their appreciation of IEF's efforts to establish a strong alliance to ensure project success. One reviewer remarked that being a part of the PROCOSI network is a bonus for CEPAC and the project as lessons learned can easily be spread throughout Bolivia.(RM) The communication links established between CEPAC and the MOH, and efforts to involve the MOH at various levels, were also identified as project strengths.(FB, SE, SR, KL) Similarly, one reviewer praised the fact that the project was presented to, and received support, from all the community councils in the municipalities where activities will be implemented.(FB) Finally, IEF's partnership with PROSALUD and their offer to provide technical expertise in vitamin A coverage to other institutions was a project strength.(SE)

Multisectoral
One reviewer praised the project for being multisectoral. Prior to this project, IEF's partner, CEPAC, was already implementing agricultural and water sanitation projects in one of the provinces to be covered by this project. Both of these project areas directly affect the nutritional status as well as the incidence of diarrheal diseases in a population. IEF has submitted proposals to donors for future continuation or expansion of these types of interventions in the project area. The fact that the project is multisectoral strengthens the overall project.(FB)

Emphasis on Sustainability and Capacity Building
Many reviewers praised the project's emphasis on sustainability and capacity building, including the fact that CEPAC and IEF will collaborate to define specific plans for each. (FB, JL, ES, SR, KL) One reviewer commented that the focus on capacity-building is strongly conveyed in each section of the document.(ES) The fact that the majority of the project staff are Bolivian Nationals was also recognized as a major project strength.(FB) The quality of human resources, in general, was noted as being high, with a good delineation of responsibilities at both IEF and CEPAC. Finally, one reviewer stated: "Planning a sustainability assessment at the onset of the project is an innovative design that certainly raised my interest in the methodology of David Green."(ES)

Cost Analysis
Reviewers recognized that a cost analysis study is imperative for making strategic decisions regarding sustainability and implementation strategies. One reviewer with substantial experience in Bolivia mentioned that a goal of 30% sustainability from fees for services is reasonable.(JL)

Links with Technical Groups
Several reviewers remarked that the strong connection that IEF has with other technical groups, such as MSH, the Johns Hopkins Division of Nutrition, Linkages, Andean Rural Health Care, etc., is a major strength of the project. (JL, KL) Being part of the PROCOSI network was also recognized as a significant project strength.(KL, RM)

Baseline Assessments
Consensus existed among reviewers that the baseline assessments were clearly described and provided a strong basis for planning IEF/CEPAC's interventions. One reviewer added, "It is particularly nice to have included a thorough baseline assessment of the capacity at the local partner, and to have invested the funds and energy to get support from MSH for this exercise."(ES)

Providing Eye Care Services
Several individuals noted that IEF's eye care experience is a major strength of the project. One reviewer noted that the DIP clearly addresses the strategic progress of IEF as a PVO using its prior expertise in particular health areas to geographically and programmatically extend child survival and eye care programs.(ES) Another reviewer commented that "…strengthen[ing] eye care services in Bolivia seems appropriate to its technical and managerial capability…[and] address[es] an important gap in Bolivian health care services."(SR)

Weaknesses:

1. **Program Goals and Objectives**

- Main goal of improving sustainable delivery of child survival interventions is not reflected in the DIP table *Program Goals and Objectives*.

  Response: The Program Goal has been added to the table.

- The source for the breastfeeding data and objectives are not clear. Results reported for the baseline survey do not include measures of exclusive breastfeeding. On the other hand, according to the 1998 DHS survey, while 60.2% of infants 0-3 months of age were exclusively breastfed, the rate decreased to 30.1% for those 4-6 months of age.(FB)

  Response: Results of the breastfeeding information are from the CS project KPC. As is consistent with WHO guidelines, the indicators reflect exclusive breastfeeding to 4-6 months and continued breastfeeding to 24 months of age. These indicators are also consistent with PROCOSI and Linkages indicators recommended for this intervention.

- Setting the timing for breastfeeding initiation to within 8 hours after birth does not measure "early attachment to the breast" and allows for the detrimental practices of providing the infant with sugar water, tea and other liquids in the meantime.(FB)

  Response: The indicator has been changed to reflect immediate attachment, defined as attachment to the breast within one hour of the birth.

- Format used in this DIP [for the objectives and indicators table] was a little confusing at first. At times "major inputs" and "major outputs" are identical (e.g. "cost analysis completed"); at others there is some confusion between different terms. For example, "percentage of written feed-back increases", here a major output, is almost an indicator of an improvement in the

quality of supervision (which would be an objective). The written feedback produced would be outputs. IEF may wish to make clarification as it sets up its monitoring system, and also as a way to clarify concepts for staff.(ES)

Response: The Objectives and Indicators table was re-written to better and more clearly state objectives, indicators and activities. The table was written as a joint effort with CEPAC in a series of planning meetings. The final version was shared with the MOH and contained many objectives and indicators that were set with MOH objectives. The MOH role will be to work with the objectives set on an intervention-by-intervention basis (i.e. the MOH has agreed at this point to focus on EPI/VA and clinical and community IMCI). The order of the remaining interventions will be decided as objectives for these interventions are met, and as priorities are re-examined on a yearly basis.

- Indicators: IEF and CEPAC should track the progress made on indicators and make annual adjustments to targets as necessary. This is in response to the concern of achieving targets set for 2003. (For example, under the nutrition/micronutrient intervention, the project proposes to increase coverage of vitamin A (2 doses) from 3.3 to 85%. If the first 18 months of this project is devoted to assessments is there sufficient time to achieve these targets?)(SR)

  Response: Some targets that may seem high are the VA and the EPI targets. Both of these were set using MOH norms to be consistent with our MOH partner. Further, because of the importance of EPI and VA, the MOH, CEPAC and IEF have agreed to focus efforts on this intervention prior to other interventions and prior to the completion of all baseline assessments. While the VA coverage indicator may seem high, IEF's expertise in this area has allowed CS projects to realize great advances in coverage in short periods of time, making this objective a reasonable and achievable one.

- Where are the midterm goals? (It would be useful to have both qualitative and quantitative measurements for the midterm evaluation. The indicator table illustrates only final evaluation goals.(SE)

  Response: The midterm goals are known to the project and were simply not reported in the objectives and indicators table due to a lack of space. Targets are set on a monthly basis by CEPAC, based on the final goal and estimating the population needed on a monthly basis to reach the coverage or other indicator. For example, if the VA objective is to provide 2 VAC's per year to 80% of all children between 6 and 69 mo. of age, than a yearly population figure is calculated and the number of children that should be dosed each month is determined. This information is reported by CEPAC to IEF along with actual supplementation totals. The mid-term goal is simply the mid-point between the baseline and the final objective, unless the intervention is being phased in later than at the start of project activities. (This does not apply to any intervention specific objectives because CEPAC was already performing activities for each of the selected intervention when the CS program began).

- Not clear what the child survival grant is trying to achieve and how it is going to strengthen IEF. Suggested: A clearer statement of exactly how IEF will be strengthened would help, that is, fill in the blank in the following sentence: "At the conclusion of the grant, IEF, as an

organization, will better be able to do _____." A similar statement might be made for CEPAC. Also, a section of the DIP or, perhaps an annex, might address the strategy by which the experience and skills derived in this small area of Bolivia will be transferred throughout IEF. (RM)

Response: This is an important question and requires a complex response. The goals of the IEF and CEPAC need to be and are, aligned with the Strategic Objectives of the Office of PVC. The SO for PVC is to, "Increase the capability of PVC's PVO partners to achieve sustainable service delivery." In this case the PVO partner is IEF. IEF has defined sustainability (see sustainability section, Section 1.F. in the DIP) to include recovery of funds, community ownership of services, diversification of funding sources and other elements that together contribute to the longevity of the project beyond PVC funding.

While the IEF/CEPAC CS project contributes to all of the PVC Intermediate Objectives, one is of particular importance, namely "IR3-Strengthened partnership between US PVOs and Local NGOs." IEF has specifically partnered with CEPAC to deliver the CS interventions in a sustainable manner in Ichilo Province. In other words, the ability of IEF to assist CEPAC to deliver CS interventions on a provincial level (whereas they were delivering interventions on a smaller scale before the project) directly leads to IEF's improved capacity, which then meets with PVC's strategic objective.

The progress of CEPAC is measured in two ways: 1.) direct measures of improved capacity (capacity and sustainability indicators) and 2.) improved coverage and quality of CS interventions (as measured with the intervention specific indicators. If IEF were not partnered with this local NGO, the indicators and objectives would be very similar and measurement would occur in these two areas (capacity and interventions)). Therefore, nothing unusual is being proposed; monitoring improvements to capacity and sustainability can occur simultaneously with improvements to the interventions.

Reviewers requested that IEF choose a priority, either sustainability or improved coverage. We feel that given the goals of IEF and PVC, it is possible to work on both sides of this equation with CEPAC, without detriment to either goal.

2. Program Design

- Confusion regarding the size of the beneficiary population for the program(FB)

Response: There are no definitive population figures for the area and, as stated, migration has been poorly recorded, adding to confusion. The writers of the DIP did take this comment into account and have provided greater clarification about the origin of differing population statistics. Every effort was made to utilize consistent statistics and only when necessary were differing statistics used and an explanation provided.

- Not clear how 100 RPS and about 35 health care providers will service target population of 20,462 infants, women, and children. (FB)

  Response: The total number of RPS has been increased to 200. This will cover above 80% of all communities. This is a first step to improving coverage. Secondly, the most remote areas need to garner greater attention as CEPAC and the MOH do not consider the most remote communities to be within their scope of work. IEF will work with CEPAC and the MOH to improve access to remote communities with alternative strategies, such as increased information about up-coming campaigns and the use of nearby RPSs to access these communities on an intermittent basis.

- Are there plans to collect information regarding what age complementary foods were first introduced and the frequency of feedings? As cultural beliefs are an important part of infant feeding in Bolivia, complementary feeding should be explored. This is especially true since growth faltering usually begins after 6 months, and appropriate complementary feeding practices are important to ensure adequate nutritional status.(SR)

  Response: Yes, this is a part of the Nutrition and Health Behaviors Survey that will be conducted at the start of year 2. Please refer to Annex XII for full details of what the survey will cover. We are in agreement that this is an important issue.

- General Indicator: Who is being supervised? Is there any community role in supervision?(KL)

  Response: The communities elect the RPS and have an on-going role in their supervision. Other than this, community participation has traditionally been limited in the area of supervision. Sharing examples of the type of community participation that has flourished in other parts of Latin America and have lead to sustained service delivery is a priority role for IEF with CEPAC and the MOH. At this time, however, the goal is to improve the existing supervisory system, including improvements to supervisor/worker feedback and consistency of visits, as a first step using QA methodologies.

- General Indicators: I appreciated the fact that inputs for supervision include applying QA approaches, but the indicator chosen is purely quantitative.(ES)

  Response: The objectives and indicators that are set for the project as a whole do not reflect all indicators and objectives . As each intervention develops, as QA exercises are completed, etc., sub-objectives and corresponding sub-activities will evolve that are not represented in the DIP but are critical to achieving DIP objectives. This is the level where we are likely to see more qualitative objectives.

- If possible, the distribution of iron tablets should be also targeted to post partum women as well as children 6-24 months of age.(SR)

  Response: Iron deficiency anemia is a problem in women of childbearing age in Bolivia. Women as well as children were always intended as a target population for this intervention. The omission of this group was simply an oversight in the DIP reporting process.

- It seems that the emphasis under this grant will be research and studies rather than fieldwork. Some decisions have already been made regarding approaches in the field and, yet, they are going to be studied. If decisions are made to change an approach, they should not be studied. It might be better to use resources for implementing an alternative strategy structured around a community-based approach and monitor its evolution carefully. For example, page 6 states "Of particular concern is the cost-effectiveness of the mobile team approach." Does it need to be studied if it is going to change?(RM)

  Response: This is a very critical question. It was not the intention of the DIP writing team to propose that any decisions had been reached regarding the best strategies for CEPAC to use as it increases service provision from a community-by-community level to a provincial level. While it is true that IEF identified some potential areas for improvements, such as a shift from clinical level services to broad-based public health strategies, this was only an observation made during development of the proposal and DIP. We do not agree that there does not need to be further study of these initial observations, 1) because data collection should accompany all major management decision whether scientific or no, and 2) because IEF and CEPAC are committed to a participatory process which would be by-passed if IEF were to simply make recommendations and implement them..

  By completing the cost-analysis and sharing this information with CEPAC, the IEF allowed CEPAC to make final changes based on the information and recommendations stated in the report. IEF will continue to monitor the progress towards project objectives and provide additional guidance as needed, however, it was not expected that CEPAC would or should implement all of the recommendations of the report. This is because CEPAC has relationships with communities and with the MOH that can not be drastically changed overnight. Furthermore, managerial changes often need to take place in stages to be accepted within a given organization. Additionally, CEPAC operates its CS project activities within the context of a wide variety of agricultural, health and other projects that also need to be taken into account when revising strategies.

3. Sustainability

- It is not clear how the cost analysis will be implemented for the general nutrition and breastfeeding interventions (FB)

  Response: The cost analysis will not specifically target the nutrition and breastfeeding interventions. The cost analysis is based more broadly on improving outreach activities and on improving overall cost effectiveness of the project. In this manner the cost analysis

indirectly improves these interventions. For example, CEPAC, based on the initial cost analysis of their mobile outreach teams, has increased the number of communities it can visit and is in the process of further improvements. These changes will affect community contacts including community education and supervision of RPS that will have a positive affect on breastfeeding and nutrition.

- The plan does not mention specific collaboration with the MOH. ARCH has extensive experience working with the MOH both at a district and local levels.(SE)

  Response: The revised DIP made a particular effort to highlight how the MOH, IEF and CEPAC are interacting. From its inception, the CS project planned greater integration of CEPAC and MOH health activities in order to improve coverage and quality of services at the provincial level. This idea of improved integration existed prior to IEF's partnership with CEPAC, however, IEF has played a key role in developing the concept into more concrete action plans which are now being developed by the Ichilo partners (MOH, ECPAC, IEF and Belgian Technical Cooperative) around the EPI/VA intervention. The goal is to have the MOH commit on an intervention by intervention basis as the CS project progresses. This approach is working at this time.

- Is there a plan for staff team building between MOH, CEPAC, and IEF? Since staff will be paid by three separate entities, IEF should anticipate problems in forming a cohesive team.(SE)

  Response: This is a very good point. The strength of the Project Advisor is organizational development. A series of workshops are planned in the DIP to address organizational issues and though these workshops and visits by the HQ personnel, the concept of team building exercises can be incorporated.

- It is not clear how much the Project Director, based in La Paz, will be involved in the project.(SE)

  Response: The Country Director is spending 20% of his time devoted to the CS project. His role includes periodic monitoring of the project activities in Yapacaní (by reviewing monthly reports and making quarterly visits), assisting with the administrative duties of developing IEF eyecare and CS activities on a National basis (including working with PROCOSI and PROSALUD), and serving as a liaison to the Executive Director of CEPAC, Widen Abastoflor.

- The project has strong ideas about analyzing costs and cost recovery. In addition, it would be good to exchange ideas on this issue with various local groups in Bolivia, such as PROSALUD. In addition to this NGO, CIES in Bolivia developed very good systems for analyzing costs and cost recovery for its clinics and outreach programs. It would be useful to meet with them and exchange ideas.(JL)

Response: The IEF has made extensive contacts in Bolivia with groups that use cost-recovery models, including PROSALUD. At this time, a proposal has been developed by IEF to provide eyecare at PROSALUD clinics. Details of this relationship, however, have not been finalized.

- It is not clear whether the sustainability plan in place is an output, an objective, or an indicator. I have not found sufficient information to understand what a "sustainability project implemented" means. Is it the initiation of a cost-recovery scheme? Is it the whole process of analyzing cost and demand and tailoring supply of services to the analysis? IEF is proposing something quite innovative for a CS project, and apparently has prior experience with these plans. It would be beneficial to clarify this issue.(ES)

  Response: The sustainability plan will not be finalized until mid-term. It is not possible at this time for IEF or CEPAC to state where cost recovery funds will come from, other than to say that we will examine improving cost recovery from community level pharmacies (RPS botiquin) and from fee for service collections. In addition, the IEF will explore income-generating concepts that have worked in other areas, such as the establishment of a lens-manufacturing factory that could generate project funds while providing much-needed glasses to Bolivians.

  The bottom line is that the CS project has committed to obtaining 30% of its field level funding from income generating sources.

4. Monitoring and Evaluation

- This section is a bit weak in that it does not specifically state how improvements will be made, other than "QA Exercises." It is clear that the info systems have been in place for a long time, which is positive, but can lead to resistance to change. What type of technical assistance is PROCOSI offering? This isn't clear. How and how often will data be used for decision making and feedback to the community?(SE)

  Response: As noted by the reviewer the fact that the M&E system has existed for a long time both works for and against the project's M&E needs. What has been found to date is that much information is collected that is organized only in a final format that addresses donor or MOH concerns. It will be possible and relatively simple for IEF to work with CEPAC to use exiting data to answer questions that are vital to daily management decisions. This can be accomplished by computerizing data entry at the earliest possible stage and allowing the computer to analyze the data based on set reports for donors, MOH and CEPAC. This can be done with existing software such as EPIInfo or by customizing a database program such as MS Access. An example of the latter is that CEPAC is not currently able to quickly access information about its static clinic in Yapacaní; data such as number of women of childbearing age visited in a one-year period, and the breakdown of services they received. This information should be available, however, because a simple roster is filled out (name, age, reason for visit, treatment, etc) for each visit. Streamlining the system therefore becomes a primary step in working to improve the existing system.

Feedback to communities works on a fairly regular basis and community information and responses are taken into account in regular project planning. Because CEPAC has many project working simultaneously, there is always data that is produced and then summarized for the communities (see Annex X for an example of a brochure used by CEPAC to disseminate information to communities) and shared with them.

Further improvements will come from an evaluation of the M&E system as part of noted QA exercises. These improvements will focus on the quality of data collection and not on changes to the system. As noted, PROCOSI is in the process of evaluating the M&E system used by its members with technical assistance from Management Sciences for Health (MSH). Early reports (oral interview with MSH staff) found that the quality of the information gathered due to inconsistent definitions etc. was, in fact, the primary concern of the external evaluation.

- Page 7 states that migration is "heavy." Monitoring and evaluation is challenging in an environment of heavy migration, especially when surveys play a major role in the evaluation scheme. The difficulty arises because the population surveyed at two points in time might not be the same. It may be wise to develop a strategy now for dealing with the measurement issues arising as a result of migration.(RM)

  Response: The CS project recognizes the need to establish the effect of migration on the population of Ichilo. For this reason, a census is planned and is in process with the MOH and other partners in Ichilo at this time. Preliminary data obtained from CEPAC indicates that 25% of the population is migratory. Understanding migration patterns as well as increases to the population over the past few years will be part of the census.

5. BCC

- The communication strategy doesn't specify the language to be used in the IEC materials(FB)--

  Response: Materials developed by CEPAC with assistance from Linkages and JHU are available in a variety of languages, including Quechua and Spanish. All materials have taken into account the fact that two distinct cultures coexist in the project area: highlanders who have moved to the lowland area in search of work, and lowlanders who are considered native to the area. All of the BCC materials have been developed with extensive field-testing to monitor acceptance and comprehension of the health messages.

- IEF and CEPAC should review their BCC messages to ensure they are standardized with the MOH. Clarification to make sure that they are delivering the same message is important. For example: on the carnet de salud infantil, the message is to feed a child 5 times a day from the age of 6 months, but in the chart of health messages they are promoting 3 times/day. (SR)

Response: All health messages are being reviewed and this specific comment is being taken into account. The first step in reviewing the comments was to request a preliminary review by CSTS. The comments generated by CSTS will be shared with CEPAC and the MOH following presentation of this revised DIP. The health messages of each intervention will then undergo a complete review as the project progresses, with each intervention having been thoroughly reviewed by the mid-term. This would include an evaluation of the process used to develop each intervention and final messages developed by an expert in the intervention.

- It is unclear how behavior materials will be used and what process of message reinforcement, encouragement, etc. will be used to actually change behaviors. The description of current beliefs and practices on page 34 suggests that there are some behaviors ingrained in the population that need changing. Yet, reference to behavior change on page 15 is limited to the existence of flip charts, posters and key message developed by LINKAGES. Behavior change starts with good materials and the right messages but should be recognized as more than just having the materials.(RM)

  Response: This is an important point that was not fully discussed in the first version of the DIP. IEF and CEPAC are very much aware that behavior change must be monitored apart from the materials development. In both the development of health fairs with JHU and community-education with Linkages, follow-up monitoring activities have been incorporated into the workplans of the CEPAC staff. In the case of the JHU materials, success in changing behaviors is monitored by festival staff through the use of questionnaires, while the Linkages team has made arrangements to monitor behavior change with the assistance of CEPAC at several time periods over the next year (as determined by Linkages). Development of monitoring systems to quantify behavior change is essential to all BCC on-going and new activities.

- It is not clear who will implement community education. What is the role of the RPS? What is the role of CEPAC's mobile team in BCC? Does the MOH play a role in BCC? (JL)

  Response: All community outreach personnel play a role in the BCC component. This includes MOH and CEPAC personnel. In the case of each BCC activity, the roles of the personnel may change and/or new personnel may be added, but generally, all field level personnel are trained in BCC (Aux. Nurses, CEPAC Mobile Team, RPSs, etc.). A specific activity, such as the health festivals may require the assistance of all of staff in addition to training community leaders and educators for the few days of the festival.

6. Immunization

- Results from the baseline surveys are reported but no mention is made of how the project is going to address some of specific issues identified such as (FB):
  -provision of immunization to those areas that are hard to reach and those considered as "unreachable" and that neither the MOH nor CEPAC are giving attention to
  -shortages of vaccine
  -vaccines that are expired
  -re-use of needles without sterilization

  Response: The IEF has initiated an important monthly meeting of the Ichilo partners which is used to develop workplans and monitor progress towards joint objectives with a current focus on EPI. The first step has been completion of the HFA survey that has lead to the development of a list of equipment and supplies needed to complete the cold chain. Next, MOH and CEPAC personnel will conduct a QA assessment to improve supervision, logistics, and other quality issues that were noted in the HFA survey and by the reviewer in the statement above.

- It would be good for the project to examine closely issues of access to vaccination activities. These may be more important that cultural attitudes against vaccinations. Previous vaccination campaigns may not have been held often enough. They may not have taken into consideration work schedules of migrant workers, and they do not target specifically unimmunized children (they just target children). The project should study where the population gathers for markets and other commercial activities. It may be feasible to hold outreach activities during these events.(JL)

  Response: Access to vaccination, especially campaigns is of primary concern for the project, as we agree with the reviewer that access is likely more important than cultural bias against vaccination. The first step to improving access was to work with CEPAC to complete the cost analysis of their outreach activities. The subsequent changes made by CEPAC to reach more communities with the mobile team will directly improve access to vaccination. The next step is a simplified cost analysis of the campaigns and other vaccination strategies of the MOH to evaluate their effectiveness. Once this analysis is completed, specific recommendations can be made to the MOH to improve access. It is expected that within the context of the cost analysis, recommendations can be made that improve access without increasing funding required (as was the case with the CEPAC recommendations).

7. General Nutrition- Including Vitamin A, and Micronutrients

- The goal of weighing all children under one year of age monthly (about 3000 children) seems difficult to attain. Suggested: a more feasible goal would be to follow newborns monthly for the first three months of age and then quarterly after that (FB)

Response: It is the goal of the MOH to weigh children every month. Up to now, CEPAC has been able to comply with this goal in the communities they serve because they were visiting each community on a monthly basis. Now that CEPAC is moving away from intensive visit schedules, the practical goal versus the goals set by the MOH will be modified. The project has proposed an annual weighing of a subset of children for the purposes of monitoring any improvements to nutritional status.

- The stunting data on page 34 show wt/ht deficiencies that are of famine proportions. Either the data is bad and should be dropped from the DIP or emergency measures need to be put in place immediately.(RM)

  Response: We agree that the data received for malnutrition is very suspect. This is noted in the Nutrition and Health Behaviors Survey and is the reason that weights and heights will be taken from children in the survey. Once an accurate estimate of the malnourished state of these children is available, a more clear strategy will be developed for the intervention. As stated by the consultant, if we were to believe the existing data, we would need to implement emergency measures to deal with a very critical situation.

- It is understood that the program approach to nutrition awaits the results of some of the proposed baseline studies. Nevertheless, for aspects such as the distribution of vitamin A capsules on a periodic basis, it should be possible to develop a program approach now and begin to put it into place.(RM)

  Response: Elements of all the interventions are in place and have been since the start of the project in October of 1999.

- Positive deviance is one tool that may be appropriate for the project area. IEC messages and behavioral change programs (such as Hearth) on complementary feeding (frequency, caring practices, protein and caloric content) should be added to the project as more is learned.(KL)

  Response: The outcomes of the Nutrition and Health Behaviors Survey (NHBS) will be linked to appropriate intervention strategies such as Health, TIPS and other methods, depending upon outcomes. Please refer to the NHBS proposal in Annex XII .

8. Breastfeeding Promotion

- Attaining goals of 90% of exclusive breastfeeding by mothers for the first 6 months of life, along with 90% of mothers to put the baby to the breast within 8 hours doesn't seem possible given the cultural breastfeeding norms in Bolivia.(FB)

  Response: The goals for this intervention have been reviewed and modified to make them more realistic, as recommended by the reviewer. Please see the Goals and Objectives Table, Annex XIII.

9. Control of Diarrheal Disease

- The KPC identified 90% of mothers who "knew warning signs calling for a referral for medical treatment in cases of diarrhea." It is not clear what warning signs the mothers identified. Given the high incidence of diarrhea in the project area, this intervention should have priority. In addition, IEF may want to consider partnering with institutions involved in water projects in the project area, to address root problems of diarrhea.(SE)

  Response: The project will collect data regarding what mothers know about diarrhea and to better understand where they are getting assistance and advice from (family, pharmacist, traditional healer, etc). This will be obtained from the NHB survey that will be conducted at the start of 2001. The intervention, however, has begun and plans to improve community access to education and information about diarrhea treatment and dehydration prevention are underway (increasing RPSs, increasing community coverage by CEPAC mobile teams, etc.) In order to address prevention of diarrhea, the project will submit a separate water and sanitation proposal by early 2001.

10. Pneumonia

- The indicator should be restated in terms of percentage of children that receive proper case management for pneumonia. The current indicator (re % of RPS with cotrimoxizole) is good in that it demonstrates community access to life-saving drugs. It is interesting to note that the KPC survey shows that 0% of caregivers currently seek advice from RPSs when their child has respiratory problems. Were timers chosen because there is lack of access to watches with second hands or digital watches? Will the project look at the role of RPS to follow-up to ensure treatment protocol is followed?(KL)

  Response: Several indicators were added to this intervention to address not only community access to antibiotics for pneumonia treatment, but also to address the quality of services provided by the MOH and/or the RPSs. Timers were mentioned in the first DIP, meaning any appropriate timer (watch, clock, etc.). The role of all community-based personnel taught to administer cotrimoxizole for pneumonia will be evaluated at mid-term and final HFA through observational studies in the HFA survey. In addition, both the approved clinical and community-based IMCI protocols are accompanied with follow-up evaluation procedures that will be followed as specified by the MOH.

- The referral slip has been shown to make a difference in care-seeking behaviors in the altiplano of Bolivia. The project should look at how it can strengthen a referral and counter-referral system between RPS and health centers to ensure timely care-seeking, and to ensure proper follow-up of treatment and caring behaviors back in the home.(KL)

  Response: The comments of this reviewer are welcomed, providing a specific, feasible avenue for the CS project to pursue as this intervention is developed.

- Will training for pneumonia case management include information on TB detection and referral? Since TB is common in these migrant workers, the project should have a referral plan for this. Andean Rural Health Care may still have a TB treatment program in Montero, Santa Cruz.(JL)

  Response: CEPAC has a TB program that it operates alongside the CS project. Discussion of this program was not included in the DIP because TB is not a CS intervention.

11. IMCI

- Once this district is chosen for IMCI implementation, the project may want to relook at:
  -indicators and IEC messages (esp. on care-seeking behaviors) proposed by MOH
  -training of aux. nurses and RPS in a modified algorithm
  -use of the adapted food box (in the algorithm) for IEC nutritional messages
  -a district level planning process to strengthen MOH/MOA/MOE/community/NGO interventions to synergistically (rather than complementarily) reduce mortality and morbidity and to promote child health and wellness.
  -how CEPAC can promote "caring" behaviors as part of a broadened community-IMCI vision.(KL)

  Response: The comments of this reviewer are welcomed, providing a specific, feasible avenue for the CS project to pursue as this intervention is developed.

- It would be good to contact local groups such as NUR and Plan in Bolivia to exchange ideas on how they are already working with IMCI.(JL)

  Response: It is a priority for the CS to engage with other groups in Bolivia and with other groups in Latin America that have experience in any of the CS interventions that are part of the project. A specific plan to visit these projects has been proposed in the project workplan.

12. Capacity Building

- It would be good to document improvements in decision making as capacity building indicators are met. For example, once a manual of operations is developed how did this help staff make decisions about implementation of activities at the field level?(JL)

- CEPAC identified that they need help in documenting their work. IEF should help them document problem identification, proposed solutions and actions taken based on these plans. The PROCOSI report, included with the DIP, has sections for recording this information, but CEPAC did not fill in these sections.(JL)

- CEPAC has a strong relationship with the community. The DIP does not go into details about what this means. It would be good for the project to help CEPAC develop their capacity to document how they involve communities in the implementation of activities and how communities make decisions based on CEPAC's community HIS.(JL)

  Response: In response to the three comments by the reviewer, the CS project recognizes that each of these recommendations is important and will incorporate the recommendations into the CS capacity building plans. Improvements should not only be documented, but they must be shared. Sharing experience with local and regional NGOs will be an important focus of the latter half of the project. CEPAC recognizes the need to document and reflect upon the why they have been able to mobilize communities in the area. Again, sharing this information is just as critical as documenting it.

- The baseline assessment of CEPAC's capacity was done systematically and with a competent technical assistance from MSH (it would have been nice to include it with the KPC and HFA in the appendices). IEF presents three clear areas for the development of the capacity of CEPAC, based on this assessment. This entire methodical approach to planning capacity building is a nice element in the DIP, and it should be translated more clearly in terms of objectives and indicators.(ES)

- As far as capacity-building indicators, some could be refined: a line of communication formalized in a manual, or a QA team assigned `on paper', are valuable indicators in themselves, but how could IEC and CEPAC assess how operational the QA team is, or how functional the lines of communication are in a management sense, once this formalization has taken place?(ES)

  Response: Please see new objectives and indicators for the capacity building intervention. The new objectives and indicators are in line with what is being recommended by these reviewers.

KPC BASELINE SURVEY

CHILD SURVIVAL PROJECT

FEBRUARY 2000

SANTA CRUZ DEPARTMENT HEALTH SERVICE – ICHILO DISTRICT

CENTRO DE PROMOCION AGROPECUARIA CAMPESINA (CEPAC)

INTERNATIONAL EYE FOUNDATION (IEF)

CONSULTANCY PERFORMED BY:

ANDEAN RURAL HEALTH CARE

DESCRIPTION OF THE SURVEY

BACKGROUND AND PURPOSE OF THE SURVEY: The Centro de Promoción Agropecuaria Campesina (CEPAC) is at the beginning of a Child Survival project that will be implemented througout the Ichilo District of the Bolivian Department of Health Services (SEDES). The project will be carried out in the municipalities of Yapacaní, San Carlos and Buena Vista with the technical and financial assistance of the International Eye Foundation, a United States-based NGO.

The purpose of the survey is to obtain and present information for the baseline for the Child Survival project to be executed by CEPAC, IEF, and SEDES – Ichilo. The study was designed to obtain information related to knowledge, practices and coverage n the following intervention areas: breastfeeding, nutrition, growth and development, immunizations, diarrhea case management, acute respiratory illness case management and some other aspects of nutrition and maternal health.

LOCATION OF THE SURVEY: The survey was completed through two cluster sampling surveys.

One of the surveys was completed in the municipality of Yapacaní, after obtaining a contingent sample of its rural communities and urban neighborhoods. The community details, its reference population and the location of the randomly selected clusters can be found in Annex 1.

The second survey was done by randomly selecting 30 clusters among the rural communities and urban neighborhoods in the municipalities of Buena Vista and San Carlos. The listing of these communities, their reference populations and the location of the clusters are presented in Annex 2.

This report presents the results of both surveys side by side, with indicators for each one.

POPULATION OF THE STUDY: The survey was done with mothers of children younger than two years old distributed in communities and neighborhoods selected randomly using general population statistics as a base. (see more details about the selection of the sample en the section that discussed the survey methodology). The main problem that the consultants encountered during the study was the complete absence of trustworthy data about the population of the three municipalities. The National Insititute of Statistics, the municipal governments and the District Offices of SEDES, were all consulted but could not provide us with up-to-date information. For the municipality of Yapacaní, the clusters utilized were distributed using the data presented in the Municipal Diagnostic of Yapacaní (total population: 21,538). This data was apparently taken from the results of the national census of 1992 (Annex 3).

For the municipalities of San Carlos and Buena Vista population data from the same census was used (total population:29,131) to distribute the clusters.

The supposition is that, although the total population of the municipalities had increased (see the last page of Annex 3), the distribution of it to the interior of the municipality had not varied greatly, thus implying that there was not a major effect on the selection and distribution of the clusters.

SURVEY METHODOLOGY: To complete these surveys, we used, as a base, the methodology developed by the World Health Organization to evaluate immunization coverage[1] and that was later further developed and complemented by Johns Hopkins University[2] to be applied in other programs such as Child Survial and Maternal Health.

Design of the Questionnaire: The KPC 2000[3] was used as the principal source for the design of the questionnaire. At the request of CEPAC's representative, Dr. Mabel Morales, various additional questions were incorporated, particularly concerning the knowledge of mothers. The majority of these questions were obtained from previous versions of the KPC, but had been eliminated from the 2000 version. Also incorporated were three questions about infant mortality that were used previously by Andean Rural Health Care. Finally, the interview ended with a question relating to the types of services the population had received. A copy of the questionnaire can be found in the attached Annex 4.

Also completed was a translation to Quechua, although ultimately it was used for only 10% of the interviews.

Since many mothers do not have or do not take care of the Child Health cards and other health documents, a page was added to the survey that allowed for information that exists in the health posts or centers that serve them to be added. The data collected was related to vaccinations, growth charts, vitamin A, and prenatal checkups, and was collected with the aim of having a more precise idea of the coverage rates in these intervention areas.

Selection of the Sample Population: The objective of this study is to gain an understanding of the reality in the three municipalities of Yapacani, Buena Vista and San Carlos. In consultation with the Executive Staff of CEPAC, it was determined that there could be significant differences between Yapacaní on the

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[1] WHO, Evaluate Vaccination Coverage – Training for Mid Level Managers EPI

[2] Guia del Capacitador de la Encuesta para encuestas rápidas sobre conocimientos, prácticas y coberturas de proyectos de Supervivencia Infantil de Organizaciones Privadas Voluntarias. Johns Hopkins University, Julio, 1995 (**Con Apéndices).**

[3] KPC 2000 Knowledge, Practices and Coverage Survey, revised by CSTS and CORE, Dec. 1999.

one hand and the two other municipalities on the other, but very little difference between the two others as compared to each other. Therefore, it was decided to do two surveys of 300 interviews each, one in Yapacaní and the others in San Carlos and Buena Vista.

In Yapacaní, we started with a list of **110** communities with a population distributed as noted in Annex 1. Using this list and the population figures referenced, a stariting point was selected. The total population was divided by the 30 clusters, and using this data as an interval, the location of the 30 clusters was selected.

Within the cluster, mothers were selected to be interviewed in the following manner:

1. Go to a central place in the cluster,
2. Spin a bottle to determine the direction to follow to find mothers,
3. Go to the first house and ask if there are any children under two years old, and, if so, do the interview,
4. Afterwards, go to each nearest home successively, until completing the seven to ten interviews necessary for each cluster,
5. Special Rules:
   - If there are two children under two years old for one mother in the same home, choose at random between the two
   - If there are two mothers in the same home with children under two years old, choose at random between the two mothers
   - If the geographic limit of the community or neighborhood is reached before completing at least seven interviews, one must return to the center of the cluster, spin the bottle again, and look for houses as described in points 3 and 4.

With this methodology, the following number of valid interviews were obtained:

Municipality of Yapacaní	288
Municipalities of San Carlos and Buena Vista	292

Selection and Training of Supervisors and Interviewers: To complete the survey, 16 interviewers and 8 supervisors were used to complete this survey, with one supervisor for each two interviewers. The detailed list of the participants and their respective responsibilities can be found in Annex 5.

The training of the interviewers and supervisors was completed over three days. The field tests of the interview instrument were done in the Bulo Bulo zone of the adjacent Cochabamba Department.

The training consisted of an explanation of the goals of the survey, the reason why we are doing the survey, the methodology of this type of survey, the importance of following the methodology, etc. Then a review of the instrument was done, question by question. Multiple practice interviews were completed over two days until mastery of the instrument was reached.

Data Collection: 90% of the interviews were done over the first six days. Due to bad access conditions for some communities because of the time of year, the completion of the survey in 6 clusters had to b epostponed until the following week. Despite these setbacks, data collection was concluded before the conclusion of the the transcription of the data to the computer.

Entering the Data: Once the design of the instrument was completed, the desing data-entrance program was also completed. Data trancription began on the third day of data collection, so that the collection, review of data consistency and the transcription could take place simultaneously.

Data entrance and tabulation was done with the EPI Info packet. Four persons worked with two computersm and data entrance and cleaning took about 5 days.

SURVEY RESULTS

The following is a review of the data obtained in each one of the themes covered by the surveys. The detailed tabulations can be found in annexes 6 and 7.

Ages of the mothers: The ages of the mothers, by age group, were distributed in the following manner:

Table 1

Distribution of the Ages of the Mothers

AGES OF THE MOTHERS	YAPACANI		SAN CARLOS BUENA VISTA	
Less than 15 years	1	0.3	0	0
from 15 to 19 years	47	16.3	49	16.8
from 20 to 24 years	99	34.4	101	34.6
from 25 to 29 years	67	23.3	56	19.2
from 30 to 34 years	34	11.8	45	15.4
from 35 to 39 years	23	8	30	10.3
from 40 to 44 years	12	4.2	11	3.8
from 45 to 49 years	5	1.7	0	0
	288	100	292	100.1

Note that in Yapacaní approximately 30.4% and in San Carlos/ Buena Vista 30.9% of the mothers are found to be in the age groups considered at high obstetric risk, es decir, that is younger than 19 years or older than 35.

Age and Sex of the Children: The ages and sex of the children in the interviewed homes were distributed as follows:

Table 2

Distribution by Age or Sex of the Child

AGE GROUP	SEX							
	YAPACANI				SAN CARLOS/BUNA VISTA			
	FEM.	MASC	TOTAL		FEM	MASC	TOTAL	
			No.	%			No.	%
0 – 11 months	78	88	166	57.6	73	92	165	56.5
12 – 23 months	48	74	122	42.4	55	72	127	43.5
TOTAL	126	162	288	100	128	164	292	100
Percentage	43.8	56.3	100		43.8	56.2	100	

Level of Education of the Mother: To the question: “Up to what grade did you complete?”, the answers were distrbuted in the following manner:

Table 3

Level of Education of the Mothers

	YAPACANI		SAN CARLOS / BUENA VENTURA	
	No.	%	No.	%
None	36	36	23	7.9
Primary Incomplete	146	146	150	51.4
Primary Completed	59	59	62	21.2
Secondary	42	42	46	15.8
University	5	5	11	3.7
TOTALS	288	100	292	100

If we assume that the majority of the mothers that didn’t complete primary school can read and write only a little or not at all, then approximately 63% (182/288) in Yapacaní and 59% in San Carlos/Buena Vista can be considered to be illiterate.

Child-Rearing Practices: To the question: “Do you do any activity outside the house to help yourself economically?”, it was determined that, in Yapacaní 18% (51/288), y en San Carlos/Buena Vista 31% (89/292) do perform economic activity outside the home.

Of the mothers that worked outside the home, it was determined that the tendency is, at least when their children are less than two years old, that the mothers take the children with them. In Yapacaní, 53% (27/51) and in San Carlos/Buena Vista 42% (37/89) take the child with them. The second preference is to leave the child with the older siblings: Yapacani, 33% (17/51) and San Carlos/Buena Vista, 35% (31/89). Very few mothers leave their children with a spouse, others parents, or friends.

Possession of the Child Health Card: In the home, the Child Health Card, or some other document that could verify his/her vaccination status and growth monitoring, was requested. When possible, we went to the nearby health service to review cards and other registers in order to take that information into account. This gave a more realistic idea of the child survival services coverage rate. The results were as follows:

Table 4

Possession of the Child Health Card

POSSESSION OF DOCUMENTS	YAPACANI		SAN CARLOS BUENA VISTA	
	No.	%	No.	%
Child Health Card verified in the home	186	64.6	167	57.2
Other document in the home	2	0.7	5	1.7
Child Health Card verified in nearby Health Post	19	6.6	20	6.9
Other document or register in the Health Post	1	0.3	1	0.3
They say they have it, but impossible to verify	43	14.9	49	16.8
Don't have it , don't know, or don't respond	37	12.8	50	17.1
TOTALS	288	99.9	292	100

In conclusion, in Yapacaní, approximately 71% (205/288) of the children have the Child Health Card and in San Carlos/Buena Vista 64% (187/292) have it.

Growth and Development Monitoring: Registered during the survey, copying the Child Health Card (or another creditable document), were the number of times that the children were weighed in the last four months, that is, between October 1, 1999 and January 31, 2000. If we use the children in the age group 12-23 months the analysis group, the results are as follows:

Table 5

Children from 12 to 23 months of age with at least one Growth and Monitoring event in the last four months

Municipality	%	
Yapacaní	56%	(68/122)
San Carlos/Buena Vista	43%	(55/127)

Knowledge of Mothers with regard to Growth and Development Monitoring: The mothers that had the Child Health Card in their homes and that had at least one monitoring session indicated (Yapacaní: 183, San Carlos/Buena Vista: 162) were asked to interpret the Growth and Development Monitoring graphic. The results were as follows:

Table 6

Mothers with Child Health Card in the home that can interpret the weight control graphic

Municipality	%	
Yapacaní	67%	(122/183)
San Carlos/Buena Vista	54%	(88/162)

If we observe the number of mothers that are able to interpret the graphic compared to the total of mothers in the sample, we have the following results:

Table 7

Percentage of total mothers that interpreted the weight control graphic correctly

Municipality	%	
Yapacaní	42%	(122/288)
San Carlos/Buena Vista	30%	(88/292)

Vaccination Coverage: Taking into account the data obtained from the Child Health Card in the home, other documents they had, and the data obtained from some health services, and if we take as the principal analysis for the amplified program of immunzations children from 12 to 23 months of age, we have the following results:

Table 8

Percentage of children from 12 to 23 months of age with vaccinations

Type of Vaccination	Yapacani	San Carlos/ Buena Vista
	%	%
TB	57.4 (70/122)	50.4 (64/127)
POLIO III	54.9 (67/122)	40.2 (51/127)
DPT III	53.3 (65/122)	40.2 (51/127)
MEASLES	46.7 (57/122)	38.6 (49/127)
Complete Scheme	40.2 (49/122)	25.2 (32/127)

In summation, only 40.2% in Yapacaní and 25.2% in San Carlos/Buena Vista of the children from 12 to 23 months of age have all their vaccinations.

If we take into account that the national norm for application of the measles vaccione recently has been to administer it in the 12th month of life (and not anytime after the 9th month) we can measure with coverage for this vaccine with more flexibilty. Therefore, if we group the children between 14 and 23 months we have the following results:

Table 9

Percentage of children from 14 to 23 months of age with vaccines

Type of Vaccine	Yapacani	San Carlos/ Buena Vista
	%	%
MEASLES	51.6 (47/91)	39.4 (41/104)
Complete Scheme	46.2 (42/91)	26.9 (28/104)

Knowledge of the mothers with regard to vaccinations: To measure mother's knowledge about the Amplified Programs of Immunizations, the following question was asked: "At what age must a child have all th vaccines completed?" In Yapacaní 45,5 (131/288) y en San Carlos/Buena Vista 44.2 (129/292) of mothers correctly answered the question ("between 9 and 13 months of age").

Administration of Vitamina A: The dose of Vitamin A that was registered on the Child Health Card or another document were noted. The results were as follows:

Table 10

Percentage of children from 12 to 23 months of age that were verified as receiving two doses of Vitamin A during 1999.

Municipality	%	
Yapacaní	6.6%	(8/122)
San Carlos/Buena Vista	0.8%	(1/127)

We also asked the mothers: Has “name of child” received Vitamin A, a tablet like this (showing the Vitamin A tablet) in the last six months. Accoridng to the mothers’ answers, the results were the following:

Table 11

Percentage of children from 6 to 23 months verified as having received a dose of Vitamin A during the last six months

Municipality	%	
Yapacaní	39%	(81/207)
San Carlos/Buena Vista	34%	(76/222)

Possession of the Mother’s Vaccination Card: The mother’s Tetanus vaccination cards were requested in the same way that the the Child Health Cards were. Tetanus vaccines were verified at local health posts when possible in the same way also. The consolidated results of both verifications are as follows:

Table 12

Possession of the Mother’s Vaccination Card

POSSESSION OF THE CARD	YAPACANI		SAN CARLOS / BUENA VISTA	
	No.	%	No.	%
Card verified in the home	74	25.7	66	22.6
Card verified at health post	34	11.8	42	14.4
Indicate that they have it , but impossible to verify	84	29.2	107	36,6
Don’t have or don’t know	96	33.3	77	26.4
TOTALS	288	100	292	100

In summation, it can be verified that, in Yapacaní, 37.5% (108/288) and in San Carlos/Buena Vista, 37% (108/292) of the mothers have a card or some vaccination record.

Tetanus Vaccination Coverage: In the survey instrument we registered the data from the vaccination cards of the mother or other registers that we could review. Where dates existed, we registered those. Also taken into account were those docuements where it was only registered with a tick mark. The results were as follows:

Table 13

Percentage of mothers by number of Tetanus vaccines verified

Type of Vaccination	Yapacani	San Carlos/ Buena Vista
	%	%
0 doses	64.9 (187/288)	68.8 (201/292)
1 dose	5.6 (16/288)	5.8 (17/292)
2 dose	10.8 (31/288)	14.7 (43/292)
3 dose	6.3 (18/288)	5.8 (17/292)
4 dose	4.5 (13/288)	3.4 (10/292)
5 dose	8.0 (23/288)	1.4 (4/292)

In summation, it can be verified that, in Yapacaní, 30% (85/288) and, in San Carlos/Buena Vista, 25% (74/292) of the mothers have received two or more doses of Tetanus Toxoid.

Also, it was verified in Yapacaní that 19% (55/288) and in San Carlos/ Buena Vista, 12% (36/292) of the mothers have received at least one dose of Tetanus Toxoid during the pregnancy of the child who was the object of the interview.

Knowledge of the mothers with regard to Tetanus vaccinations: Two questions were asked during the surveys with regard to the knowledge of the mothers about the Tetanus vaccine. The first was intended to measure the level of comprehension of the mother as to why the vaccine is given: " What is the principal reason why a woman, pregnant or not, must be vaccinated against tetanus?" The results were as follows: In Yapacani, 40% (116/288) and in San Carlos/Buena Vista , 42% (123/292) answered that it protected the child and the mother from tetanus.

The second question was to see if the mothers know the number of doses that are required so that the tetanus toxoid fulfills its objective: "How many vaccinations against tetanus must a woman receive before or during pregnancy to protect herself and her newborn?" In Yapacaní, 35% (101/288) and in San Carlos/Buena Vista, 31% (90/292) responded that "2 to 5" were required.

Prevalence of Breastfeeding: The survey asked the question: “Are you breastfeeding your child? The results were as follows:

Table 14

Percentage of mothers breast-feeding their child

Municipality	%	
Yapacaní	76%	(219/288)
San Carlos/Buena Vista	70%	(203/292)

In Yapacani, 1.4% (4/288) y en San Carlos/Buena Vista, 3.4% (10/292) of the mothers indicated that they never breastfed their children.

Weaning age: Of the mothers that have weaned their children, the average agea t weaning was 9 months in Yapacaní (65 children) and 11 months in San Carlos/Buena Vista .

Continuation of Breastfeeding: The percentage of children 18 to 23 months of age that continue to breastfeed is as follows:

Table 15

Percentage of children 18 to 23 months of age that continue to breastfeed

Municipality	%	
Yapacaní	38%	(21/55)
San Carlos/Buena Vista	38%	(24/64)

Iniciation of breastfeeding: The survey collected information about the amount time that passed after the birth before breastfeeding began. The results were as follows:

Table 16

Percentage of mothers that breastfed with 8 hours of birth

Municipality	%	
Yapacaní	80%	(229/288)
San Carlos/Buena Vista	64%	(187/292)

Exclusive breastfeeding: The survey collected information about breastfeeding practices and complementary feeding of the mothers. With regard to exclusive breastfeeding in children younger than six months, the results were as follows:

Table 17

Percentage of children from 0 to 6 months of age exclusively breastfeeding

Municipality	%	
Yapacaní	43%	(35/81)
San Carlos/Buena Vista	17%	(12/70)

Complementary Feeding: Various questions were asked with regard to feeding of the children. They were consulted about the consumption of the following elements:

water	other liquids
leche maternizada	other types of milk
fruit juice	
tubers	cereals
vegetable sources of vitamin A	
vegetable sources of iron	
other vegetables y fruits	
legumes	animal sources of protein and iron
animal sources of protein and calcium	
sources of calories (oil)	

The mothers were asked: “During the last seven days, how many days did you consume (giving examples of the products generally consumed locally]?” If they had consumed any of those products, they were asked: “How many times did you consume the product between yesterday and last night?” (please see question 17 in the survey in Annex 4). The most salient results are as follow:

Table 18

Percentage of breastfeeding children ages 6 to 12 months that also received some solid food between yesterday morning and last night

Municipality	%	
Yapacaní	98%	(52//53)
San Carlos/Buena Vista	85%	(55/65)

Complementing foods with oil: The survey obtained information with regard to the practice of mothers to add oil to their children's food. The results are the following:

Table 19

Percentage of mothers that indicate they have added oil to the food of their children aged 6 to 23 months within the last seven days

Municipality	%	
Yapacaní	17%	(35/207)
San Carlos/Buena Vista	29%	(64/222)

Prevalence of Diarrhea: The survey sought to estimate the prevalence of diarrhea for both municipalities. The results are the following:

Table 20

Percentage of children with diarrhea in the last two weeks

Municipality	%	
Yapacaní	42%	(120/288)
San Carlos/Buena Vista	48%	(139/292)

Breastfeeding during diarrhea: The survey inquired about the practices of mothers with regard to breastfeeding during diarrhea. Among the children that have diarrhea and still breastfeed the results are the following:

Table 21

Percentage of children that breastfeed the same amount or more when they have diarrhea

Municipality	%	
Yapacaní	93%	(76/82)
San Carlos/Buena Vista	91%	(89/98)

Use of liquids during the diarrhea: The survey inquired about the practices of mothers with regard to the use of liquids (not including mother's milk) during episodes of diarrhea. Among the children that have diarrhea and that are not breastfeeding exclusively, the results are as follows:

Table 22

Percentage of children that receive the same amount or more of other liquids when they have diarrhea

Municipality	%	
Yapacaní	86%	(83/96)
San Carlos/Buena Vista	89%	(101/113)

Continuity of feeding during diarrhea: The survey inquired about the practices of mothers with regard to the continuation of giving solid foods during episodes of diarrhea. Among the children that had diarrhea and were not breastfeeding exclusively, the results were as follows:

Table 23

Percentage of children that receive more food than normal or an equal amount when they have diarrhea

Municipality	%	
Yapacaní	86%	(83/96)
San Carlos/Buena Vista	89%	(101/113)

Treatment during Diarrhea: The mothers with children who had diarreha in the the last weeks were asked, “How did you treat your child for the diarrhea?”

Table 24
Percentage of children that were treated with medication when they had diarrhea

Municipality	%	
Yapacaní	37%	(44/120)
San Carlos/Buena Vista	40%	(55/139)

Table 25
Percentage of children that were treated with Oral Rehydration Fluid (ORF) (from a packet or homemade) when they had diarrhea

Municipality	%	
Yapacaní	27%	(32/120)
San Carlos/Buena Vista	17%	(23/139)

Table 26

Percentage of children that were treated with coca teas or other types of teas when they had diarrhea

Municipality	%	
Yapacaní	48%	(58/120)
San Carlos/Buena Vista	37%	(51/139)

Help sought for diarrhea: For mothers with children who had diarrhea in the last two week, the survey also investigated whether the mother sought help and from whom. The results were as follows:

Table 27

Percentage of mothers that sought help for their children who had diarrhea

Municipality	%	
Yapacaní	51%	(61/120)
San Carlos/Buena Vista	54%	(75/139)

With regard to whom the mothers prefer to go to for help when their children have diarrhea, it can be established that, **among the more than 50% of the mothers who do seek help**, the preferences are as follows:

Table 28

Preferences of the mothers in their search for help with cases of diarrhea*

Type of Assistance Preferred	Yapacaní	San Carlos/ Buena Vista
	%	%
Hospital	36 (22/61)	31 (23/75)
Health Post	16 (10/61)	13 (10/75)
Pharmacy	15 (9/61)	17(13/75)
Community Health Promoter (RPS)	0	1 (1/75)
Parents/Friends	38 (23/61)	43 (32/75)

*More than one answer possible to this question

Knowledge of the mothers about the signs of dehydration: With the goal of estimating knowledge with regard to the danger signs of diarrhea, the following

question was included for all mothers: "If (name of child) had diarrhea, how could you tell if it was serious enough to seek advice or help?" The results were as follows:

Table 29

Percentage of mothers that mentioned specific danger signs in diarrhea cases that indicated they should seek help (Principal symptoms mentioned)

Danger signs mentioned	Yapacaní	San Carlos/ Buena Vista
	%	%
Vomiting	11 (31/288)	9 (26/292)
Fever	24 (68/288)	23 (67/292)
Dehydration**	29 (84/288)	25(73/292)
Prolonged Diarrhea***	51 (146/288)	50 (147/292)
Child won't eat	27 (77/288)	31 (90/292)
Weak or lethargic	36 (104/288)	43 (127/292)

** Dry mouth, sunken eyes, Sunken fontanelle, urinating very little
*** Diarrhea for more than 14 days

Knowledge and use of Oral Rehydration Fluid (ORF): A series of four questions were asked with the object to observe the level of knowledge about and use of ORF, as follows:

- Have you ever heard of ORF or homemade rehydration fluid?
- Do you know what ORF/homemade rehydration fluid is used for?
- Have you ever used ORF/homemade rehydration fluid?
- Do you know how to prepare ORF/homemade rehydration fluid? If the answer was yes, she was asked to explain how to prepare it. Correct answers: a) 1 liter of water with a packet of ORF; b) one liter of water , 8 teaspoons of sugar and one teaspoon of salt; or c) one liter of water, 4 tablespoons of sugar and one teaspoon of salt.

The answers are as follows:

Table 30

Percentage of mothers (from the enter sample) that have heard of, used, and know how to prepare ORF/Homemade rehydration fluid

Question	Yapacaní	San Carlos/ Buena Vista
	%	%
Have you heard of it? Yes	78 (225/288)	82 (239/292)
Do you know what it is used for? Yes	75 (209/288)	75 (219/292)
Have you ever used it? Yes	57 (165/288)	59 (173/292)
¿Do you know how to prepare it? Yes	67 (194/288)	63 (184/292)

Prevalence of acute respiratory infections: The survey attempted to estimated the prevalence of acute respiratory infections during the previous two weeks. To the question, "Has (name of child) been sick with a cough or cold en the last two weeks?", the following answers were obtained:

Table 31

Percentage of children with a cough or cold in the last two weeks

Municipality	**%**	
Yapacaní	35%	(102/288)
San Carlos/Buena Vista	40%	(118/292)

In order to estimate the prevalence of pneumonia, the mothers who answered affirmatively to the previous question were asked: "Has (name of child) had rapid, difficult or agitated breathing, when he/she had a cough or cold?"

Table 32

Percentage of the total children with cough or cold that also had difficulty breathing during the last two weeks

Municipality	**%**	
Yapacaní	12%	(34/288)
San Carlos/Buena Vista	15%	(44/292)

Seeking help for a bad cough and respiratory difficulties: The mothers with children who had cough or difficulty breathing during the last wo weeks were asked: “Did you ask for advice or help for (name of child) when he/she was sick with cough or respiratory difficulties?” The answers were the following:

Table 33

Percentage of mothers that sought help for the child when he/she had difficulty breathing during the last two weeks (principal answers)*

Source of help	Yapacaní	San Carlos/ Buena Vista
	%	%
Hospital	35 (12/34)	20 (9/44)
Health Post	6 (2/34)	20 (9/44)
Parents or Friends	18 (6/34)	14 (6/44)
Community Health Promoter	0	0
CEPAC	3 (1/34)	7 (3/44)

*More than one answer possible to the question

Possession of the Maternal Health Card: Besides verifying the possession of the mother’s vaccination card, the survey also sought to verify the possession fo the Maternal Health Card relating the pre-natal monitoring of the pregnancy of the subject child. The results were as follows:

Table 34

Possession of the Maternal Health Card

POSSESSION OF THE CARD	**YAPACANI**		**SAN CARLOS / BUENA VISTA**	
	No.	%	No.	%
Card verified in the home	52	18.0	33	11.3
Regististration verified in the Health Service	31	10.8	43	14.7
Indicates that they have it, but impossible to verify	102	35.4	107	36.6
Don’t have it or don’t know	103	35.8	109	37.3
TOTALS	288	100	292	100

Prenatal Monitoring: While verifying the presence of the Maternal Health Card, whether in the home or in the health post, the number of prenatal control visits that the card showed was noted. The results were as follows:

Table 35

Percentage of the total of mothers that had at least one prenatal control visit during the pregnancy of the child who is the subject of the interview

Municipality	**%**	
Yapacaní	22%	(62/288)
San Carlos/Buena Vista	16%	(46/292)

Table 36

Percentage of mothers by number of registered prenatal controls

Number of prenatal controls	Yapacaní	San Carlos/ Buena Vista
	%	%
1	6.5 (4/62)	15.2 (7/46)
2	17.7 (11/62)	26.1 (12/46)
3	37.1 (23/62)	23.9 (11/46)
4	16.1 (10/62)	13.0 (6/46)
5	4.8 (3/62)	8.7 (4/46)
6	14.5 (9/62)	6.5 (3/46)
7	1.6 (1/62)	4.3 (2/46)
8	1.6 (1/62)	2.2 (1/46)

Administration of Iron: Mothers were asked: "When you were pregnant with this child, did you receive or buy iron tablets like these (tablets shown) During the review of the Maternal Health Cards, we took the opportunity to verify the registry of the administration of iron. The results are as follows:

Table 37

Percentage of mothers that indicated that they received iron during the pregnancy of the child participating in the study

ADMINISTRATION OF IRON	YAPACANI		SAN CARLOS / BUENA VISTA	
	No.	%	No.	%
Verified by the Health Card in the home	45	16	37	13
Indicates that they have received it , but impossible to verify	155	54	180	62
Have never received it, don't respond, or don't know	102	30	75	25
TOTALS	288	100	292	100

Distribution and use of the Hygienic Birth Packet: The mother was asked if she had received a hygienic home birth packet while she was pregnant with the subject child. The results were the following:

Table 38

Percentage of the total of mothers that received a hygienic birth packet before the birth of the subject child

Municipality	%	
Yapacaní	6%	(17/288)
San Carlos/Buena Vista	0	0

To summarize, hygienic birth packets were only distributed in Yapacaní. Only 6% of the families in Yapacaní received the packets. Of the 17 families that received them, 885 (15) used them.

Attendant at birth: To aproximate the knowledge about the practices of mothers with relation to birht attendants, the foolwoing questions were asked: "¿Who attended the birth and who cut the umbilical cord?" The results were as follows:

Table 39

Percentage of mothers by the person who attended the birth of the subject child

Person that attended the birth	Yapacaní	San Carlos/ Buena Vista
	%	%
Herself alone	1% (3/288)	1% (2/292)
Husband	16% (46/288)	15% (45/292)
Female family member	7% (21/288)	7% (21/292)
Male family member	1% (3/288)	2% (5/292)
Midwife	4% (12/288)	4.5% (13/292)
MOH area health personnel	45% (130/288)	50% (146/292)
Other health personnel	13% (38/288)	11% (31/292)
Other	12% (35/288)	10% (28/292)

Post-birth administration of Vitamin A to the mother: Each mother was asked if she had received a dose of Vitamin A within 30 days after the birth. The results are the following:

Table 40

Percentage of the total of mothers that received a dose of Vitamin A within 30 days of the birth

Municipality	**%**	
Yapacaní	19%	(54/288)
San Carlos/Buena Vista	22%	(64/292)

We tried to verify the answers through the registers. In Yapacaní, we could only verify two cases and in San Carlos/Buena Vista 5 cases.

Child Mortality: CEPAC asked that data about child mortality be included in the survey, so the following sequence of questions was asked:

- How many children do you have (including those that live somewhere else as well as the subject child?
- How many of your children have died?
- How old were they when they died?

- How many times did you have a miscarriage or was your baby still-born?

The results are the following:

Table 41

Percentage of mothers by number of still-born or miscarried children

Number of stillborn or miscarried children	Yapacaní	San Carlos/ Buena Vista
	%	%
1	26% (74/288)	18% (54/292)
2	6% (18/288)	8% (24/292)
3	2% (6/288)	1% (4/292)
4	1% (4/288)	1% (3/292)
5	0	1% (2/292)
6	0	0.3% (1/292)
7	0	0.3% (1/292)

Table 42

Percentage of mothers that have lost at least one child or had at least one miscarriage

Municipality	**%**	
Yapacaní	35%	(102/288)
San Carlos/Buena Vista	30%	(89/292)

Table 43

Percentage of mothers that have lost two or more children by death or miscarriage

Municipality	**%**	
Yapacaní	10%	(28/288)
San Carlos/Buena Vista	12%	(35/292)

Drinking water source: The survey collected information with regard to the sources of drinking water for the various families. The results were as follows:

Table 44

Percentage of families in the survey by principal source of drinking water

Source of Water	Yapacaní	San Carlos/ Buena Vista
	%	%
Piped into the house	9% (25/288)	9% (25/292)
Piped into the patio	44% (127/288)	47% (137/292)
Public water area (large communal cement water container)	3% (9/288)	4% (11/292)
Brick well in patio	2% (6/288)	5% (16/292)
Public brick well	2% (5/288)	3% (10/292)
Closed brick well in patio	2% (5/288)	0.3% (1/292)
Manual pump	13% (36/288)	13% (37/292)
Protected deep well in patio	17% (48/288)	6% (17/292)
Communal, protected deep well	3.5% (10/288)	3% (8/292)
Spring	3% (9/288)	3% (9/292)
River, lake or curichi	2% (7/288)	4% (11/292)
Others	0.3% (1/288)	3% (10/292)

Type of bathroom used by the family: The survey also collected information about the type of mechanism used by the families for the elimination of human waste. The results were as follows:

Table 45

Percentage of families by mechanism of elimination of human waste

System of elimination	Yapacaní	San Carlos/ Buena Vista
	%	%
Flush Toilet	9% (27/288)	10% (29/292)
Traditional Latrine	74% (214/288)	70% (203/292)
Improved Latrine	3,5% (10/288)	4% (12/292)
None	11% (31/288)	16% (28/292)
Other	2% (6/288)	0

Type of services received: Only 4% in Yapacaní and 6% in San Carlos and Buena Vista do not receive any service from health personnel of the zone. The different services were utilized according to the following percentages:

Table 46

Percentage of mothers by type of service received by the family*

Preferred Assistance	Yapacaní	San Carlos/ Buena Vista
	%	%
Consultation in community health post	22% (63/288)	33% (97/292)
Consultation in a Hospital or in the medical center of CEPAC	59% (170/288)	39 (115/292)
Consultation by health personnel in the home	2% (7/288)	7% (20/292)
Consultation un mobile health unit of CEPAC or in a hospital	12% (35/288)	2% (5/292)
Weight, height or vaccination	70% (201/288)	46% (133/292)
Consultation with community health promoter (RPS)	4% (11/288)	1% (3/292)

* More than one answer possible to the question

Language of the interviews: Because the municipalities that are the object of this study are zones of colonization, with many inhabitants that migrated from the inter-Andean valleys and the altiplano, the survey was prepared so that it could also be applied in Quechua.

Table 47

Percentage of the interviews by language in which they were done

Language	Yapacaní	San Carlos/ Buena Vista
	%	%
Spanish	87.5% (252/288)	90.4% (264/292)
Quechua	10.8% (31/288)	7.5% (22/292)
Both	1.7% (5/288)	2.1% (6/292)

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INDEX OF ANNEXES

IEF/CEPAC CHILD SURVIVAL PROJECT

ASSESSMENT OF ICHILO HEALTH FACILITIES

Survey Team:

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8 CEPAC health professionals (MDs, RNs, and technicians)

March (16 facilities) and June (8 facilities) 2000

TABLE OF CONTENTS **PAGE**

1. EXECUTIVE SUMMARY

A partnership of the International Eye Foundation (IEF) and the Centro de Promoción Agropecuaria Campesina (CEPAC) has been established to implement a high quality and highly sustainable child survival (CS) program. The partnership strategically matches the strengths of a highly technical PVO with over 10 years CS experience with a community based local NGO that has strong ties and an excellent reputation within Bolivia. The partnership brings effective and responsive health programming for child survival to the Province of Ichilo, Bolivia.

The goal of the project is to improve the sustainable delivery of child survival interventions. The partership will achieve this goal by:

- improving the managerial capacity of CEPAC
- improving coverage and quality of individual indicators

The project has clearly defined interventions, quality, managerial capacity and sustainability indicators that will monitor the progress of the CS project.
IEF is working with CEPAC to implement the most cost-effective strategies for the program, educating CEPAC about strategies that have been used by IEF and other NGO/PVOs. CEPAC has a strong relationship with the Bolivian MOH, and their health personnel in the area are well-integrated into the project.

The sampling frame for this survey comprised of all the health facilities in province of Ichilo, except for the an expensive private hospital that serves a Japanese community in San Carlos. One part of the survey, the health worker interview, measured health worker knowledge and some practices. The other part was an inventory survey that measured infrastructure, equipment, and supplies. There were a total of 24 health facilities surveyed.

Health workers' knowledge was found to be generally quite high. This is understandable considering their involvement in various workshops and trainings, many of them hosted by NGOs working in the area, particularly CEPAC.

The level of equipment and supplies was very poor. The area cold chain is in need of significant repair. In facilities that do have refrigerators, vaccine supplies are low or non-existent. Facilities do not have specific ORT corners. Most facilities were lacking in at least one essential medication, and some were lacking in many.

Supervision of health workers was also poor. Auxiliary nurses reported low frequency of receiving supervision from superiors and performing supervision of community health workers in their charge. It was also reported that when supervision occurred it was not perceived to be very effective.

IEF and CEPAC believe that child survival health services in the project area can be improved by establishing a sustainable supply of medications and vaccinations, repairing and implementing a maintenance plan for the cold chain, and developing and implementing a more effective supervision plan. The Bolivian MOH has concurred

with these results, and is working with this project towards those goals. It should be noted that the Belgian Technical Cooperation is also working towards these goals, in full cooperation and coordination with the MOH, CEPAC, and IEF.

2. Introduction

The child survival project in the municipalities of Yapacaní, San Carlos, and Buena Vista, Ichilo Province, Bolivia, is being implemented by the International Eye Foundation (IEF) and Centro de Promoción Agropecuaria Campesina (CEPAC). The total population of the area includes 62,153 people living in 210 different communities. The project will reach over 24,000 women of fertile age and children under 5 in Ichilo. Ichilo is poor, rural and characterized by a under 5 mortality rate of 104 per 1000.

Ichilo area data on immunization coverage is available to us from the KPC survey conducted by Andean Rural Health in February 2000 as part of this project. Only 40.2% in Yapacaní and 25.2% in San Carlos/Buena Vista of the children from 12 to 23 months of age have all their vaccinations. The following table shows the low level of coverage for each vaccine:

Type of Vaccination	Yapacani	San Carlos/ Buena Vista
	%	%
TB	57.4	50.4
POLIO III	54.9	40.2
DPT III	53.3	40.2
MEASLES	46.7	38.6
Complete Scheme	40.2	25.2

The level of malnutrition in Ichilo is also quite high. The MOH reports in 1998, that 1231 of 2952 (41.7%) children under the age of two in the province are moderately malnourished or worse based on weight for height. Other data from 1999, also obtained from the MOH shows similar, although slightly better measures of malnutrition.

	Ichilo Province	Dept. of Santa Cruz	National
Malnutrition (wt/age)	34%	24%	8%
Malnutrition (ht/age)	55%	22%	27%
Malnutrition (wt/ht)	15%	10%	1%

Iron and VA deficiency are severe problems in the project area. National data reports that about 50% of women have iron deficiency anemia. Oral reports from CEPAC based on their mobile outreach activities suggest that this figure is greater than 90% in rural areas in the province, and only slightly lower in urban areas. CEPAC reported 100% of pregnant women in their target communities received iron tablets, but the data is not distinguishable between pre and post-natal supplementation nor is there information on compliance. Nightblindness has been reported in the area, a strong indication that there is a severe VA problem although no national or provincial data exists. According to the KPC, about 63% of children less than two years old had eaten a VA rich food in it in the last 7 days in SC/BV and Yapacani. Only about 20% of

children under two had received a VA capaule in the six months prior to the KPC survey.

Diarrhea is also a significant threat to children in the area. According to the KPC survey, 41% of under two year olds had had an episode of diarrhea in the two weeks preceding the survey in Yapacani and 47% in SC/BV, 47%. The MOH estimates that the average child under 5 in the district has three cases of diarrhea per year, or approximately 22,992 cases per year in the district.

There are currently 24 health posts/centers in the entire project area. Travel times to the centers can range from 10 minutes to a day's travel (in dry season) by foot or public transport. The available health infrastructure might be adequate for the region, were it fully equipped.

The goal of the project is to improve the sustainable delivery of child survival interventions. The partership will achieve this goal by:

- improving the managerial capacity of CEPAC
- improving coverage and quality of individual indicators

The project has clearly defined interventions, quality, managerial capacity and sustainability indicators that will monitor the progress of the CS project.
IEF is working with CEPAC to implement the most cost-effective strategies for the program, educating CEPAC about strategies that have been used by IEF and other NGO/PVOs. CEPAC has a strong relationship with the Bolivian MOH, and their health personnel in the area are well-integrated into the project.

3. Objectives of the Survey

The objectives of this survey were to:

determine the level of:

- Current knowledge of health workers regarding the assessment and management of sick children
- Adequacy of training and supervision of health workers
- Adequacy of facilities, and
- Barriers against effective implementation of child health services.

and provide information to:

- Prioritize and plan improvements in patient health facilities at all levels, including clinic organization, equipment requirements, drug and material supplies and communications
- Develop a strategy for supervising and monitoring health workers, and
- Improve child health service

4. Methodology

The sampling frame for the survey was comprised of all health facilities in Ichilo, except for a private, relatively expensive hospital that serves the Japanese community in San Carlos. The survey instruments were designed to obtain information on key aspects of the knowledge of health workers and availability of materials and supplies at the health facilities.

Two survey instruments were used at each health facility. The first was the Health Worker Interview, which was used to gather information regarding knowledge of the health workers. The second was the Equipment and Supplies Inventory, which was used to gather information regarding material obstacles to proper health care.

Field work was conducted by four teams (each performed interviews at six facilities). Each team was comprised of a supervisor (an MD) and a surveyor (a nurse or health technician). At each health facility, the supervisor was responsible for introducing the team and explaining the purpose of the visit. The surveyor then conducted both interviews, with the supervisor present to correct any mistakes. At the end of the day, the supervisor reviewed for completeness and accuracy.

Training of survey teams was conducted for half a day. Training included a review of survey methodology and objectives, conduct of the field activities and careful review of the survey instruments.

5. Overview of Key Results

With regard to the Equipment and Supplies Inventory, it was found that:

- 41% of facilities had no potable water
- 25% had no functioning public restroom
- 87.5% had no specific ORT area
- 12.5% had a functioning vehicle (other than a motorcycle)
- 54.2% did not have an otoscope
- Very inexpensive supplies such as cups, spoons, and tongue depressors were in short supply
- Only 58.3% had a functioning refrigerator, and 5 of those had flaws that will necessitate replacement.
- Availability of vaccinations was 21.8% for tuberculosis, 41.7% for polio, 41.7% for DPT, 29.2% for measles, and 41.7% for tetanus toxoid.
- 33.3% of facilities did not have a vaccination registry.
- There were numerous stockouts of vital medicines, vitamin A and health cards (see attached results for full table)
- 70.8% did not have a Kardex for medications
- 58.3% cited “financial problems” as a reason for not having medications
- 33.3% did not have the proper forms to fill out for illnesses that require obligatory notification
- 83.3% said they had ran out of some supply in the last month

With regard to the Health Worker Interview, it was found that:

- There is generally excellent availability of services at the facility, with many health workers willing to attend patients around the clock
- The absence of the presence of National Standards of Service/Case Management was particularly high for Immunizations (72.2%), Vitamin A (55.9%), Growth and Development (62.5%), Diarrhea (46.8%), and ARIs (46.8%).
- The average number of supervisory visits by supervisors of interviewees was once every three months
- 33.3% did not have a schedule of visits from their supervisor, while of those who were supervisors only 41.2% had a schedule of the visits they make to their supervisees
- The median number of visits made by interviewees was once every three months
- Only 55.9% of supervisors checked the cold chain when they visited
- Only 15% of supervisors observed management of sick children when they visited
- Only 50% reviewed clinic histories
- Only 50% reviewed the Kardex
- Only 65% received feedback from their supervisory session
- 84.6% of feedback was not written
- Top obstacles for interviewees in doing their jobs were lack of supplies and/or stock (50%), inadequate transport (33.3%), poor work environments (building, infrastructure, offices) (29.2%), and staff shortages (29.2%)
- 62.5% had received child-related health training in the last six months
- Vaccination and Vitamin A knowledge was very high
- Knowledge of ARIs was also high
- Growth and Development, Nutrition, and case referral knowledge was also high

6. Conclusion, and Recommendation

The only result of this survey that can be considered as indicative of a strength of the Ichilo health system is the level of knowledge that health workers displayed regarding treatment of ill children.

The HFA shows that the major weaknesses of the system are poor equipment, lack of supplies, and infrequent and ineffective supervision. The following table lists the weaknesses of the system as shown by this HFA, and the planned CS project response to them.

Weakness	**Response**
Low supervision frequency and poor procedures/skills/commitment	Development, implementation and follow-up of supervision plan with proper procedures, with cooperation of MOH and Belgian Technical Cooperation
Cold chain in disrepair	Complete repair of cold chain, followed by development and implementation of supervision and maintenance

	plan
Poor maintenance of vaccination registrations and medication Kardexes	Development and implementation of a plan to standardize vaccination and medication registries, and train health workers how to use them.
Lack of potable water	Development of a water/sanitation proposal that will be submitted to donors so that communities can build water systems that draw on clean sources.
Poor supply of vaccinations	It has been determined that there is a sufficient supply of vaccination at the departmental level, but that there are numerous bottlenecks that prevent their efficient distribution to their ultimate destinations. There is a plan to revise the system of distribution that will result in a better supply at the field level.
Poor supply of medications	The major obstacle here is a lack of financing. It has been determined that the various municipalities are not properly distributing the funding they receive from the government for medications. The MOH, Belgian Technical Cooperation, and IEF/CEPAC have agreed to work together to solve this problem with the municipalities.

EQUIPMENT AND SUPPLIES INVENTORY

Institution Name:	Ministry of Health - CEPAC	
Department:	Santa Cruz	
Province:	Ichilo/Sara	
Municipality:	San Carlos	[8 – 33.3%]
	Buena Vista	[8 – 33.3%]
	Yapacani	[8 – 33.3%]
District:	Ichilo	
Health Area:	Ichilo	
Type of Health Facility:	Post	[15 – 62.5%]
	Center	[5 – 20.8%]
	Hospital	[4 – 14.2%]

Name and Site of the Interviewed Personnel:

Ilse Yabeta Arnez	Palacios – Buena Vista
Filomeno Martinez Serrudo	Moiler Condor – Yapacaní
Norma Arce Trujillo	Espejitos – Buena Vista
Silvestre Sejas Ochali	Puerto Greter – Yapacaní
Inocencio Tejerina Espinosa	Villa Diego – Buena Vista
Domingo Claudio Villegas	Ayacucho – San Carlos
Esperanza A. Estevez Madrano	Enconada – San Carlos
Maria Luisa Ramos Patzi	Caranda – Buena Vista
Ruth Cayo	Puerto Palos - Yapacaní
Primitiva Calderon Hermocilla	Nuevo Horizonte- Yapacaní
Fanny Apata	Yapacaní - Yapacaní
Silvestre Sejas Ochali	San Rafael – Yapacaní
Luis Rocha	El Palmar – Yapacaní
Julian Llenes Coronado	San German – Yapacaní
Lidia Orellana	Buena Vista – Buena Vista
Eusebia Cabero	San Miguel – Buena Vista
Sixta Olarte de Poniguona	Huaytu - Buena Vista
Sonia Pedroza	Arboleda- Buena Vista
Mirtha Pantoja Zabala	Buen Retiro - San Carlos
Mary Mejia y Rosamari Samacuri	San Carlos - San Carlos
Claudina Rojas y Dr. Juan Ricaldis	Antofagasta - San Carlos
Mercedes Garcia Malgar	San Juan - San Carlos
Wilma Angulo	Santa Fe - San Carlos
Amalia Tejerina	El Jochi - San Carlos

Type of Health Worker Interviewed:	Doctor	[2 – 7.7%]
	Auxiliary Nurse	[22 – 84.6%]
	Nurse	[2 – 7.7%]

(In two cases there were two people interviewed)

Number of health personnel with responsibilities in preventive and curative management of children:

Category	Assigned to Facility	Present Day of Evaluation
Doctor	**15(62.5%): None assigned** **6(25.0%): 1** **1 (4.2%): 3** **1 (4.2%): 4** **1 (4.2%): 5**	**2 of 18 total (11.1%)**
Nurse	**20 (83.3%): None assigned** **3 (12.5%): 1** **1 (4.2%): 2**	**2 of 5 total (40.0%)**
Auxiliary Nurse	**21 (87.5%): 1 assigned** **2 (8.3%): 4** **1 (4.2%): 10**	**23 of 39 total (59.0%)**
Community Health Promoter	**14 (58.3%): 0 assigned** **2 (8.3%): 1** **3 (12.5%): 2** **1 (4.2%): 4** **1 (4.2%): 5** **1 (4.2%): 6** **1 (4.2%): 7** **1 (4.2%): 9**	**0 of 10 (0%)**

Facilities for patients and personnel

1. Is there adequate seating for patients?…….. .....Yes [22 - 93.8%] No [2 – 4.2%]

2. Is there potable water? .....Yes [14 – 58.3%] No [10 – 41.7%]

3. Is there a functioning bathroom or public latrine?……..... Yes [18 – 75.0%] No [6 – 25.0%]

4. Are there posters with health information present? …… . .....Yes [19 – 79.2%] No [5 – 21.8%]

Percentages below of total # of facilities (24)
Nutrition**:** number in Spanish: 15 (62.5%) had 1; in Quechua: None (0%)
Pneumonia: number in Spanish: 9 (37.5%) had 1; in Quechua: None (0%)
Vitamin A: number in Spanish: 5 (20.8%) had 1; in Quechua: None (0%)
Immunizations: number in Spanish: 1 (4.2%) had 2, 12 (50.0%) had 1; in Quechua: None (0%)
Breastfeeding: number in Spanish: 1 (4.2%) had 2, 7 (29.2%) had 1; in Quechua: None (0%)

5. Is there an area specifically for oral rehydration?.....Yes [3 – 12.5%] No [21 – 87.5%]

Equipment and Supplies

Do the following equipment and supplies exist in the facility?

6. Transportation

Vehicle…Yes [3 – 12.5%] No [21 – 87.5%]
If yes, is it functioning well?…Yes [3 –100%] No [0 – 0%]
Number: 1 facility (4.2%) had 3 vehicles

Motorcycle… Yes [19 – 79.2%] No [5 – 20.8%]
If yes, is it functioning well? Yes [14 – 73.7%]No [5–24.2%]
Number: 18 facilities (94.7%) had 1, 1 facility (5.3%) had 2

Bicycle…Yes [7 – 29.2%] No [17 – 70.8%]
If yes, is it functioning well? Yes [2 – 28.6%] No [5 – 71.4%]
Number: [6 - 75%] had one, [1 – 14.3% had two]

7. Equipment for social mobilization/campaigns

Megaphone…Yes [9 – 37.5%] No [15 – 62.5%]
If yes, is it in good condition?…Yes [9 - 100%] No [0%]
Number: (100%) had 1

Educational Flipcharts…Yes [18 – 75.0%] No [6 – 25.0%]
If yes, is it in good condition? Yes [17 – 94.4%] No [1 – 5.6%]
Number: 18.2% had 1, 9.1% had 2, 45.5% had 3, 9.1% had 4, 18.2% had 5

Pamphlets..Yes [3 - 12.5%] No [21 – 87.5%]
If yes, is it in good condition?…Yes [3 - 100%] No [0%]
Number: 1 (33%) had 5, 1 (33%) had 6, 1 (33%) did not answer

8. Weighing Equipment

Adult Scale …Yes [23 - 95.8%] No[1 – 4.2%]
If yes, is it in good condition?…Yes [18 - 78.3%] No [5 - 35.7%]
Number: 11 (47.8%) had 1, 10 (43.5) had 2, 1 (4.3%) had 3, 1 (4.3%) had 4

Baby Scale ...Yes[20 - 83.3%] No[4 – 16.7%]
If yes, is it in good condition?...Yes [13.5 - 67.5%] No [6.5 – 32.5%]
Number: 12 (75%) had 1, 3 (18.8%) had 2, 7.1 (6.2%) had 3, 4 did not answer

Hanging Scale/Watch..Yes [22 – 91.2%] No [2 – 8.8%]
If yes, is it in good condition? Yes [20 – 90.9%] No [1 – 4.5%] No Answer [4.5%]
Number: 14 (63.6%) had 1, 5 (22.7%) had 2, 3 (13.6%) did not respond

Medical Equipment

9. Thermometers ...Yes [22 – 91.7%] No [2 - 8.3%]
If yes, is it in good condition?…Yes [22 - 100%]
Number: 6 (27.3%) had 1, 5 (22.7%) had 2, 5 (22.7%) had 3, 2 (9.1%) had 4, 3 (13.6%) had 5, 1 (4.5%) had 6

10. Stethescope…Yes [24 - 100%] No [0 - 0%]
If yes, is it in good condition?…Yes [22 – 95.7%] No [1 - 4.2%] No answer [1 - 4.2%]
Number: 25% had 1, 37.5% had 2, 18.8% had 3, 4.2% had 4, 12.5% had 5

11. Otoscope...Yes [11 – 45.8%] No [13 – 54.2%]
If yes, is it in good condition?…Yes [10 - 90.9%] No [0%] No answer [9.1%]
Number: 9 (81.8%) had 1, 1 (9.1%) had 3, 1 (9.1%) did not answer

12. Tongue Depressors ...Yes [18 – 75.0%] No [6 – 25.0%]

13. Watch w/ second hand .Yes [19 – 79.2%] No [5 – 20.8%]
Number: 11 (57.9%) had 1, 4 (21.1%) had 2, 2 (10.5%) had 3, 1 (5.3%) had 4, 1 (5.3%) had 5

14. Measuring utensils of 1 liter and mixture ...Yes [9 – 37.5%] No [14 – 58.3%] No answer [1 – 4.2]

15. Cups and spoons ...Yes [8 – 33.3%] No [16 – 66.7%]

16. Refrigerator for vaccinations…Yes [18 – 75.0%] No [6 – 25.0%] If **NO**, please go to question 21
Number: 17 (94.4%) had 1, 1 (5.6%) had 2

17 a. Functioning? .....Yes [14 – 77.8%] No [4 – 22.2%]
(includes three that are functional, but not used because of a lack of gas, and one that is only used part-time because of lack of gas
b. Internal Thermometer..(of all 18 that had refrigerators) Yes [14 - 77.8%] No [4 - 22.2%]

Current Temperature: 1 was 2C, 1 was 3C, 2 were 4C, 1 was 5C, and 1 was 10C (there were only six responses)

c. Temperature control knob? (of the 14 functional) Yes [8 - 57.1%] No [6 – 42.9%]

18. In the last 30 days: the temperature is registered and updated (of the ten that function all the time).... Yes [5 - 50.0%] No [5 - 50.0%]

(If there is more than one refrigerator, indicate the temperatures for each one)
Temperature higher than 8 C. 1 for 19 days (number of days)
Temperature lower than 8 C. 4 for 4, 11,14, and 20 days respectively (number of days)

	Vaccinations	**Available**	**Expired**
19.	**BCG**	Yes [5 - 21.8%] No [19 – 79.2%]	Yes [0%] No [100%]
20.	Polio	Yes [10 – 41.7%] No [14 – 58.3%]	Yes [1 – 10.0%] No [9 – 90.0%]
21.	DPT	Yes [10 – 41.7%] No [14 – 58.3%]	Yes [1 - 10.0%] No [9 – 90.0%]
22.	Measles	Yes [7 – 29.2%] No [17 – 70.8%]	Yes [0%] No [100%]
23.	Tetanus Toxoid	Yes [10 – 41.7%] No [14 - 58.3%]	Yes [0%] No [100%]

24. Are there vials of DPT or TT congealed in the refrigerator? .....Yes [0%] No [100%]

25. Is there a vaccination register?.....Yes [16 - 66.7%] No[8 – 33.3%]
If the answer is yes, is it updated?…….....Yes [16 - 100%] No[0%]

26. Are there graphics of vaccination coverage?.....Yes[16 - 66.7%] No[8 – 33.3%]

27. Availability of Medications and Consumables (on the day of the evaluation)

Availability of Medications and other Supplies

(on the days of the evaluation, March 11(16 interviews - **Phase I**) & June 20, 2000 (8 interviews - **Ph**

Product	**% with any/median amt. of those with >0**	**Last day in stock (if none in stock)***	**Maximum Sale Pri (Avg. includes fre**
Acetaminophen (100mg tabs.)	16 - 66.7% - 150	4 never, 2/00, 1/00 (I); 1 never, 5/00 (II)	0.43
Acetaminophen (120mg/ 5 ml. serum)	11 - 45.8% - 12.5	10 never (I); 3 never (II)	4.13
Naladixic Acid (250mg/ 5ml serum)	3 - 12.5% - 4	10 never, 3/99, 12/99, 1/00 (I); 8 never (II)	Bs. 35.5
Amoxolin (250mg/ 5ml susp.)	14 - 58.3% - 8	6 never, 2/00 (I); 3 never (II)	11.7
Penicilin Benzatine (1.2 million UI)	17 - 70.8% - 17	4 never (I); 3 never (II)	6.76
Penicilin Procaine (4 million UI)	9 - 37.5% - 7	11 never (I); 4 never (II)	4.83
Gentamicin	21 - 87.5% - 15	1 never (I); 2 never (II)	2
Cloroquine (100mg tabs.)	15 - 62.5% - 50	4 never (I); 3 never, 4/00, 5/00 (II)	0.02
Primaquine	14 - 58.3% - 50	5 never (I); 3 never, 4/00, 5/00 (II)	0.02
Cotrimoxazol (suspension)	15 - 62.5% - 5.5	5 never (I); 4 never (II)	8.23
Cotrimoxazol (Pediatric Tabs.)	12 - 50.0% - 700	11 never (I); 4/00 (II)	0.07
Eritromocine (200mg 5 ml susp.)	6 - 25.0% - 7.5	10 never (I); 8 never (II)	10.48
Mebendazol (100mg. Tabs.)	21 - 87.5% - 150	2 never (I); 1 never (II)	0.17
Tetracycline (250 mg Tabs.)	6 - 25.0% - 90	11 never, "more than a year" (I); 5 never, 5/00 (II)	0.4
Tetracycline (Opthalmic ointment)	10 - 41.7% - 3	7 never (I); 7 never (II)	7.05
Piperacina	2 - 8.3% - 3.5	13 never, "more than a year"; 8 never (II)	16.5
Nistatina 100.0 -UI ml	5 - 20.8% - 5.5	12 never (I); 7 never (II)	14.42
Salbutamol Inhalant solution	5 - 20.8% - 8.5	13 never (I); 6 never (II)	13
Salbutamol Inhaler	0 - 0.0% - 0	16 never (I); 7 never, 3/00 (II)	0
Teofilina solution	0 - 0.0% - 0	16 never (I); 8 never (II)	0
ORF packets	22 - 91.7% - 30	1 never (I); 1 never (II)	0.47
Lactato Ringer (500-1000cc)	22- 91.7% - 5	2 never (II)	7.96
Ferrous Sulfate drops	7 - 29.2% -13	11 never (I); 6 never (II)	9.43
Ferrous Sulfate 60 mg. Tabs.	20 - 83.3% - 870	3 never (I); 1 never (II)	0
Vitamin A 100,000 UI	4 - 16.7% - 14.5	13 never, 11/99, 4/99 (I); 5 never (II)	0.15
Vitamin A 200,000 UI	17 - 70.8% - 50	3 never, 11/99 (I); 2 never, 6/00 (II)	0
Syringes with needles	23 - 95.8% - 20	1 never (I)	0.86

IV equipment	22 - 91.7% - 8	1 never (I); 1 never (II)	3.27
Carnet de Madre	14 - 58.3% - 10	5 never (I); 4 never, 5/00 (II)	0.02
Carnet de Nino	13 - 54.2% - 10	6 never (I); 4 never, 5/00 (II)	0

28. Is there a Kardex for medications?.....Yes [7 – 29.2%] No [17 – 70.8%]

If the answer is yes, is it updated?…….....Yes [6 - 85.7%] No [1 - 14.3%]

29. Where do your medications generally come from?

Mark all that apply

a) National Government Source [8 - 33.3%]
b) Department Government [0 - 0%]
c) Mayor's Office/Municipality [3 – 12.5%]
d) Community Pharmacy [0 - 0%]
e) Private Pharmacy [19 – 79.2%]
f) NGO/International org [8 - 33.3%]
g) Own funds [11 – 45.8%]
h) Others ... Specify [5 – 20.8%]
Not specified for this report

30. How do you usually receive your medications?
Mark only one answer

a) They are delivered to the center [2 – 8.3%]
b) We go the provider to get them [15 – 62.5%]
c) Both [7 – 29.2%]

31. What are the reasons for lacking some medications?
Mark only one answer

a) Inadequate transport [0 - 0%]
b) Administrative problems [4 – 16.7%]
c) Financial problems [14 - 58.3%]
d) Insufficient gasoloine [0 - 0%]
e) Insufficient personnel [0 - 0%]
f) Unavailable at the store [1 - 4.2%]
g) Other ...Specify [0 - 0%]
Not specified for this report
h) Not lacking [5 – 20.8%]

Maintenance of Documents and Clinical Histories

32. Forms to fill out when there is an illness that requires obligatory notification .YES [66.7%] NO [33.3%]

33a. Are there monthly consolidations? Yes [21 - 87.5%] No [3 - 12.5%]
33b. If the answer is yes, are they updated? Yes [19 – 90.5%] No [2 – 9.5%]

34a. Daily register of consultations Yes [24 - 100%] No [0 - 0%]
34b. If the answer is yes, are they updated? Yes [23 – 95.8%] No [1 – 4.2%]

35. Have you ran out of any supply in the last thirty days..... Yes [20 – 83.3%] No [4 – 16.7%]
If the answer is yes, which?

ITEM	Number of days unavailable in the last thirty days
Vaccinations(Specify type)	16 (66.7%) in total: Unspecified (11 for unspecified (4), 7,14,20 & 30 days respectively) BCG (2 for unspecified # of days) BCG – 15 days Sarampion – 30 days BCG – 60 days
Syringes / needles	10 (41.7%) for 7,14,20,30,30,30 days; 4 unspecified number of days
Oral Rehydration Fluid	4 (16.7%) for unspecified, 7, 7, & 30 days
Health card	10 (41.7%) instances for 7,14,20,30,30,30 & 4 for an unspecified # of days
Forms (specify type)	2 (both were obligatory notification forms, # of days unspecified)
Others (specify)	5 (20.8%) in total 2 for Seguro Basico forms (20 days & unspecified) 1 for forms to order Malaria medicine (days unspecified) 1 for Vaccination forms 30 days 1 for Vitamin A form 30 days

36A.What is the schedule of (hours and days) of the health facility?
[See health worker interview form.]

36B. Has it closed in the last month?If the answer is yes, for what reason?
15 (62.5%) said workshop/CAI/course
6 (25%) said no
1 (4.2%) said lack of personnel
1 (4.2%) said for holidays
1 (4.2%) said for community visits

36C. Has it closed in the last three months? If the answer is yes, for what reason?

8 - 33.3% said no
7 – 29.2% said for workshops
3 – 12.5% said for lack of personnel
3 – 12.5% said for community visits
2 – 8.3% said for unspecified reasons
1 – said for holidays

Health Worker Interview

Name of Agency: Ministry of Health - CEPAC

Department: Santa Cruz
Province: Ichilo/Sara

Municipality: San Carlos [8 – 33.3%]
Buena Vista [8 – 33.3%]
Yapacani [8 – 33.3%]

District: Ichilo
Health Area: Ichilo

Type of Facility: Health Post [15 – 62.5%]
Health Center [5 – 20.8%]
Hospital [4 – 16.7%]

Type of Health Worker Interviewed: Doctor [2 – 7.7%]
Auxiliar Nurse [22 – 84.6%]
Professional Nurse [2 – 7.7%]

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1. What is the work schedule of the Center/Post/Hospital?

Weekday Mornings
6:00 – 12 Noon [1 – 4.2%]
6:30 – 12 Noon [1 - 4.2%]
7:00 – 12 Noon [3 – 12.5%]
8:00 – 12 Noon [15 – 68.8%]
8:30 – 12 Noon [1 – 4.2%]
No Answer [1 – 4.2%]
24 hours [2 – 8.3%]

Weekday Afternoons
2:00 – 4:30 [1 – 4.2%]
2:00 – 5:00 [3 – 12.5%]
2:00 – 6.00 [11 - 45.8%]
2:00 – 6:30 [1 – 4.2%]
2:00 – 7:00 [1 – 4.2%]
2:00 – 9:00 [1 – 4.2%]
2:00 – 10:00 [1 - 4.2%]
2:00 – 10:30 [1 – 4.2%]
2:30 – 6:00 [1 – 4.2%]
No Answer [1 – 4.2%]
24 hours [2 - 8.3%]

Note: Most (close to all) of the facilities will handle emergency patients at any hours.
Data completed for weekends was incomplete, but most facilities are open only on Saturday mornings.

2. How many days per month do you visit the field workers?

# Days	Freq.	%
1	8	33.3
2	6	25.0

3	1	4.2
4	3	12.5
5	1	4.2
6	1	4.2
7	1	4.2
8	2	8.3
9	1	4.2

3. Is there a charge for consultations? Yes [18 – 75.0%]
No [6 – 25.0%]

If the answer is yes, how much does each service cost?

Service	**Cost**
General Consultation	10 (41.7%) charge for this service: Bs. 3 – [1 – 10.0%] Bs. 5 – [5 – 50.0%] Bs. 8 – [1 – 10.0%] Bs. 9 - [1 – 10.0%] Bs. 10 – [1 –10.0%] Bs. 12 – [1 –10.0%] Average charge: Bs. 6.70
PAP Smear	Free in all cases
Family Planning	Free in all cases
Other (specify)	Abscess Drainage: 2 answers (8.3%) – avg.: 6.75 Injection (unspecified): 7 answers (29.2%) – avg.: 1.71 Nebulization: 1 answer (4.2%) – 3.00 Sutures: 11 answers (45.8%) – avg.: 2.91 per stitch IV: 3 answers (12.5%) – avg.: 9.00 IV injection: 3 answers (12.5%) – avg.: 3.33 IM injection: 7 answers (29.2%) – avg.: 1.79 Small Curation: 13 answers (54.2%) – avg.: 3.00 Med. Curation: 1 answer (4.2%) – avg.: 3.00 Large Curation: 2 answers (8.3%) – avg.: 7.50 Rehydration IV: 4 answers (16.7%) – avg.: 7.50 Emergency: 2 answers (8.3%) – avg.: 10.00 Extraction from under skin: 1 answer (4.2%) – 5.00

4. Does your work follow National Standards of Service/Case Management of children younger than 5 years old? Please show them

(Verify the presence/existence of the Standards)

Standards	**Available**	
	Yes	**No**
Diarrheas	**13 – 54.2%**	**5 – 46.8%**
Respiratory Infections/Pneumonia	**13 – 54.2%**	**6 – 46.8%**
Immunizations	**5 – 27.8%**	**13 – 72.2%**
Breastfeeding	**17 – 70.8%**	**7 – 29.2%**
Women's Health	**22 – 91.7%**	**2 – 8.3%**
Growth and Development	**9 – 37.5%**	**15 – 62.5%**
Vitamin A (9 responses	**4 – 44.1%**	**5 – 55.9%**

If you have a supervisor and you are a supervisor, please answer both a. and b. in questions 5 through 10.

5. Do you have a supervisor who visits you? Yes [20 – 83.3%]
No [4 - 16.7%]

5b. If you are a supervisor, do you make supervisory visits? Yes [8 – 47.1%]
No [9 – 52.9%]

If the answer is no, please go to question 11

6a. Do you have a schedule of visits from your supervisor? Yes [13 – 61.9%]
No [7 – 33.3%]
No answer [1 – 4.8%]

6b. Do you (supervisor) have a schedule for visiting your supervisees? Yes [7 – 41.2%]
No [10 - 58.8%]

7a. How many times have you been visited by your supervisor in the last six months?

Average number of times: 2.1 Range: 0 – 9

7b. How many times have you visited your supervisees in the last six months?

Average number of times: 10.6 Range: 1-48
Note: The median number was 2

8a. What did your supervisor do the last time you were supervised?

Mark all that apply

a) Brought supplies (medicine, gas, etc) [Yes: 5 – 25.0%]
[No: 15 – 75.0%]

b) Observed immunization technique [Yes: 3 – 15.0%]
[No: 17 – 85.0%]

c) Checked the cold chain [Yes: 11 – 55.9%]
[No: 9 – 45.0%]

d) Reviewed clinical histories [Yes: 10 – 50%]
[No: 10 – 50%]

e) Reviewed Kardex / Medical Supplies [Yes: 10 – 50%]
[No: 10 – 50%]

f) Observed management of sick children [Yes: 3 – 15.0%]
[No: 17 – 85.0%]

g) Reviewed reports prepared by health workers [Yes: 15 – 75.0%]
[No: 5 – 25.0%]

h) Discussed problems related to supplies and equipment [Yes: 10 – 50.0%]
[No: 6 – 50.0%]

i) Others .....(specify)..... [Yes: 12 – 60.0%]
[No: 8 – 40.0%]

Details exist, but will not be included for this report.

8b. (If you are a Supervisor) What did you do the last time you supervised personnel?

Mark all that apply

j) Brought supplies (medicine, gas, etc) [Yes: 2 – 25.0%]
[No: 6 – 75.0%]

k) Observed immunization technique [Yes: 0 – 0.0%]
[No: 8 – 100.0%]

l) Checked the cold chain [Yes: 1 – 12.5%]
[No: 7 – 87.5%]

m) Reviewed clinical histories [Yes: 1 – 12.5%]
[No: 7 – 87.5%]

n) Reviewed Kardex / Medical Supplies [Yes: 3 – 37.5%]
[No: 5 – 62.5%]

o) Observed management of sick children [Yes: 2 – 28.6%]
[No: 6 – 75.0%]

p) Reviewed reports prepared by health workers [Yes: 3 – 37.5%]
[No: 4 – 62.5%]

q) Discussed problems with supplies and equipment [Yes: 1 – 14.3%]
[No: 7 – 87.5%]

r) Others .....(specify) [Yes: 3 – 37.5%]
[No: 5 – 62.5%]

Details exist, but will not be included for this report.

9a. Did you receive feedback from that supervisory session?. Yes [13 – 65.0%]
No [7 – 35.0%]

If the answer is yes:

In what form?
a) Supervisory Register….....[1 – 7.7%]
b)Oral Report...….....[11 – 84.6%]
c) Written Report ..... [2 – 15.4%]
d)Other, specify .....[1 – 7.7%]

Details exist, but will not be included for this report.

9b. Did you give feedback from your last supervisory session? Yes [5 – 62.5%]
No [3 – 37.5%]

[Of eight who said they made visits]

If the answer is yes:

In what form?
e) Supervisory Register….....[3 – 37.5%]
f)Oral Report...….....[4 - 50.0%]
g) Written Report .....[3 –37.5%]
h)Other, specify .....[0 – 0.0%]

10. What does your supervisor do to help you maintain your technical knowledge and skills up-to-date?

Mark all that apply:

a) Nothing.....[3 – 15.0%]
b) Individual Feedback…….... [6 – 30.0%]
c) Workshops.....[13 – 65.0%]
d) Training sessions…….....[4 – 20.0%]
e) Sends documents ..... [6 – 30.0%]
f) Other .... specify..... [2 – 10.0%]
Details exist, but will not be included for this report

10b. What do you do as a supervisor to help maintain your supervisees' technical knowledge and skills up-to-date?

Mark all that apply:

g) Nothing.....[0 – 0.0%]
h) Individual Feedback…….... [4 – 50.0%]
i) Workshops.....[4 – 50.0%]
j) Training sessions…….... [1 - 12.5%]
k) Sends documents .....[2 – 25.0%]
Other .... specify.....[1 – 12.5%]
Details exist, but will not be included for this report

11a. What problems have you identified in the process of being supervised?

11: None
1 each of:
They don't do what they say they are going to do
There is difficulty with the vaccination registry
None, but only because I haven't been supervised in the last year
Attendance book problem – Personnel pages are not signed
Immunization register – too many colors of pens are used
No follow-up on supervision
Supervision time is short
There are no appropriate manuals provided
They visit by surprise, no schedule
They make us do too much of one workshop (SNIS)
They ask for reports without training us to do them
The community complains about the poor work of the last supervisor
Lack of supplies provided

What changes can you recommend with regard to this issue?
2: None
1 each of:
Sign personnel pages
Get help for management of the vaccination registries
Use only one pen color
Development of supervision guides
More training with regard to medication mgmt.
Stop surprise visits
That supervisors provide more supplies
Supervisors be more responsive about filling my requests
Supervisors be more responsable
Supervisors better trained
More training with regard to medication and case mgmt.
That they get more supplies

11b. What problems have you identified in your work as a supervisor*?*
1 each of:
None
Disorganized pharmacy and lack of medication
They are not registering their activities
Facilities are not kept clean by employee
That the personnel at the health posts always complain
Workers do not manage the medication well, the cupboards are dirty and some medications have expired

What changes can you recommend with regard to this issue?
1 each of :
In the workshops they should give more security to the RPS, to develop their work in the communities
That we, as supervisors, give more feedback
More training for supervisors
Better orientation for workers
More training for workers

12. What are the most difficult problems you face in doing your job***?***

Mark all that apply

a) Lack of Training……..... [4 – 16.7%]
b) Caretakers do not bring their children to clinic.....[8 – 33.3%]
c) Lack of Time…..... [5 – 20.8%]
d) Staff Shortages.....[7 – 29.2%]
e) Lack of supplies and/or stock…….....[12 – 50.0%]
f) Inadequate transport.....[8 – 33.3%]
g) Poor work environment(building, infrastructure, offices)…….[7 – 29.2%]
Other….Specify (not detailed here) [10 – 41.7%]

13. Have you discussed these problems with your supervisor? Yes [18 – 75.0%]
No [6 – 25.0%]

14. If the last answer was yes:
Were you given a solution? In what form?..... Yes [3 – 16.7%]
No [13 – 72.2%]
Partial [3 – 21.4%]

15. Have you received any child health-related training sessions in the last six months?
Yes [15 – 62.5%]
No [9 – 37.5%]

<u>If no training received, go to question 16</u>

15. What type of training was it? Mark an X for all that apply

	Intervention				
	Immunization	Vitamin A	Nutrition	Pneumonia	Breast-feeding
Workshop	3	3	2	5	6
Seminar	1	1	1	1	1
Exercise	4	3	1	3	2
Self-Training Modules	1	1	0	2	2
Other – specify Montero School	2	1	2	2	2

16. Did your last training involve clinical practice? .....Yes [7 – 46.7%]
.....No [8 – 53.3%]

17. In this facility, for children under one year old, at what age do you administer these vaccinations?

Bold = Correct answer

Vaccination	New-born	First	Second	Third
DPT	//////////////////	**23 (95.8%): 2 months** 1 (4.2%): Don't know	1(4.2%): 3 months **19 (75.0%): 4 months** 2 (8.3%): 6 months 2 (8.3%): Don't know	1(4.2%): 4 months **19(79.2%): 6 months** 2 (8.3%): 8 months 1 (8.3%): Don't know
Polio	**22 (91.7%): <29days** 2 (8.3%): Don't know	**23 (95.8%): 2 months** 1 (4.2%): Don't know	1 (4.2%): 3 months **20 (83.3%): 4 months** 1 (4.2%): 6 months 2 (8.3%): Don't know	1 (4.2%): 4 months **19 (79.2%): 6 months** 2 (8.3%): 8 months 2 (8.3%): Don't know
BCG	//////////////////	**21 (87.5%): <1 year old** 1 (4.2%): <1 year old & > 2500kg 1 (4.2%): <1 year old & <2500kg 1 (4.2%): Don't know	//////////////////	//////////////////
Measles	//////////////////	**19 (79.2%): 1 year old** 1 (4.2%): 6-9 months old 1 (4.2%): 9 months to one year old 1 (4.2%): >one year old 1 (4.2%): one month 1 (4.2%): Don't know	//////////////////	//////////////////

18. To whom do you give Tetanus Toxoid?

Mark all that apply

a) Pregnant Women.....[18 (75.0%): Yes; 6 (25.0%): No]
b) Women of child-bearing age (15 to 49 years)....[23 (95.8%): Yes; 1 (4.2%): No]
c) For injuries or risk zones……..... [13 (54.2%): Yes; 11 (45.8%): No]
d) Don't know.....[0: 0.0%]

19. To whom do you give Vitamin A?

Children from 6 months to 6 years old [21 (87.5%): Yes; 3 (12.5%): No]
Children with measles or malnutrition [7 (29.2%): Yes; 17 (70.8%: No]
Mothers less then one month post-birth [21 (87.5%): Yes; 3 (12.5%: No]
Other answer : (8 (33.3%): Yes; 16 (66.7%): No]

20. What dose of Vitamin A must be given to children between 6 months and 1 year old?

100,000 UI [22 (91.7%)]
Other answer [2 (8.3%)]

21. What dose of Vitamin A must be given to children between 1 year and 6 years old?

200,000 UI [21 (87.5%)]
Other answer [3 (12.5%)]

22. What dose of Vitamin A must be given to mothers in the first month after birth?

200,000 UI [21 (87.5%)]
Other answer [3 (12.5%)]

23. Have you identified any problem with giving Vitamin A to mothers or children?
Comments:
19 (79.2%): No
2 (8.3%): Yes (details not specified here)
3 (12.5%): No answer/Don't know

24. What signs/symptoms of diarrhea cause a mother to bring her child to the health center?

Blood in feces [9 (37.5%): Yes]
Dehydration [13 (54.2%: Yes]
More than 14 days of diarrhea [9 (37.5%): Yes]

25. What signs/symptoms of pneumonia cause a mother to bring her child to the health center?

Slow breathing [7 (29.2%): Yes]
Rapid breathing [12 (50.0%): Yes]
Other [12 (50.0%): Yes; one each of coloring of the skin, convulsions/attacks/fever/temperature, continual coughing, strong cough/nasal secretions/elevated temperature, vomiting/cough/fever, cough, unspecified]

26. What is the treatment for diarrhea (in accordance with the Ministry of Health protocols)?

No Answer
ORF & Cotrimoxazol (3 answers)
ORF and Hygiene/Nutrition education
ORF (2 answers)
MOH norms and Cotrimoxazol
ORF, Cotrimoxazol, Mebendozal
Cotrimoxazol, Mebendazol
Cotrimoxazol, ORF, Paracetamol
First: Home Rehydration & Cotrimoxazol; Next: ORF and Cotrimoxazol
Plan A: ORF, Plan B: Cotrimoxazol, Plan C: Gentamycine, ORF, Amoxocilin
Plan A: Ambulatory ORF, Plan B: ORF in health facility, Plan C: Refer to hospital (4 answers)
Plan A, B, C (2 answers)
Plan A, B
Mebendazol, Cotrimoxazol, SRO, Ringer
Cotrimoxazol (5 days), Liquids
Cotrimoxazol, Vitamin A, ORF
Cotrimoxazol, ORF, Breastfeeding

27. Have you identified any problems with regard to the treatment for diarrhea in your health center, or ways to improve the treatment?
Commentary:

Lack of hygiene education (2)
Need more supplies from government (Seguros Basicos)

When the mother doesn't administer the medicine well, or doesn't follow the treatment indicators

Or in your community?

We need potable water and better waste system (2)
Education re boiling water for children
Poor nutrition
The caretakers don't complete the ORF treatment scheme
Educate the mothers to bring their children in earlier
Better hygiene
Mothers don't take advantage of the health services
Ingestion of contaminated water
The people self-medicate without consulting us

28. What is the treatment for pneumonia (in accordance with the Ministry of Health protocols)?

Cotrimoxazol (5 answers)
Procaine Penicillin
Cotrimoxazol, Terbacil, Paracetamol
Paracetamol (100mg) at first, then procaine penicilin and referral to next level of health facility
Cotrimoxazol, Paracetamol, Procaine Penicillin (3 answers)
Paracetamol, Cotrimoxazol, then referral (2 answers)
Refer to a doctor
MOH norms and Cotrimoxazol
Paracetamol and Cotrimoxazol (4 answers)
Antibiotics
Cotrimoxazol (2 days), if it doesn't get better refer to hospital
Cotrimoxazol, Paracetamol, Procaine Penicillin, if it is very bad, refer
Cotrimoxazol, Paracetamol, Nebulization
PNC 6:33

29. Have you identified any problems with regard to the treatment for pneumonia in your health center, or ways to improve the treatment?
Commentary:

There is no pediatric area – Establish a pediatric area
We need more antibiotics (2)
When there are seriously ill patients, we refer them but the mothers don't take them to the hospital very quickly
There are good results with IMCI

Or in your community?
Commentary:

Lack of nutritious food
Not enough breast-feeding
Better-equipped pharmacy
Need better hygiene
Shouldn't bathe when it is cold
Too much self-medication

30. When should women take iron supplements?

During pregnancy [100%: Yes]
Others
1 each of:
Unspecified
For anemia (25%)
After giving birth (8.3%)

31. What dose of iron is recommended? (List the recommendation during pregnancy and for women of child-bearing age according to MOH protocols)

One tablet daily for 90 days (5 answers)
2 tablets a day
180 tablets during pregnancy and 180 after birth
One 200mg tablet for 6 months
After 5 months of pregnancy, one tablet per day (2 answers)
30 tablets per month, depending on how long she has been pregnant, up to 90 tablets
30 tablets per month, 120 total during pregnancy
One tablet a day during pregnancy (3 answers)
One tablet a day for three months, after 5 months of pregnancy
90 to 120 tablets
20 to 30 tablets for anemia
120 tablets during pregnancy
220 tablets during the 9 months of pregnancy
One tablet a day after 4 months of pregnancy through the birth
One tablet a day (2 answers)

32. Have you identified any problems with regard to maintenance and prevention of iron deficiency in your health center, or ways to improve the treatment?
Commentary:

I don't have any iron supplement serum
Lack of iron to give
We have had problems with storage of the tablets – they dissolve

Or in your community?_____
Commentary:

The norms aren't being followed properly
The pregnant women won't take the iron because it causes nausea (5 answers)
They must be told to take it after lunch or with a lemon drink (2 answers)
More education
Some women prefer the serum to tablets
The maintenance of the tablets in the home is a problem

33. How many times should a children under one and two years, respectively be weighed (according to MOH protocols)

Number of times:
Monthly, for both (14 answers)
12 times up to a year, then 6 times during the second year (4 answers)
12 times up to a year, then 4 times during the second year (3 answers)
36 times up to a year, then 12 times between one and two years – 48 total (1 answer)
16 times the first year, four times the second year (1 answer)
14 times the first year, 6 times the second year (1 answer)

34. How do you measure children in accordance with the growth card?

Referring to the Growth Curve graphic (16 answers)
With a tapemeasure (5 answers)
Monthly (2 answers)

No answer (1 answer)

35. Have you identified any problems with regard to maintenance and prevention of malnutrition in your health center, or ways to improve malnutrition levels?

Commentary:
Mothers don't come until it is too late
There is no iron for children

Or in your community?
There is no center for malnourished children
Education about nutrition is needed (2)
The people should eat more rice and eggs
Families should have less children
The mothers must improve feeding
Mothers don't have sufficient education, and don't know how to value the nutrients in foods
Not very many fruits and vegetables available
There is no advice available about nutrition

36. Please state the symptoms that would cause you to refer a child older than 2 months to the next level of health facility.

23 respondents
Mark all that apply

a) Child is lethargic/drowsy/unconcscious.....[10 – 43.5%]
b) Child is having convulsions……..... [10 - 43.5%]
c) Child does not eat or drink…….....[9 – 37.5%]
d) Child does not respond to habitual treatment……..... [7 – 29.2%]
e) Child has elevated fever…….....[13 – 54.2%]
f) Child vomits all food or liquid consumed.....[8 – 33.3%]
g) Child with severe dehydration….....[15 - 62.5%]
h) Child with severe Pneumonia.....[20 – 83.3%]
i) Child severely malnourished or anemic..... [10 – 41.7%]
j) Other ..... Specify .....[7 – 29.2%]
Not specified for this report

37. Please state the signs that would make you refer a child under two months old to the next level of health facility.

23 respondents
Mark all that apply

a) Child is lethargic/drowsy/unconscious…..... [7 – 29.2%]
b) Child is having convulsions …….....[12 – 53.3%]
c) Child does not eat or drink …..... [11 – 45.8%]
d) Child is breathing rapidly …......[15 – 62.5%]
e) Child with severe breathing where skin goes between ribs.....[9 – 37.5%]
f) Child with nasal flapping.....[5 – 20.8%]
g) Child that complains .....[7 – 29.2%]
h) Child with indented fontanella ....……..... [6 – 25%]
i) Child with redness of the navel extended from the skin……...…..[5 – 20.8%]
j) Child with elevated fever.....[14- 58.3%]
k) Child w/ many and/or severe skin pustules……..... [5 – 20.8%]
l) Child is moving less than normal…….....[4 – 16.7%]
m) Child has not responded to habitual treatment …….. .....[5 – 20.8%]
n) Child with severe dehydration….....[5 – 20.8%]
o) Child with severe, persistent diarrhea….....[5 – 20.8%]
p) Child with dysentery .....[4 – 16.7%]
q) Child is severely malnourished/anemic.....[8 – 33.3%]
r) Other. ... Specify .....[8 – 33.3%]
Not specified for this report

38. a) Does the health worker know at least three signs of reference for children older than two months?

.....Yes [22 – 91.7%]

..... No [2 – 8.3%]

38. b**)** Does the health worker know at least three signs of reference for children younger than two months?…….....Yes [19 – 79.2%]

.....No [3 – 20.8%]

40. a*)* At any time, have you had to refer a child to the next level of health facility, but been unable to do so?

……...Yes [10 – 41.7%]

.....No [14 – 58.3%]

<u>If the answer is NO, go to question 41</u>

b) If the answer is yes, why could you not?

<u>Mark all that apply</u>

a) The next level health facility was very far…….....[3 – 37.5%]
b) No transportation available……..... [3 – 37.5%]
c) The parents didn't have enough money…….....[8 – 80.0%]
d) The mother or father wouldn't go.. .....[5 – 50%]
e) There was no gasoline.....[1 – 10%]
f) Other .. Specify .....[2 – 20%]
Family Problems (2)

41. What type of information should be given to the mother during the consultation?

<u>Mark all that apply</u>

<u>19 respondents</u>

a) Information about the danger signs so they can evaluate ... [5 – 26.3%]
b) Information about what they should do at home…… .....[10 – 52.6%]
c) Information how to give medication at home.....[12 – 63.2%]
d) To know what she must do at home and the symptoms of illnesses in their children
…….. [1 – 5.3%]
e) Information about what to do to prevent illnesses….....[11 – 57.9%]
f) Tell the mother when she should return to the center.....[12 – 63.2%]
g) Assure that the mother knows what to do at home……...[5 – 20.8%]
h) Give group health chats .....[5 – 20.8%]
h) Other .. Specify…. .....[6 – 31.6%]
Information about feeding their child
Breastfeeding
Immunizations
Prenatal checkups
Hygiene

42.Is there a particular obstacle to teaching the mother to care for her children?

....…….....Yes [8 – 33.3%]
.....N0 [16 – 66.7%]

If the answer is yes, indicate which**?**

Mark all that apply

a) Not really my role.....…….. [0]
b) Someone else does it..... [0]
c) There is no time ..... [2 – 25%]
d) They don't listen.....… [5 – 62.5%]
e) They don't understand what we say…….....[5 – 62.5%]
f) I don't have educational materials.....[3 – 37.5%]
g) It is not important.....… [0]
h) I don't know .....[0]
i) Other (specify) .....[2 – 37.5]

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
BUREAU FOR HUMANITARIAN RESPONSE

PVO CHILD SURVIVAL GRANTS PROGRAM
GUIDELINES FOR MID-TERM AND FINAL EVALUATIONS
CS-15, 1998-2002

OFFICE OF PRIVATE AND VOLUNTARY COOPERATION
DECEMBER 1999

OVERVIEW OF EVALUATION

The strategic objective of USAID's Office of Private and Voluntary Cooperation, within the Bureau for Humanitarian Response (BHR/PVC) is *the increased capability of BHR/PVC's PVO partners to achieve sustainable service delivery*. With USAID's emphasis on managing for results, program evaluations have become less descriptive and more evidence based. BHR/PVC has assisted PVOs to strengthen their program monitoring and to document program achievements so that PVOs can provide credible evidence of achievements and results.

A Core Evaluation Practices

BHR/PVC's evaluation policies reflect a commitment to a set of core evaluation practices that over the years have proved to be critical elements in building PVO capacity to monitor and evaluate field programs. These practices have emerged through lessons learned from the programs implemented by our PVO partners.

- **Evaluations are joint activities** and truly effective learning experiences involve all the partners. BHR/PVC, the PVOs, their local partners, and other stakeholders usually participate in program evaluations. The participatory nature of the evaluation process encourages problem analysis and development of solutions by project staff and partners.
- **Good program design** is the foundation for documenting achievements. Programs that have successfully documented their achievements have clearly stated objectives, valid indicators and a realistic method for measuring change over the life of the program. The establishment of accurate baseline data is a critical element in tracking change.
- **Commitment to the use of data** contributes to the most successful programs. Such projects demonstrate strong staff commitment to action planning based on the regular review of performance data.
- **All good evaluations recognize the achievements** of the project and staff and document innovative activities highlighting promising practices or new approaches.

B. Purpose of the Monitoring and Evaluation System.

The BASICS publication, "Child Survival BASICS — Monitoring an Evaluation: Tools for Improving Child Health and Survival," (Quarterly Technical Newsletter #5, Spring 1998), defines monitoring and evaluation as "collecting and analyzing information that is accurate and reliable and can be put to practical use".

- Monitoring involves plotting progress in meeting implementation goals or measuring outputs and process.
- Evaluation takes a broader perspective, determining if the course is the best one – or assessing overall outcome or impact.

In the PVO Child Survival Grants Program, monitoring and evaluation provides program managers, local partners and USAID with a clear understanding of how the PVO program is functioning; evidence of results that have been achieved, and the importance of these achievements to the design and implementation of future programs. The Detailed Implementation Plan (DIP) describes the monitoring system the PVO intends to use. The

evaluations take place at the program mid-term and end, and differ from each other in focus and in the kinds of information they provide:

- **the mid-term evaluation** focuses on the process of program implementation. This evaluation uses data and information from the program's monitoring system to (a) assess progress in implementing the DIP; (b) assess progress towards achievement of objectives or yearly benchmarks; (c) assess if interventions are sufficient to reach desired outcomes; (d) identify barriers to achievement of objectives; and (e) to provide recommended actions to guide the program staff through the last half of the program.
-
- **the final evaluation** is focused on (a) assessing if the program met the stated goals and objectives; (b) the effectiveness of the technical approach; (c) development of the overarching lessons learned from the project; and (d) a strategy for use and communication of these lessons both within the organization and to other partners.

C. The Evaluation Audience

The possible "audiences" for the information from the program evaluations include the local partners, the PVO, USAID, both BHR/PVC and Missions, as well as other stakeholders. However, while BHR/PVC and its partners share similar evaluation objectives, the information needs of each partner are different.

While the BHR/PVC's Child Survival Division monitors the performance of the individual programs, the division also must consolidate information across all programs to report to senior level agency managers and congressional interest groups about the effectiveness of the PVO child survival programs. Results reporting by BHR/PVC is intimately linked to resource allocation and thus clearly presented program results, with supporting evidence, are key to continued funding of the PVO Child Survival Grants Program.

> Throughout these guidelines text boxes like this one identify BHR/PVC's information needs. These questions are linked to BHR/PVC's strategic plan and indicators. It is important that these questions are incorporated in the evaluation SOW and responses appear in the evaluation report.

D. The Evaluation Process

- Participation: BHR/PVC encourages participation from PVO headquarters and field program staff, representatives from project partners, government health service personnel and community members in planning and conducting the evaluation. Representatives from other PVOs, USAID mission staff and other stakeholders may be invited.
- Developing the SOW: The PVO is responsible for developing the Statement of Work (SOW) for the evaluation team. While these evaluation guidelines identify a core set

of components to be addressed, the PVO tailors the evaluation to its needs, with questions that are specific to the program. The information needs and evaluation questions of the primary partners should also be integrated into the evaluation SOW. BHR/PVC does not need to approve the evaluation SOW.

- Team Composition: The evaluation Team Leader, who serves as the lead author and editor of the evaluation report, should be someone who is not employed by, or otherwise professionally associated with the concerned PVO or the specific child survival program. The PVO should identify a candidate for the Team Leader position and propose this person to BHR/PVC for approval prior to the evaluation. The CORE Group, CSTS, and several PVOs have developed databases of good, proven evaluators of PVO child survival programs. Other team members may include people selected from within the PVO, its partners, and other organizations. *If your PVO has identified other good evaluators, please add the person's name to the databases maintained by CSTS and the CORE Group!*

THE MID-TERM EVALUATION

The mid-term evaluation provides an opportunity for all project stakeholders to take stock of accomplishments to date, and to listen to the needs of beneficiaries at all levels – mothers, other community members and opinion leaders, health workers, health system administrators, local partners, other organizations, and donors. The mid-term evaluation provides a chance for the project staff to benefit from the viewpoint of an external consultant, acting as an evaluation process facilitator. Other PVOs and resource persons may also be invited to participate in the evaluation process.

I The Evaluation Report

The mid-term evaluation report shall address each of the points listed below. If any of these items is not discussed in the report, please provide an explanation. Except for the summary, repetitious sections may be cross-referenced.

1. Summary

Provide a brief (1-2 pages) executive summary of the report that includes:

- description of program and objectives
- main accomplishments of the program
- overall progress made towards achieving program objectives.
- main constraints, problems, and areas in need of further attention.
- a summary of capacity-building effects of the program.
- prospects for sustainability.
- priority recommendations that have resulted from this evaluation.

2. Assessment of Progress Towards Achieving Program Objectives

The DIP presented in the first year is the official workplan of the program. This section of the mid-term evaluation report provides a clear picture of how well the program is implementing the workplan, what challenges it will face in the remaining time, recommendations for addressing those challenges and for building on its successes. The outline below provides guidance to the evaluation team for examining the program's technical child survival interventions and cross cutting approaches.

A. Technical Approach

- A brief overview of the project, including objectives, location, technical interventions/focus areas, and general program strategy. (More detailed documentation may be provided in the annexes.)
- A progress report by intervention area. This section describes:
  - activities related to specific interventions as proposed in DIP
  - progress toward benchmarks or intermediate objectives
  - the effectiveness of the interventions
  - changes in the technical approaches discussed in the DIP with rationale.
  - special outcomes, unexpected successes or constraints
  - next steps

- New tools, innovative approaches the program is using; operations research or special studies that may have been conducted; and how the data/information have been used, and what actions were taken.

B. Cross Cutting Approaches (*address each section as applicable*)

This section discusses progress on approaches that cross technical intervention areas, and have, or will have, an impact on project objectives. These are activities that may or may not have been articulated specifically in the DIP, but have emerged as critical activities in the program. In discussing cross cutting activities, please expand on the impact of such activities on the program. Examples of cross-cutting approaches include behavior change strategies, community mobilization, partnership building, training (e.g. negotiations, agreements achieved, linkages formed), outreach strategies, advocacy or community awareness building strategies, strengthening information management systems. The evaluation team may discuss any other cross cutting activities that may be pertinent to the program. Also include modifications and explanations/rationale for such modifications, as well as cross-cutting activities added to the work plan.

Discuss progress made in relation to objectives and targets, methods and approaches used, timing, key participants, geographical scope of activity, technical areas covered, etc. Describe how activities have had:

- an effect/impact on the program
- the lessons learned to date
- links to future activities

The following are specific questions for several cross-cutting approaches.

(1) Community Mobilization

- What kinds of community mobilization activities have been undertaken by the project?
- To what extent has the community responded to these?
- How have these activities been used to refine program implementation plans?
- What kinds of barriers exist to prevent members of the community from benefiting from the program, and how have these been addressed?
- What impact do factors such as security, politics, roads, mass media, theater group issues, etc. have on program implementation?

(2) Communications for Behavior Change

- Is the program's approach to behavior change appropriate and effective?
- Are the messages technically up-to-date? Have any essential messages been omitted?
- How are the effects of the behavior change activities being measured? What tools are used and are the tools appropriate and effective?
- Who uses the data gathered regarding the effects of behavior change activities? How have communities used these data to reinforce or promote other behavior changes?

(3) Capacity Building Approach

- Discuss the progress made in implementing the capacity strengthening plans outlined in the DIP. This may include plans for the PVO, the public sector partners, NGOs and/or community-based partners.
- Discuss how this progress affects the project's vision of and plans for sustainability as described in the DIP. Use the questions below to guide your assessment of the project's capacity building strategies.

Strengthening the PVO Organization

- Describe progress towards achieving the capacity building objectives, indicators and targets.
- Describe the approaches and tools used to assess capacity and comment on the appropriateness of the tools to measure change in capacity over the life of the program.
- Include a description of activities related to organizational capacity building within the PVO at HQ and in the field.
- What indications do you see at this point that the program has increased organization capacity?

Strengthening Local Partner Organizations

- Discuss the organizational capacity building efforts with the local partners and which ones are the main participants in capacity building activities.
- Briefly discuss the actual roles and responsibilities of each of the local partners and any changes that have occurred since these were articulated in the DIP.
- Describe the outcomes of any assessment, formal or informal, conducted at the outset of the project to determine the organizational capacities of your local partners.
- How have the organizational capacities of the local partner changed since the beginning of the project? What factors/interventions have most contributed to those changes?
- What are the primary challenges this project will face in further building the capacities of its partners?

Health Facilities Strengthening

- Are the health facility strengthening activities of the program appropriate and effective?
- What tools does the program use for health facility assessments? Are the tools appropriate and effective?
- Discuss linkages between these facilities and the communities?

Strengthening Health Worker Performance

- What is the approach to strengthening health worker performance?
- Has this been effective?

- What tools has the project used to assess performance and are they appropriate and effective for measuring change in the program timeframe?
- How have assessment results been used to improve the quality of services?
- How is the program addressing the gaps between performance standards and actual performance?

Training

- Discuss the training strategy, and its effectiveness.
- What is the progress made towards objectives?
- What evidence is there that suggests that the training implemented has resulted in new ways of doing things, or increased knowledge and skills of the participants?

(4) Sustainability Strategy

- What is the progress to date in meeting the sustainability objectives articulated in the DIP?
- Has the groundwork for the exit strategy been laid with project staff and local partners in the first two years of the project
- What approaches has the project implemented to build financial sustainability--(e.g., local level financing, cost recovery, resource diversification, corporate sponsorships
- What does the beneficiary community say about sustaining project services through alternative funding sources at the close of the project?

3. Program Management

This section provides an overall discussion of program management issues – at HQ, within the field program, with partners and the community. The objective is to assess the strengths and weaknesses of the support systems, i.e., planning, financial, information, & personnel management, supervision, training, logistics, etc. The aim is to identify specific ways in which the management support systems can function better.

A. Planning

- What groups have been involved in program planning?
- Is the work plan submitted in the DIP on schedule?
- Are the program's objectives understood by, all staff, local level partners, and the community?
- Do all parties have a copy of the program's objectives and the monitoring and evaluation plan?
- To what extent are program monitoring data used for planning and/or revising program implementation?

B. Staff Training

- How effective is the process for continual improvement in the knowledge, skills and competencies of the program's staff, including needs assessment, training methods, content of training and follow-up assessment?
- How is trainee performance in new skill areas monitored?
- Are adequate resources dedicated to staff training?

C. Supervision of Program Staff

- How effective is the process of directing and supporting staff so that they may effectively perform their duties? Include an assessment of supervisory leadership, methods, style, training, work planning and problem solving.
- Are the numbers, roles, workload of personnel and frequency of supervisory visits appropriate for meeting the technical and managerial needs of the program?

D. Human Resources and Staff Management

- Discuss the program's personnel management system.
- Are key personnel policies and procedures in place, and are there job descriptions for all positions in the PVO – headquarters, field program and partners collaborating on the project?
- Describe the morale, cohesion and working relationships of program personnel and how this impacts program implementation.
- Describe the level of staff turnover in the program and its impact on program implementation. If this is an issue, what are the current strategies for staff retention?
- What plans does the project have for facilitating its staff's transition to other paying jobs when the project ends?

E. Financial Management

- Discuss the management and accountability for program finances, budgeting, and financial planning for sustainability of both the program and local NGO partners.

F. Logistics

- What impact have logistics (procurement and distribution of equipment, supplies, vehicles, etc.) had on the implementation of the program?
- What logistics challenges will the program face during the remainder of the program?

G. Information Management

- Is there a system in place to measure progress towards program objectives?
- Is there a systematic way of collecting, reporting and using data at all program levels?
- Does the program use data to inform management decision-making?
- Discuss the purpose, methods, findings and use of any assessments (mini surveys, focus groups, etc.) conducted by the program.

- How effective is this system? What types of data are generated? What is the frequency and method(s) of data analysis? Who is involved in collection and analysis of data
- Describe the extent to which the program is using and supporting other -existing data collection systems (i.e. government).

H. Technical and Administrative support

- Discuss types and sources of external technical assistance the program has received to date, and how timely and beneficial this assistance has been.
- What are the anticipated technical assistance needs of the program in the upcoming two years?
- Discuss PVO/headquarters and regional support of the field program. Approximately how much time has been devoted to supporting this program?

4. Other Issues Identified by the Team

Discuss additional issues identified by the team during the course of the evaluation.

5. Conclusions and Recommendations

This section presents the main conclusions based on this mid term evaluation. It should outline the recommendations for USAID/BHR/PVC, the program staff and collaborating partners for the next 2 years of the program.

6. Results Highlight

One page "results highlight" ["Tear-out sheet"]

If appropriate, provide a one-page description of some element of the program, with supporting data, that would make a good stand-alone communication piece for the PVO or USAID to distribute, or to post on the office web page.

II. The Action Plan (to be completed by the PVO team)

Developing an action plan for implementing the recommendations that emerge from the mid-term, by coming together, is a major window of opportunity for both partnership and stakeholder capacity building. Sustainability is best achieved when the practice of stakeholders periodically reexamining work and procedures is institutionalized, and by identifying what is working well, where unexpected problems arise or where new

approaches or systems are tried. The importance of encouraging local actors to examine situations, prioritize needs, and use creative problem solving to improve their well-being cannot be overstated. In addition to the lessons learned and expressed by local stakeholders, the opportunity to have an exchange of ideas with others who have wide involvement with child survival activities in different places potentially makes the mid-term evaluation a pivotal learning experience. While the mid-term evaluation highlights the progress made towards results to date, documents innovative approaches and promising practices, uncovers areas of challenge where more attention or new approaches would be useful, evaluates concerns and suggestions of stakeholders at all levels and considers the incorporation of new ways of doing things, ***the resulting Action Plan should be carefully constructed with high participation and consideration of many viewpoints and adopted by the vast majority of stakeholders.***

III. Attachments

1. Baseline information from the DIP

For this section, copy the requested information from the stated sections of the approved DIP and indicate if substantial changes have been made since approval of the DIP.

a. Field Program Summary:
   From Section A of the DIP, copy the table "Estimated Program Effort and USAID funding by intervention" and the table "Program Site Population: Children and Women".

b. Program Goals and Objectives:
   From Section D of the DIP, cite the Program Goals and Objectives including information on measurement methods and major planned results.

c. Program Location:
   From Section E of the DIP, copy the information about program location, and the groups to whom program activities are addressed, as well as information about existing health infrastructure.

d. Program Design:
   From Section G of the DIP, briefly describe the program design.

e. Partnerships:
   From Section I of the DIP, copy the information about partnerships with the public sector, NGOs and community based organizations.

f. Health Information System:
   From Section L of the DIP, describe the program's proposed health information system and the mechanism for program monitoring.

2. Team members and titles

3. Assessment methodology

Provide a brief discussion of the assessment methods used by the mid-term evaluation team to assess essential knowledge, skills, practices, and supplies of health workers and facilities associated with the program.

4. List of persons interviewed and contacted

5. Diskette with an electronic copy of the report in MS WORD

6. Special reports

If appropriate, include special reports or analyses produced by the program

THE FINAL EVALUATION

The final evaluation provides an opportunity for all program stakeholders to take stock of accomplishments, and to listen to input or feedback from all types or levels of beneficiaries, including women and children and their families, other community members and opinion leaders, health workers, health system administrators, local partners, other organizations and donors. The final evaluation includes the comparison of baseline and final data; elaborates the lessons learned from the model or implementation approach; identifies promising practices and opportunities for scale-up, replication or use of the approach in a broader context. The final evaluation offers yet another opportunity for the program to benefit from the outside viewpoint of a consultant.

I. The Evaluation Report

The final evaluation report shall address each of the following elements. If any of these items is not covered by the evaluation, please explain why. Except for the summary, redundant sections may be cross-referenced.

1. Summary

Provide a brief (1-2) page executive summary of the report that includes:

- Brief description of program and objectives
- Main accomplishments of the program.
- Highlights from the comparison of the baseline and final survey.
- Priority conclusions that have resulted from this evaluation.

2. Assessment of Results and Impact of the Program

The DIP, presented in the first year of the program, is the official work plan of the program. The outline below provides guidance for the evaluation team for examining the program's technical child survival interventions and cross-cutting approaches across those interventions.

A. Data Summary Chart

Construct a chart containing baseline and final data for all of the program objectives/indicators

B. Results – Technical Approach

- Provide a brief overview of the program approach--- objectives, location, intervention mix, general program strategy. More detailed documentation may be provided in the annexes.
- Present results by intervention area.
- Discuss the results of the program as measured by comparison of the baseline and final survey.
- Describe factors affecting achievement of program objectives.
- For objectives not fully achieved, discuss contributing factors.
- For each intervention, what are the main lessons learned?
- Discuss special outcomes, unexpected successes or constraints

- If the program is continuing, describe how will the lessons learned be applied to future activities.
- Discuss any new tools or approaches that the program developed or used; operations research or special studies that were conducted, and how findings will be used.

C. Results - Cross Cutting Approaches (address each section if applicable)
This section discusses results of approaches that cross intervention areas. These are activities that may or may not have been articulated specifically in the DIP, but have emerged as critical activities in the program. In discussing cross cutting activities, discuss the impact of the activities on the program and how the information will be used in future activities.

Examples of cross-cutting approaches include behavior change strategies, community mobilization, partnership building activities (e.g. negotiations, agreements achieved, linkages formed), training, outreach strategies, advocacy or community or awareness building strategies, strengthening information management systems. The evaluation team may discuss any other cross cutting activities that were pertinent to the program. Also include modifications and explanations/rationale for those modifications, and crosscutting activities added to the work plan.

The following are specific questions for several crosscutting approaches.

(i) Community Mobilization

- How effective was the approach for community mobilization?
- Were the objectives met for community mobilization?
- What lessons were learned for future community mobilization efforts?
- Is there demand in the community for program activities to continue? How was this measured?
- What are the plans for sustaining these activities once the program closes?
- Are the sustainability plans realistic?

(ii) Communication for Behavior Change

- How effective was the approach for communication and behavior change?
- Were the behavior change objectives met?
- What were the lessons learned?
- How will these behaviors be sustained once the program closes?
- Are the sustainability plans realistic?

(iii) Capacity Building Approach

Discuss the capacity strengthening results of this program. This may include how the program improved the capacity of the PVO, the public sector partners, NGOs and/or community-based partners. Use the questions below to guide your assessment.

Strengthening the PVO Organization

The external reviewer and the PVO will assess the capacity building effects this program had on the overall organization – US based headquarters as well as field operations. This may require a visit by the external reviewer to the PVO headquarters.

- How has this grant improved the capacity of the PVO to design, implement and evaluate effective child survival programs?
- Have effects of this grant influenced other programs operated by the PVO?

Strengthening Local Partner Organizations

- Discuss organizational capacity building with the local partners
- Describe the outcomes of any assessment, formal or informal, conducted at the outset of the program to determine the organizational capacities of local partners. (These were not required under CS XV, but may have been performed.)
- How have the organizational capacities of the local partner changed since the beginning of the program? What factors/interventions have most contributed to those changes?
- What are the lessons learned in capacity building of local partners?

Health Facilities Strengthening

- How effective was the approach for improved management and services at health facilities?
- What tools did the program use for health facility assessments? Were the tools effective for measuring change?
- What were the lessons learned?
- What are the plans for sustaining these activities once the program closes? Are the sustainability plans realistic?
- Discuss linkages between these facilities and the communities.

Strengthening Health worker performance

- How effective was the approach for strengthening health worker performance?
- Were the performance objectives met?
- What were the lessons learned?
- What are the plans for sustaining health worker performance once the program closes?
- Are the sustainability plans realistic?
- Were the tools used to assess the results of improving health worker performance sensitive enough to measure change over the life of the program?
- Did the program address the gaps between performance standards and actual performance?

Training

- How effective was the training strategy?
- Were the training objectives met?
- What evidence is there that the training strategy has resulted in new ways of doing things, or increased knowledge and skills of the participants?
- What were the lessons learned?
- What are the plans for sustaining these activities once the program closes?
- Are the sustainability plans realistic?

(iv) Sustainability Strategy

- Were the sustainability goals and objectives that were articulated in the DIP met?
- What is the status of the phase over plan, and is it on schedule? After the program, will there be any continuing technical and management assistance?
- Have the approaches to build financial sustainability-- (e.g., local level financing, cost recovery, resource diversification, corporate sponsorships) been successful?
- How has the program built demand for the services and is the community sufficiently engaged to influence how services are delivered?

3. Program Management

This section provides an overall discussion of program management issues, at HQ, within the field program, with partners and with the community. The objective is to assess the strengths and weaknesses of the management support systems, i.e., planning, teamwork and communication, financial management, information management, personnel management, supervision, training, logistics, etc. The aim is to identify specific ways in which the management support systems contributed to or hindered program implementation.

Planning

- How inclusive was the program planning process and what effect did this have of the implementation process?
- To what extent was the DIP work plan practical? Based on the PVO and its partner's experience with this program, what could be added to the DIP preparation and review process that would have strengthened implementation?
- What were the gaps in the DIP and how were they addressed by the program staff?

Staff Training

- What change is there in the knowledge, skills and competencies of the program and partner's staff? Is there evidence that the staff has applied these skills both within the program and in another context?
- Were adequate resources dedicated to staff training?

- What are the overall lessons learned about building the capacity of program staff?

Supervision of Program Staff

- Was the supervisory system adequate?
- Is the supervisory system fully institutionalized and can it be maintained?
- Is there evidence that the program's approach to strengthening supervisory systems has been adopted beyond the program?

Human Resources and Staff Management

- Were essential personnel policies and procedures in place to continue the program operations that are intended to be sustained?
- Describe the morale, cohesion and working relationships of program personnel and how this affected program implementation.
- Describe the level of staff turnover over the life of the program and the impact on program implementation.
- Were plans developed to facilitate staff transition to other paying jobs at the end of the program?

Financial Management [to be completed with the field staff and lead evaluator]

- Discuss the adequacy of the PVO's and partners' financial management and accountability for program finances and budgeting. If the project budget was adjusted, explain why. Do the program implementers have adequate budgeting skills to be able to accurately estimate costs and elaborate budgets for future programming?
- Are adequate resources in place to finance operations and activities that are intended to be sustained beyond this cooperative agreement?
- Was there sufficient outside technical assistance available to assist the grantee and its partners to develop financial plans for sustainability?

Logistics

- What impact have logistics (procurement and distribution of equipment, supplies, vehicles, etc.) had on the implementation of the program?
- Is the logistics system sufficiently strong to support operations and activities that are intended to be sustained?

Information Management

- How effective was the system to measure progress towards program objectives?
- Was there a systematic way of collecting, reporting and using data at all program levels? Cite examples of how program data was used make management or technical decisions.
- Is the program staff sufficiently skilled to continue collecting program data/information and to use it for program revisions or strengthening?

- Did the program conduct or use special assessment, mini survey focus groups etc. to solve problems or test new approaches? Give examples of the research, use of data, and outcome.
- To what extent did the program strengthen other existing data collection systems (i.e. government)?
- Do the program staff, headquarters staff, local level partners, and the community have a clear understanding of what the program has achieved?
- How have the program's monitoring and impact data been used beyond this child survival program?

Technical and Administrative Support

- Discuss types and sources, timeliness, and utility of external technical assistance the program has received to date.
- What assistance did the program need that was not available? How could PVO headquarters and/or USAID better plan for the technical assistance needs of PVO programs?
- Discuss PVO/headquarters and regional technical and managerial support of the field program. Approximately how much time has been devoted to supporting this program?

Management Lessons Learned

- List the overall management lessons learned.

4. Other Issues Identified by the Team

- Discuss additional issues identified by the team during the course of the evaluation.

5. Conclusions and Recommendations

- This section presents the main conclusions based on this final evaluation.
- Based on the data from the baseline and final assessments, presented in the summary chart, discuss whether the objectives were met, and your conclusions regarding the success of the program in meeting its objectives
- Describe the most important achievements, constraints and other factors affecting program performance.
- Outline the lessons learned.
- Present any recommendations for USAID/BHR/PVC, the program staff and collaborating partners regarding future work or directions.

PVO headquarters should present a short section on how they intend to use the lessons learned and communicate this information to the broader development community.

6. Results Highlight

One page "results highlight" ["Tear-out sheet"]

If appropriate, provide a one-page description of some element of the program, with supporting data, that would make a good stand-alone communication piece for the PVO or USAID to distribute or to post on the office web page. This might be an aspect of the program that was particularly successful and deserves further documentation.

II. ATTACHMENTS

1. **Team members and titles**

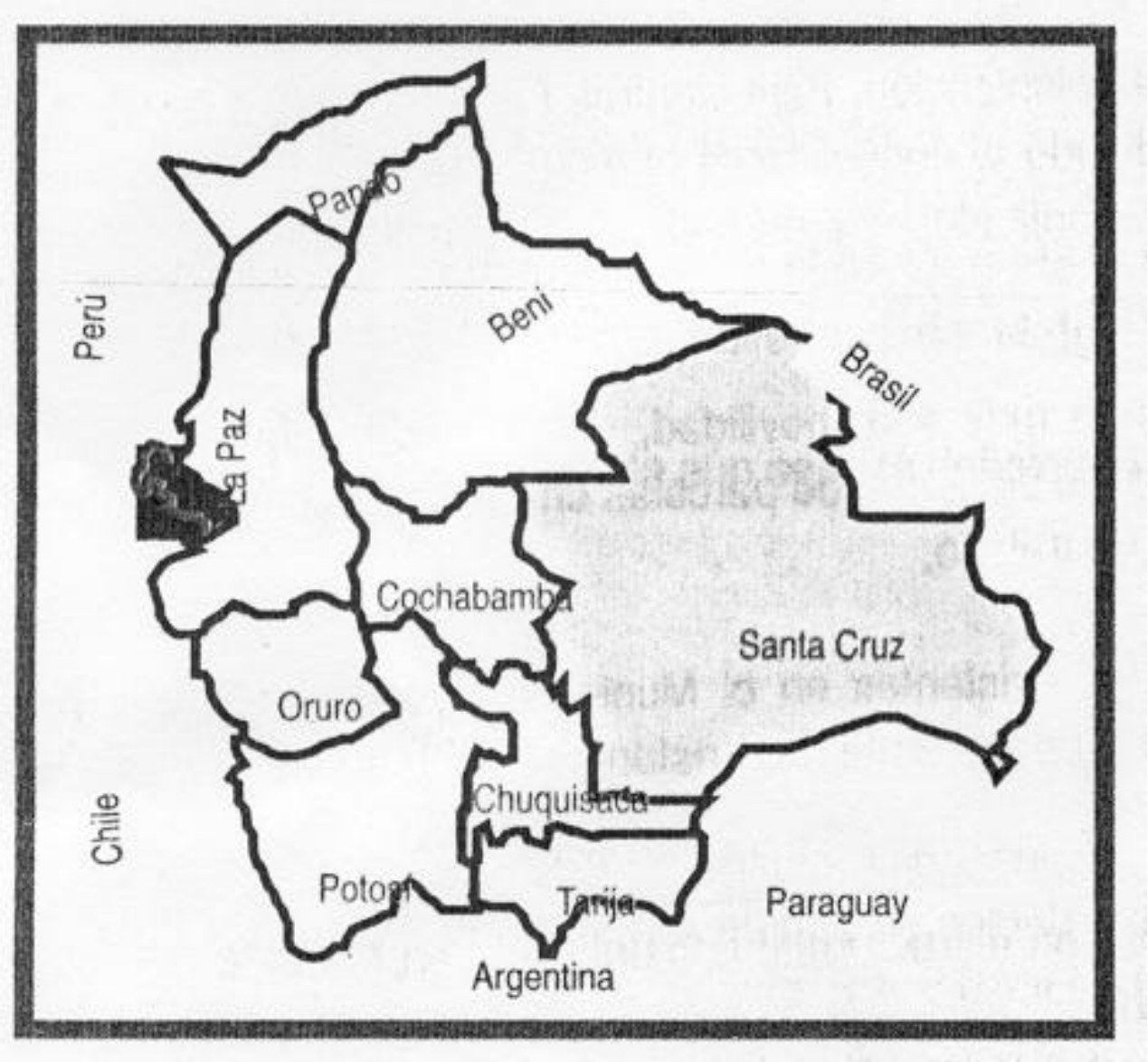
2. **Assessment methodology**
   Provide a brief discussion of the assessment methods used by the final evaluation team to assess essential knowledge, skills, practices, and supplies of health workers and facilities associated with the program.

3. **List of persons interviewed and contacted**

4. **Diskette with electronic copy of the report in MS WORD**

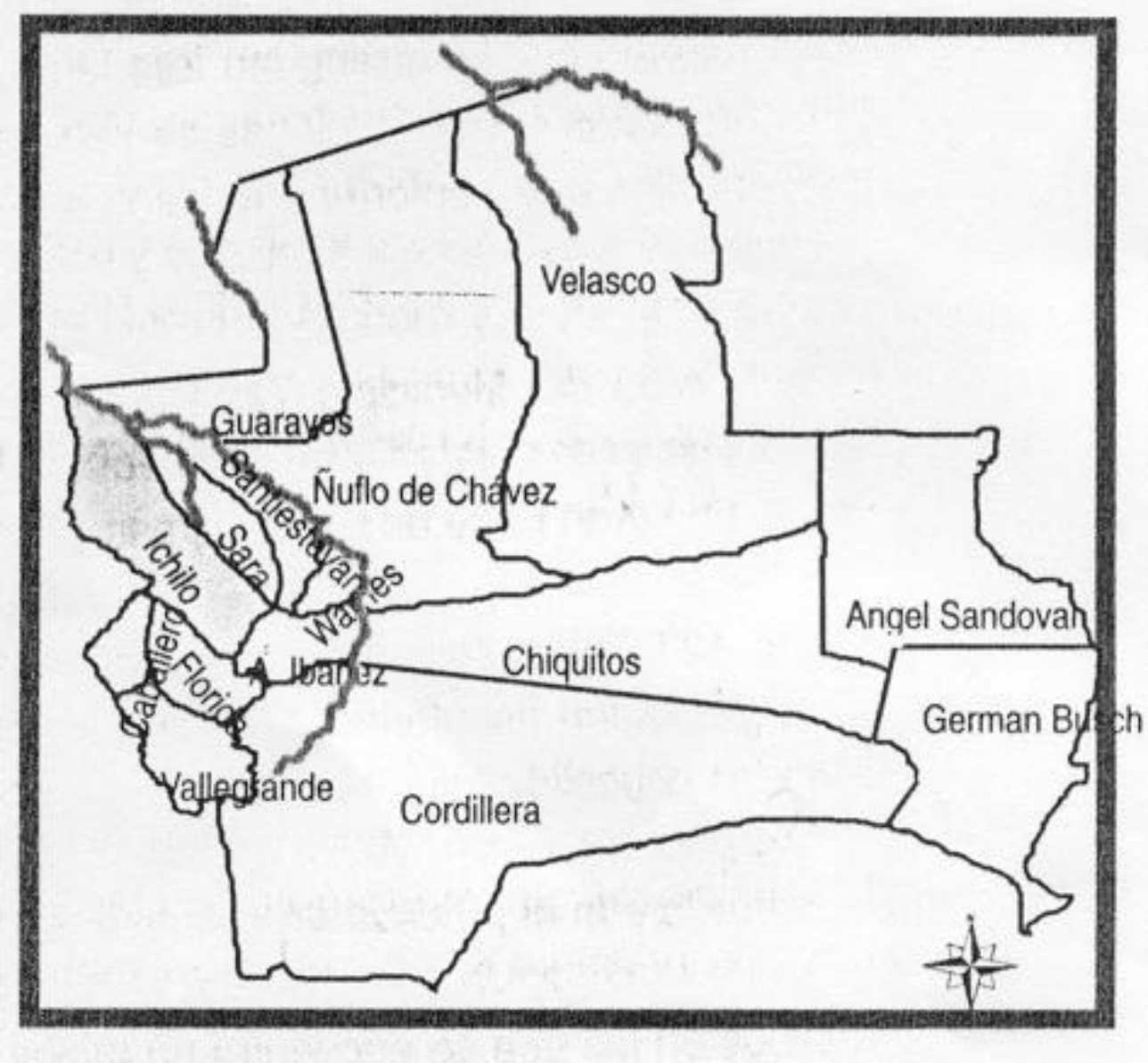
5. **Special reports**
   If appropriate, include special reports or analyses produced by the program

Bolivia



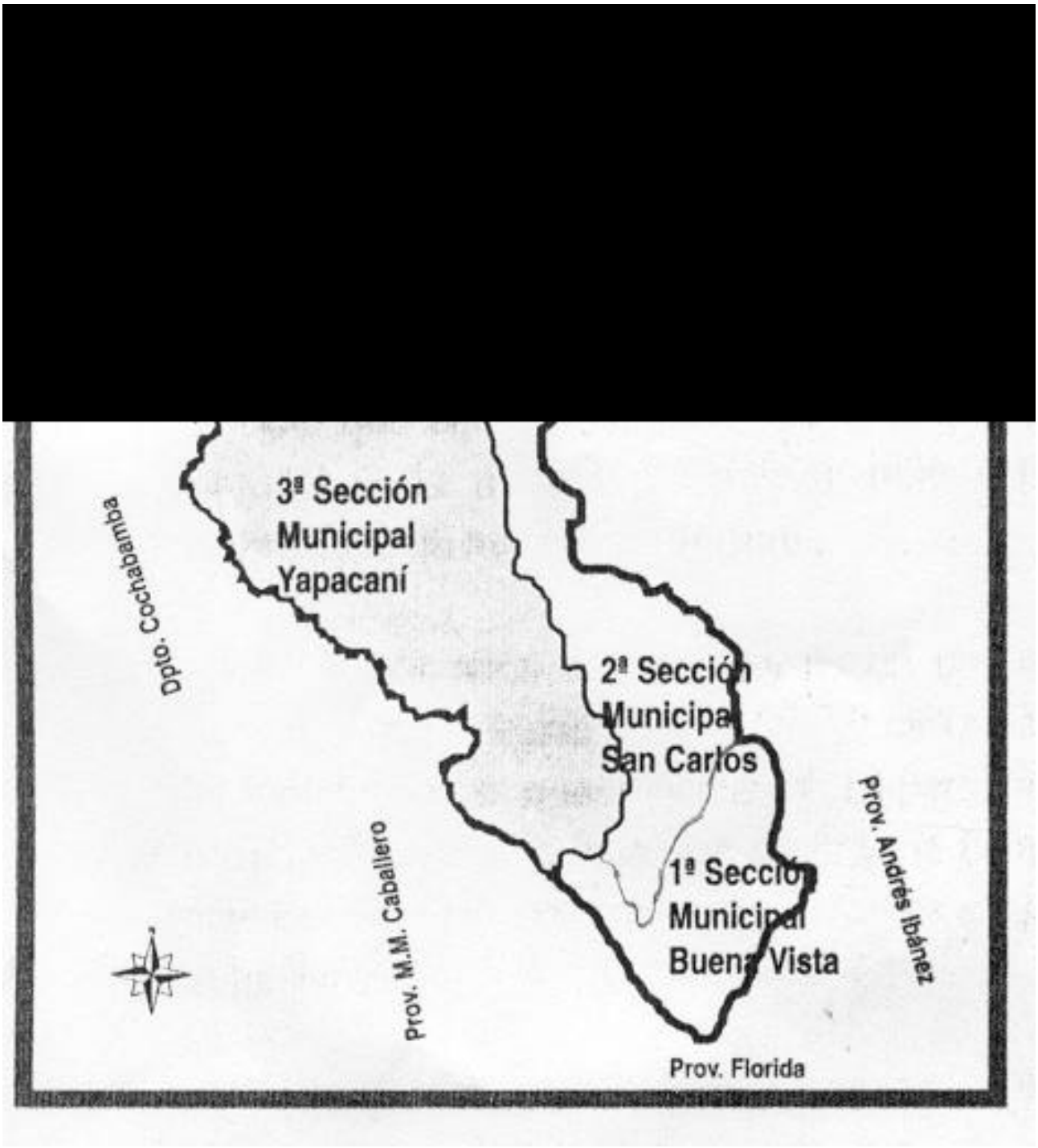
Scale: 1 inch = 173 miles

Santa Cruz



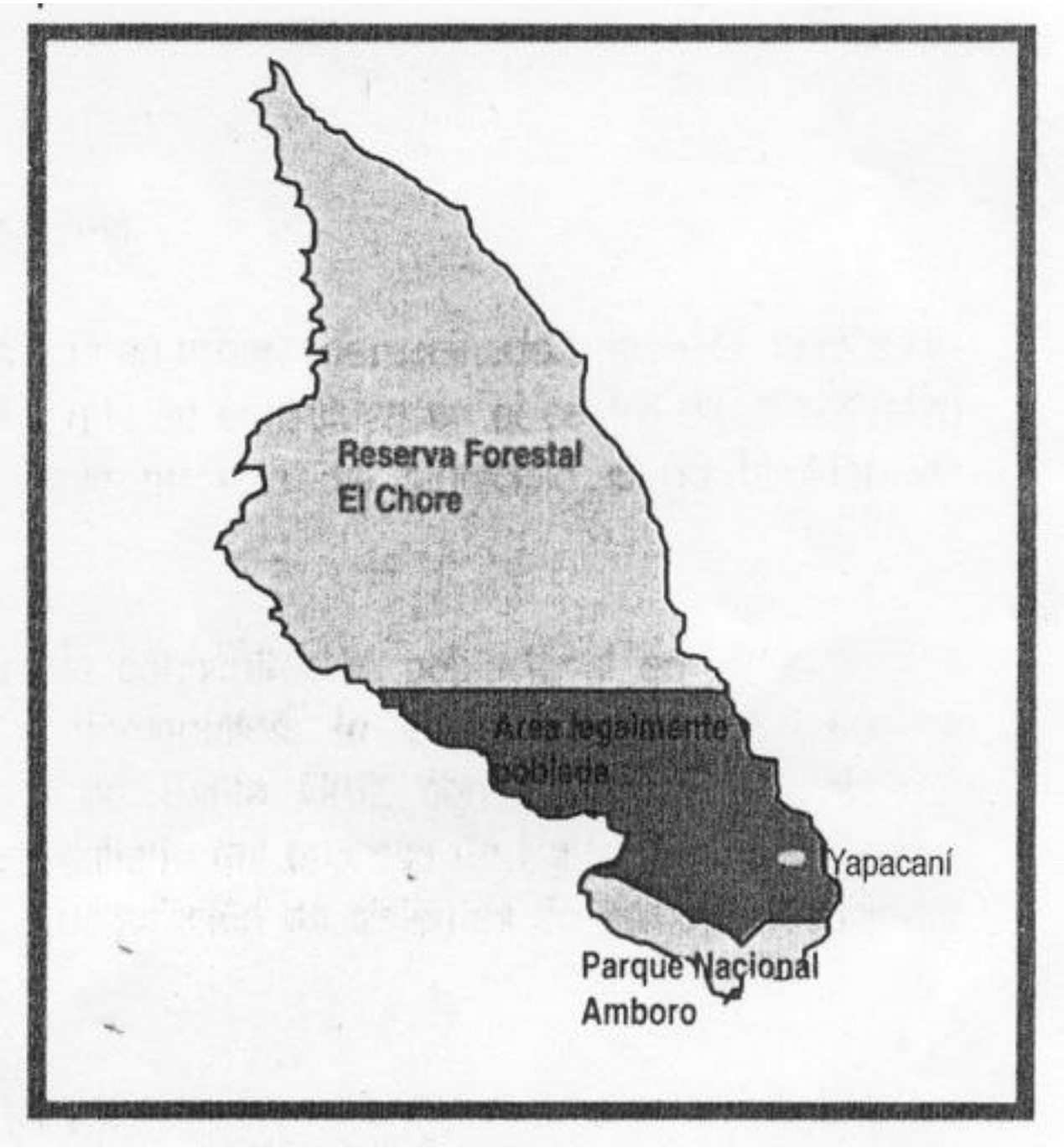
Scale: 1 inch = 83 miles

Ichilo Province



Scale: 1 inch = 23 miles

Legally populated area of Ichilo Province



Scale: 1 inch = 20 miles

Comunidad	Población Sg/Proyec. a 1999	**Población Estimada año 2000**	**Población Acumulada**
Buena Vista	2,873	3,014	3,014
Caranda	568	596	3,610
Comunidad San Miguelito	204	214	3,824
La Arboleda centro (carretera a Buena Vista)	670	703	4,527
Comunidad Delicias	197	207	4,734
Sdto. Potrerito - Cairito - Sdto. Carmen	273	286	5,020
Comunidad El Cairo	267	280	5,300
Comunidad Potrero Marcelo	177	186	5,486
Comunidad Sta. Bárbara	221	232	5,718
Comunidad Aguas Calientes	185	194	5,912
Sdto. Colorado	202	212	6,124
Sdto. Moterrico	135	142	6,266
Sdto. Salitral	105	110	6,376
Comunidad V. Diego	355	372	6,748
Zona dispersa de Espejitos - Comunidad Espejitos	261	274	7,022
Sindicato Sta. Rosa	209	219	7,241
Comunidad Espejillos	155	163	7,404
Camino Villa Amborò	172	180	7,584
Sdto. El triunfo	114	120	7,704
Sdto. El Carmen	577	605	8,309
Cooperativa el Cheyo	213	223	8,532
Sdto. Recompensa I.	419	440	8,972
Camino Huaytu	905	949	9,921
San Isidro	512	537	10,458
Comunidad San Isidro	194	204	10,662
Camino San Isidro - Caranda	318	334	10,996
San Javier	325	341	11,337
Comunidad Palacios	51	54	11,391
Comunidad San Javier	274	287	11,678
San Miguel	490	514	12,192
Comunidad San Miguel Rincón	243	255	12,447
San Miguel afuera	247	259	12,706

San Carlos (Urbano)	3,223	3,381	16,087
Santa Fé de Yapacani	4,029	4,227	20,314
Buen Retiro	1,544	1,620	21,934
Colonia Villa Antofagasta	605	635	22,569
San Juan de Yapacaní	2,344	2,459	25,028
Sindicato Estancia Raúl Menacho	305	320	25,348
San Pedro de Yapacaní	202	212	25,560
Comunidad María Auxiliadora	137	144	25,704
Estancia Hugo Molina	112	117	25,821
Sdto. 6 de Agosto - Sdto. Chapaco	111	116	25,937
Estación Ayacucho - El Carmen	177	186	26,123
Sdto. Guadalquivir	232	243	26,366
Sdto Los Andes - Sta. Fé - 2 de Agosto	225	236	26,602
La Enconada	395	414	27,016
Sindicato Bolivar, Villa Montes y Ana Rancho	133	140	27,156
Villa Cotoca	177	186	27,342
Faja Litoral - Sdto. Mejillones	256	269	27,611
Faja Calama	134	141	27,752
Sdto. El Jochi y 14 de Septiembre	165	173	27,925
Sdto. San Luis, Abaroa y 2 de Agosto	260	273	28,198
Estación Buen Retiro	202	212	28,410
Sdto. Aguas Blancas	174	183	28,593
Camino Antofagasta Buen Retiro	86	90	28,683
Sdto. Piquiri	147	154	28,837
Comunidad San Lorenzo	341	358	29,195
Zona San Carlos - La Lidia	182	191	29,386
Camino San Lorenzo	181	190	29,576
San Carlos - Buena Vista Santa Fé	482	506	30,082
Sdto. Surutu - Atacagua	114	120	30,202
Sindicato Los Mojos	84	88	30,290
Aguas Bonitas	161	169	30,459
Sdto. Oriente Chichas	16	17	30,476
Sdto. Mataracu y Sdto. 2 de Agosto	90	94	30,570
25 de Septiembre	281	295	30,865
Colonia Japonesa San Juan	1,040	1,091	31,956

Villa German Busch	8,585	9,006	40,962
San Germán de Yapacani	824	864	41,826
Sdto. 16 de julio	154	162	41,988
Sdto. Arboleda - La Ele	252	264	42,252
Sdto. 24 - 22 - 8 de Septiembre	378	397	42,649
Illimani Norte - Sur	151	158	42,807
Puerto Grether - Coop. Sta Fé	286	300	43,107
El Palmar	83	87	43,194
Sdto. Maranjal	337	354	43,548
Comunidad San Jose Alto	369	387	43,935
Sdto. San Jose Bajo	108	113	44,048
Sindicato Las Petas	96	101	44,149
Sindicato San Salvador -* Sindicato San Antonio	261	274	44,423
Sindicato Valle Hermoso - Comunidad Abanico	146	153	44,576
Abanico I	242	254	44,830
Area Dispersa Hata Entrada a Abanico - Comunidad I	158	166	44,996
Area Dispersa Hasta el Rio Chore	248	260	45,256
Sdto. Luna Nueva	266	279	45,535
Villa Chore - El Palmar	444	466	46,001
Sdto. Barrientos	273	286	46,287
Villa Chore	425	446	46,733
Sdto. Molle 27	228	239	46,972
Zona el Palmar - San Germán	299	314	47,286
Sdto. Litoral	212	222	47,508
El Palmar UV-1, UV-2	552	579	48,087
Sindicato Ichilo	202	212	48,299
Sdto. 3ra. Transversal - Villa Unión	107	112	48,411
6 de Agosto - San Isidro	220	231	48,642
Sindicato Condor	374	392	49,034
Sindicato Abaroa	374	392	49,426
Central Km 50 - 45	164	172	49,598
Central Cooperativa Viña del Mar	90	94	49,692
Puerto Abaroa	386	405	50,097
Sindicato Chorolque - Km. 35 - Km. 38	242	254	50,351
Cooperativa 1ro. de Mayo	240	252	50,603
Agrario Nuevo Horizonte	219	230	50,833
Coopeativa 2 de abril	181	190	51,023
Villa Nuevo Horizonte	264	277	51,300
Sdto. Challivito	89	93	51,393
Cooperativa 15 de Agosto	173	181	51,574
Sdto. Los Pozos	263	276	51,850
Sdto. Puerto de Palo	106	111	51,961
Comandito - Abanico 34	127	133	52,094
Cooperativa 27 de Mayo	256	269	52,363
Cooperativa Linares - San Miguel Troncal	111	116	52,479
Comunidad Villa Esperanza	98	103	52,582
Sindicato Abanico 21 - Villa Imperial	199	209	52,791
Comunida S, Bolivar - Sdto. Abanico 18	162	170	52,961
Abanico km 15	180	189	53,150
Abanico 2 - 3 - Arroyo Agua Dulce Km - 10	149	156	53,306

Bolivia

Ministry of Health

Strategic Plan

2000

CONTEXTUAL ANALYSIS OF THE STRENGTHS, OBSTACLES, WEAKNESSES AND THREATS IN THE ICHILO DISTRICT

STRENGTHS

- Interinstitutional coordination

- Convocation capacity
- There are national programs
- There are local projects
- There is qualified personnel
- Balanced distribution of Human Resources
- Presence of an NGO.
- There are equipped health centers that have infrastructure (except in San Carlos)
- There are means of transport
- Motivated human resources
- Good vaccination coverage
- Much research has been carried out
- There is a district program for professional development and permanent training for the health personnel
- There are trained Community Health Promoters in the areas
- Team work is carried out in the areas and district
- Specialized technical support exists at a district level

WEAKNESSES

- There are no administrative or management systems
- High personnel turn over rate
- One year of work in the countryside requirement
- Registration, analysis and flow of information
- There is not an appropriate supervision model
- There is no analysis, transmission or application of the research that is carried out in the district
- There is no epidemic profile at a district level.
- Lack of administrative and negotiation capacity
- Lack of agreements with NGO's at both the area and district levels
- Lack of quality and warmth in the health services
- Lack of own resources for operative expenses in the case of the areas and for administrative ones at the district level
- Lack of a reference system and counter reference system in the handling of specific cases
- There are no job description or internal regulations manuals at the areas or the district level
- Health care attention norms, procedures and protocols are unknown
- There is no patient or health service user follow-up system
- Lack of an IEC program
- Need to develop a network of Community Health Promoters at the district level
- The health assistant´s relationship with the community needs to improve
- The communication network is not complete
- The transfer of the Ichilo Hospital to the Municipality of San Carlos was not carried out

OPPORTUNITIES

- There is good acceptance of health care in the community and in the municipalities
- International cooperation is interested in supporting the district
- There is expectation and credibility of the work that is being done in the Department of Health Services environment
- There are possibilities of receiving resources from NGOs
- The natural resources of the province are an incentive to investment and to the improvement of the quality of life of the local population.

THREATS

- Suspension of basic services because of lack of payments by the municipalities
- Sectarian political differences at an administrational and municipal level
- Direct agreements amongst NGOs and municipalities that endanger the resources of co-participation because they don´t take into account the administrations of the area and the district
- Political interference from the central administrations in the district and area administrations
- High turn over rate of mayors, more than three mayors per administration.
- Flaws in appropriate supply systems from the central administration
- Standstill of district council operations and of the municipal health councils
- Resistance in cultural and religious sectors of the society to the sexual and reproductive health information and material

PROBABLE SCENARIOS

POLITICAL	ECONOMIC	SOCIAL
The whole population is aware of the Popular Participation law, and takes ownership of it as a decision making and control instrument in the municipal and provincial policies development. The surveillance committees fulfill their functions in an autonomous way and in coordination with the base and sector territorial organizations to comply with the Annual Operation Plans. The Health Reform which is in progress is strengthening the service network and the health policies. The municipal councils and health district regularly work with norms and procedures in the decision making process. The municipal association processes and strategies to develop development policies has been deepened and strengthened, especially in the area of health. The decentralization law is in practice and the district is autonomous in its administrative and management systems. The health sector plays an active part in the application of the educational reform law.	The economic income of families has improved because of the productive investments in the area of Ichilo and the development of family production support politicies. The municipalities capacity to obtain resources for social investment and for investment in health has improved. The funds of the basic health insurance appropriately manage to cover the expenses of the services. The reinvestment of utilities generated by the health sector, in the needs and operative expenses of it, is guaranteed. There is an impact of the economic improvements in the improvement of people´s health **TECHNICAL** The population's credibility toward the health services is increasing. The network of services can count upon stable and well trained human resources that guarantee technical and human quality in health care attention. The proportional relation of personnel and services to population has improved in Ichilo.	The quality of life of rural and urban families in the province of Ichilo has improved. There are minimum basic services such as drinking water, light and basic drainage. Housing conditions in the county have improved. The illiteracy rate has gone down. Maternal and infantile morbidity and mortality rate has diminished. The relationship of food and article supply to people has improved. Programs directed to the integral development of the adolescents have been implemented. The main risk factors associated to the infantile maternal morbi-mortality rate in the community and in the services have diminished. Local culture is promoted and national cultural diversity is respected. The barriers, myths and beliefs that interfere with social development have diminished. There is more social and individual awareness of the

The strategic alliance between health, education has strengthened for joint development. The Bolivian democratic system has been strengthened and guaranteed by the participation of its citizen. Greater participation of women in the power circles and in the decisions taking process being promoted.	The service network has a stable and permanent communications system. The reference and countereference system works at all levels of the services network.	need to protect and preserve the environment as a result of of the application of environmental politicies . The interinstitucional coordination to execute the development programs and obtain resources continues.

OUR VISION:

The Ichilo district is an administrative unit, capable of leading and coordinating the integral development of the health system in the province of Ichilo. This area is also capable of developing creative and innovative proposals in relation to the population's needs and demands. For this purpose, it has an organized network of services that offer technical and human quality in health care attention through highly qualified, motivated human resources that are committed to regional development.

The Ichilo district has been a catalyst in integral development proposals through the interinstitucional coordination with others such as education, municipalities, NGOs, base organizations, etc.

As a result of its managerial and administrative actions, and its attention to people, the Ichilo district has become a model district at a regional and national level because it has reached indicators that contribute to improve the quality of life of all the population in that area.

OUR MISSION

The health district of Ichilo has as its mission to promote and offer services and integral attention to guarantee the individual and collective health of the population in the province of Ichilo. It offers quality services based on warmth, solidarity, universality, accessibility, justness and organized participation of a community that respects the customs of the people and works in coordination with other sectors of the society and the State.

DESIRED OUTCOME OVER A FIVE YEARS PERIOD:

Reduce the maternal mortality rate due to pregnancy, childbirth and puerperium problems

Reduce the perinatal morbidity and mortality rate

Reduce the infantile mortality rate

Bring down the incidence of tuberculosis to national goal levels

Decrease the rate of malnutrition

LINE OF ACTION

1. Management

- Improve the managerial and administrative capacity

2. Interinstitucional administration

- Develop mechanisms of interinstitucional and intersector coordination

3. Training

- Have qualified personnel that are able to offer the appropriate technical and human quality services

4. Information, Education and Communication

- Contribute to the decrease of risk factors associated to the maternal and infantile morbi-mortality rate due to the customs, attitudes and practices amongst the population

5. National programs

- Fulfill the administrative commitments taken on with the Departmental Health Service
- Reach the national goals proposed by the Ministry of Health and the Departmental Health Service

6. Improvement of the service provision network

- Have an appropriate infrastructure and equipment network of services that guarantees quality attention to the population.
- Guarantee the continuous supply of resources..

7. Research and epidemic control

- Have an analysis, information, evaluation and registration system at all levels of the service network that allows the taking of opportune decisions on the predominant health problems.

PLAN FOR THE ICHILO DISTRICT 2000

BUENA VISTA - SAN CARLOS - YAPACANI

PPESSR/DFID -. BELGIAN COOP - CEPAC - QAP

1. - MANAGEMENT. -

RESULTS	INDICATORS	MEANS DE VERIFICATION.
*Have a planning, follow up, and evaluation system in the Ichilo district.	• Strategic Plan is made, approved and distributed to the authorities and the population. • Plan 2000 is approved and being executed.	Document Document
* Design and apply a flowchart, a manual of job functions and internal regulations in the Ichilo district.	• All the personnel knows and complies with the flowchart, the job functions established in manual and the internal regulation.	Supervision records
* Have a standardized, administrative, financial and accounting system in the district, areas and sectors.	• The administrative and accounting system is installed and working in the district and the areas. • Management and administrative personnel are trained in the administrative, financial and accounting system	Documents of procedures Training and supervision records
* Design a human resource administration system.	• Redistribute the personnel in accordance to their needs and capacities and those of the population and the area • Apply the policy of incentives and rewards	Work documents Records Records
* Incorporate other service providers into the health system , recognizing their nature through agreements.	• Signed and supervised agreements with NGO´s. • Agreements with clinics, doctor´s offices, private pharmacies to provide reports on cases attended and	Document. Supervision Records Document. Reports. Receipts.

	economic contribution. • Agreement with the hospital San Juan de Yapacani.	Document
* Designed, validated and applied supervision training plan, by levels.	• Revision and modification of the supervision manual. • Monthly supervision of area and sector. • Monthly supervisions of the district and area.	Document Records and supervision reports Records and supervision reports

2. - IMPROVEMENT IN SERVICE PROVISION

RESULTS	INDICATORS	MEANS OF VERIFICATION
* Families in the province of Ichilo use the provided human and technical quality services at the appropriate level of the network	• 80% of users state satisfaction with services received • 58.211 external medical visits • 50% increase in the use of the services in the sectors • 100% of the areas and sectors have Essential Medications of the Basic Security System	Survey National Health Information System National Health Information System Records, Inventory
* Create quality control guarantee teams in the establishments of the service network	• Five quality control teams working in the district by the end of the year • 80%of the service personnel knows the processes design methodology • Approval of a Papanicolau and STD laboratory for the north	Records Memoirs, Reports. Resolution

* Increased in resolution, reference and counter reference, capacity at each level of the network.	• 75% of obstetric complications attended to and resolved according to the norms of the network • 90% of the first level health problems are resolved according to norms. • 100% of the services make projects to improve their infrastructure, equipment and training challenges.	Reports Reports, records Documents
* Strengthened community health promoters organizations connected to the service network	• All the sectors have a team of active community health promoters. • National community health promoter congress • 100% of the community health promoters and their families receive free medical attention at the district services	Records of the community Reports Documents, Report Registration book

3. – NATIONAL PROGRAMS

RESULTS	INDICATORS	MEANS DE VERIFICATION.
* Achieve the goals assumed in the administrative commitment.	• Institutional childbirth 75% • Hospital neonatal mortality rate 10% • Four pregnancy Check-ups 60% • Pneumonia < 5 years 10% • Acute Diarrhea < 5 years 50% • DPT 3rd dose. 100% • Occupancy rate with 2nd level hospital bed 45%	National Health Information System

* Contribute to the achievement of the objectives in sexual and reproductive health ,tuberculosis, infantile and Belgian survival. projects.	• 90% of the children of < 2 years of age have a complete CSI in the service • 100% of children youngerr than 2 years of age have all of required vaccines • 24% of women at reproductive risk uses modern FP methods • 90% of the prospective home births are assisted by qualified personnel • 100% of pap samples are returned to the services with results reported back within one month • 100% of the detected STDs receive appropriate treatment • 100% BK + receive treatment and focus control. • 100% of newborns begin nursing within the first half hour after birth. • 90% children < 6 months of age are breastfed exclusively • 100% of homes are protected by residual spraying in areas that are endemic to malaria.	National Health Information System
* Achieve the articulation of national programs with the District projects	• Department of Health Services follow-up plan to the joint District projects	Document

4. - INTERINSTITUCIONAL ADMINISTRATION

RESULTS	INDICATORS	MEANS OF VERIFICATION
* Institutionalized and working Distrital and municipal Health Councils	• The municipal councils participate in the monthly follow up meetings of the plan. • The district council participates in the quarterly follow up meetings of the plan.	Minutes of the meetings Minutes of the meetings
* Department of Health Services approves the district plan, guaranteeing the technical support and the stability of human resources.	• District plan approved by the authorities of Department of Health Services • Personnel is not removed from their functions without a	Document Documents

	justified cause and /or the district´s agreement • Supervision plan to the district, agreed upon and approved. • Increased of 10% of the technical personnel in the district.	Document Memo, articles
* Establish credibility and achieve trust in the health system amongst the population.	• Attendance of health personnel to 200 meetings of local NGOs. • 2 annual meetings organized by the sector with the health. Committee.	Records Records, memoirs Records, memoirs
* Develop an active relationship and involvement policy between the church and the district.	• Personal invitation to all the meetings of the District and San Carlos area.	Letters, memos
* Teachers of the province of Ichilo are all made aware of and trained in the health issues that appear in the new educationl reform.	• 100% of the decision makers are made aware of issues • 80% of classroom teachers are trained for the sex education classes • 1 teacher from each school is part of the operative health festival team.	Memoirs Memoirs Records
* Develop capacity to elaborate and negotiate external resources in the district and areas	• 1 team per area trained in elaborating and administrating projects.	Memoirs. Elaborated projects
* Communities of the provinces reflect upon their health reality and generate development proposals.	• 1 obstetric emergency plan in 90 communities • 90 development proposals presented by the local committees of surveillance	Records Proposal documents

5. – RESEARCH AND EPIDEMIC SURVEILLANCE

RESULTS	INDICATORS	MEANS OF VERIFICATION
* Improve the information, analysis and evaluation system in order to make more appropriate and opportune decisions.	• All the services of the district use the new National Health Information System. • All the services use the Information Analysis Committee manual which has been adapted and validated by the Information Analysis Committees of the sector, the area and the district. • All the services use the same registers to gather data starting in April. • All the sectors have a map monitoring system • District and areas have a computerized program for monitoring.	National Health Information System Document Registration sheets Reports Reports
* Identify topics and develop operative research on epidemics.	• District has an infant survival base line. • The district has a profile of the epidemics. • Base line of service suppliers. • Base line of tuberculosis of the whole district. • Operative research on the use of the rhythm method. • Research on malaria and anemia. • Research on the development of maternal mortality over the last 10 years. • Operative research on the decision making capacity of the services. • Operative research on the handling and the application of the Essential Medications at the services • Operative research on the nutritional rehabilitation	Document Document Document Document Document Document Document Document Document

	system. • Activities and Practives Committee community line on obstetric risk • Operative research on the establishments that have essential obstetric care. • Research on the quality, quantity and distribution of the human resources system.	Document Document Document
*The community epidemic surveillance system contributes to the collective construction of knowledge in health.	• 100% of the communities have a local committee of epidemic surveillance	Records

6. - TRAINING

RESULTS	INDICATORS	MEANS DE VERIFICATION
* Enlarge and consolidate the module system of training for doctors, nurses, auxiliary and community health promoters.	• 100% personnel that provides services participates in the training and professional development program • 100% of the service providing personnel has a professional diploma. • A modular community health promoter training program is carried out in the 3 areas.	Memoirs Documents Document Memoirs
* The Human Resources modular training system has the backing and accreditation of educational institutions.	• Agreements with educational institutions. • The participants' certificates are credited by the educational institutions.	Signed document Document

* Develop and execute intership and scholarship plans for health Human Resources.	• 2 scholarships for Public Health in an international course. • 4 local and regional internships of 1 month in Health Service Administration. • Four month training period of 12 people in computer use. • Four month training of 2 people in languages. • Post graduate studies scholarship in Public Health to 4 people. • 2 people in tropical medicine. • Five internships to laboratory technicians. • Five internships to statistic technicians. • Internships in obstetric risk attention. • 100% of the health personnel is qualified in obstetric risks	Documents

7.- INFORMATION, EDUCATION AND COMMUNICATION

* Participation and community mobilization for the IEC	• 40% of pregnant women know 3 obstetric risk signs. • 40% of the people know of the services provided. • 40% of the people know of the Basic Security System services. • 30% of the people intend to of use the services when needed. • 40% of the women at risk of pregnancy risk know of a family planning method. • 60% of the population can recognize symptomatic respiration and knows the consequences of abandoning the treatment • 60% of the mothers with children of < 2 years of age use ORF in the case of	Surveys Surveys Surveys Surveys Surveys Surveys Surveys

	diarrhea. • 60% of the mothers with children of < 2 years of age recognize the signs of pneumonia. • 80% of the mothers with children of < 2 years of age have the CSI up to date, according to age	Surveys Surveys
* Organize a library and an educational material bank in the District, Areas and Sectors	• 1 library and database in the district, in the areas and in the sectors, depending on the needs and decision level.	Registrations, Inventories

PLAN TO CONDUCT ICHILO RAPID RURAL ASSESSMENT/COMMUNITY MAPPING SURVEY

This document discusses two integrals part of this Child Survival project, a census and dissemination of project information to Ichilo inhabitants. The census is particularly important in this project because there are known issues concerning an underestimation of the population by the MOH. There is also a desire to produce definitive community maps for use by all health personnel in their outreach, to assess community water systems for the development of a district-wide water/sanitation proposal that would address one of the main causes of childhood illness in the area, and to collect information for the nutrition component of the project. It is also an opportunity to disseminate the results of the February 2000 KPC.

These activities were supposed to be carried out in September and October 2000, but civil strife in Bolivia resulted in blockades of the highway leading to the project area, thus suspending activities. Since these blockades have been recently lifted, activities will resume in November.

A first phase of this work has nearly been completed. The MOH has already solicited simple censuses from the RPSs (*Responsables Para Salud*, or Community Health Workers). The Buena Vista RPSs have concluded theirs, and Yapacaní and San Carlos are nearing completion. The results of this preliminary work will simply be the names, ages, and occupations of all individuals in a given community. Randomly selected censuses will be checked for accuracy by CEPAC staff.

Objectives

These activities are designed to provide CEPAC and IEF with:

- census information for the nutrition component of this project
- mapping information for water/sanitation proposals development and general use by area health personnel, and
- an opportunity to disseminate the results of the KPC.

Products of this work

This will not be a "full-fledged" PRA (Participatory Rural Appraisal), but rather an RRA (Rapid Rural Assessment) that will:

- Map all communities in Ichilo Province including schools, health facilities (including RPS' (if any) house, roads, springs/rivers, homes, water system (if any), etc.
- Develop an accurate and detailed list of all members of each family in each community, with personal data, such as age and number of children borne, collected for each person. There will be an emphasis on ascertaining the correct ages of children under 5.

- Account for migrant families and workers. We will ask each family if they have a neighbor who is not a year-round resident. If yes, we will ask when they do live in the area and ask the size of the family and how many U5s and older children they have.

Another component of this work will allow us to disseminate the information accrued in the KPC to the people whose health conditions we are seeking to improve. Two bulletins, one for Yapacaní and one for Buena Vista, have already been developed that will help staff disseminate the information. These bulletins is attached to this document. The dissemination of the KPC should be incorporated with the RRA work when possible.

Methodology

Although this is not a "full-fledged" PRA, we think that it is important to follow the Organization of a PRA format as closely as possible. Careful recording of each phase will allow for quick and effective report writing. The format is the following:

1. Selection of RRA team members
2. Objectives
3. Formation of sub-topics
4. Selection of methods, designs, and respondents
5. Interview
6. Sub-team meeting
7. Whole team meeting
8. Report Writing

1) Selection of RRA team members

We have identified five core team members: the IEF Project Advisor, one of the Medical Directors in Yapacaní, and the three area coordinators (Yapacaní, San Carlos, Buena Vista). This team will oversee the corps of RPS' who will be doing the large majority of the actual census/mapping work, and some of the KPC dissemination work. Two Community Health Promoters (Spanish acronym = RPS) will be selected to assist the core team in developing the workplan, based on the best responses to a request put out in July by CEPAC for simple community maps.

It was initially believed that this census could be carried out by CEPAC staff, but after examining the logistics of such an exercise, it was decided that resources (vehicle and staff time) were not available to undertake such an effort. A more efficient means would be to utilize the RPS' to carry out the large portion of this work with CEPAC and the MOH filling a supervisory role. This process may provide us with better information, since the RPS' know their communities best. It also furthers the integration of the RPS' with MOH and CEPAC staff. Furthermore, having the RPS' do the work fits into the PRA methodology of "learning rural life and their environment from rural people…[and] help[ing] local people conduct their own analysis, plan and take action accordingly." (Source: http://www.panasia.org.sg/nepalnet/socio/PRA_paper.html) This method of

completing this work will necessarily take longer, but will result in a better product at less cost. There is some concern about quality, since some of the RPS' writing skills are poor, but the quality control component should address this issue.

Once the questionnaires and the KPC dissemination materials are completed, it will be necessary to schedule their implementation in the 210 communities of Ichilo. The KPC materials will be disseminated by the CEPAC Mobile Unit teams during their community visits. CEPAC has committed to doubling their mobile team coverage to a total of 120 communities. In those communities, CEPAC will disseminate the KPC information, while the RPS that accompany them on their visits will implement the RRA. Informal training of the RPS will be done by the CEPAC mobile team just before the RPS sets off to complete the questionnaire. It is likely that the RPS will already know most or all of the geographical information. This process will should take approximately 2 months.

In the 90 communities that mobile teams do not visit, the RPS, (or if there is no RPS, the CEPAC area coordinator) will be expected to complete the questionnaire and disseminate the KPC information, with appropriate training from the CEPAC area coordinator.

Thus, the tentative schedule follows:

Activity	Revised Scheduled Dates & Status
Selection of RRA teams members	**September** • CEPAC/IEF members selected • RPS not selected as of 10/20
Development of Objectives	**August** • Completed
Formation of sub-topics	Not applicable due to the rapid nature of the this survey
Selection of methods, designs, and respondents	**October** • The materials for the KPC have been developed and printed. • The questionnaires for the RRA must still be developed. • Respondents (all 210 communities) have been selected.
RRA Interviews and KPC Dissemination	**January** • The Mobile team RRA interviews and KPC dissemination should be complete by 1/15, given the 2-month visit cycle of the Mobile teams, and taking into account the Christmas holidays. • We expect the other communities to be completed in this timeframe, although there is no guarantee of full compliance from the RPS'
Sub-team meeting	**Not applicable**

Whole Team Meeting	**January 15** • The whole core team will meet to discuss the results that will have been tallied by a CEPAC staff member as they arrived. A strategy for completing the work in any outstanding communities (if any) will be completed at that time.
Report Writing	**February 1** • The IEF Project Advisor will write the final report in English for submission to IEF. The report will be translated into Spanish and distributed to IEF staff members, community leaders, etc.

Plan to Improve Current Child Vaccination Coverage Levels in Ichilo Province

Coverage rates in Ichilo Province for individual vaccinations and the complete scheme are shown in the following table:

Percentage of children from 12 to 23 months of age with vaccinations

Type of Vaccination	Yapacani	San Carlos/ Buena Vista
	%	%
Tuberculosis B	57.4 (70/122)	50.4 (64/127)
Polio III	54.9 (67/122)	40.2 (51/127)
DPT III	53.3 (65/122)	40.2 (51/127)
Measles	46.7 (57/122)	38.6 (49/127)
Complete Scheme	40.2 (49/122)	25.2 (32/127)

Source: KPC, February 2000

During the DIP development period, seven strategies for improving the current coverage level were identified, as follows:

- Improvement of supervision of field level personnel
- Improvement of the flow of vaccinations from the departmental level to the field level
- Improvement of vaccination registration systems
- Analysis of vaccination campaign involvement
- Completing and maintaining the cold chain for all health facilities in the area
- Increase the number of communities that the mobile units visit
- Implementation of 3-day Health Festivals with improved health messages

IEF and CEPAC believe that these measures will raise the coverage level to 85%, the project objective (and the stated goal of the Bolivian MOH).

Improvement of supervision of field level personnel

MOH supervision of field level is poor, as shown by the following statistics:

- 17% of field personnel do not receive supervisory visits
- 33% of those who do receive visits do not have a schedule for those visits
- The vast majority of field personnel receive no more than one supervisory visit every six months
- Only 35% of those who receive visits, get follow-up feedback

CEPAC is working with the MOH to develop a supervision plan that will:

- Provide training for MOH personnel in areas of supervisory weakness

- Increase the number of MOH supervisory visits
- Incorporate CEPAC mobile unit personnel into the supervisory system, thereby taking further advantage of their field visits

This plan will be developed and fully implemented by early 2001.

Improvement of the flow of vaccinations from the Departmental level to the field level

The following levels of vaccination availability were found in Ichilo Province health posts:

Vaccinations	**Available?**
BCG	Yes [5 - 21.8%] No [19 – 79.2%]
Polio	Yes [10 – 41.7%] No [14 – 58.3%]
DPT	Yes [10 – 41.7%] No [14 – 58.3%]
Measles	Yes [7 – 29.2%] No [17 – 70.8%]
Tetanus Toxoid	Yes [10 – 41.7%] No [14 - 58.3%]

Source: Health Facilities Assessment, March & June 2000

Through discussions with relevant MOH personnel and other NGOs implementing projects that involve vaccinations, the IEF Project Advisor and CEPAC staff determined that the major obstacle to sufficient vaccine supply is the MOH's inefficient distribution of them.

The MOH vaccination chain follows:

MOH (La Paz) > Departmental (Santa Cruz) > District (Ichilo) > Area (San Carlos, Buena Vista, Yapacaní) > Health Posts

There is a good supply of vaccines at the Departmental level, but after that bottlenecks appear. While some NGOs working in the area are able to obtain sufficient supplies from the MOH through special efforts, there is a major problem at the MOH health post level, as the above table illustrates.

CEPAC is addressed this problem in October 2000 by bringing all the relevant parties together in a workshop to:

- Discuss the problems that exist
- Develop potential solutions
- Draft a plan of action for resolving the issue, including follow-up and evaluation

During this workshop only the first two points above were completed, due to time constraints.

It was agreed that besides the other factors such as a poor cold chain, the major issues in the flow of vaccinations are the following:

- That the MOH at the departmental level (SEDES) is not providing as many vaccinations as were programmed for the district
- The number of vaccinations that were programmed was for a much lower population than the actual population that now exists in Ichilo
- There are many vaccinations that go bad during transfer
- There is nobody responsible at the district level for vaccinations

It was agreed that the IEF Project Advisor and appropriate MOH personnel would complete a plan to address these issues. The plan will include, but not be limited to:

- The development by the District of a list of vaccinations programmed but not provided by the departmental MOH.
- The completion of the census, presentation of the higher number of District inhabitants to the Departmental MOH, and solicitation of higher quantities of vaccinations.
- Fix the cold chain
- Within existing district staff, identify someone responsible for cold chain maintenance and sufficient vaccination supply and efficient flow.
- Arrange a meeting with the Departmental level MOH to present the preceding and draft an agreement for support in implementing these measures.

This plan is expected to be completed by the end of November 2000, with a signed agreement by January 2001.

Improvement of vaccination registration systems

The HFA shows that only 66.7% of the posts have a vaccination registry. Even within the group that has registries, there is inconsistency and sloppiness in registration.

Poor registration has resulted in probable underreporting of vaccination coverage. Also, it may result in health personnel giving children too many vaccinations.

As part of this CS project , CEPAC will address this problem by working with MOH to:

- Provide new registries for all posts
- Train health personnel in proper protocol for vaccination registration
- Conduct follow-up to ensure that new procedures are being followed

Part of the training will include daily registration of registration temperatures, supply levels, and vaccinations discarded due to breakdowns in the cold chain or expiration.

Analysis of vaccination campaign involvement

This project will also undertake the analysis of the MOH vaccination campaigns in which CEPAC is involved. Specifically, this work will include:

- Analysis of advance publicity for the campaign
- Analysis of MOH and CEPAC's coordination
- Analysis of coverage levels and missed opportunities
- Investigation into the possibility of CEPAC doing some campaign's of their own.

IEF has a great deal of expertise in this area, having implemented large campaigns in Africa.

Completing and maintaining the cold chain for all health facilities in the area

24 health facilities in Ichilo District were surveyed for vaccination availability and equipment needs during the Health Facilities Assessment conducted in March and June 2000.

It was determined that seven (7) facilities needed refrigerators for use with conventional electricity, while eight (8) facilities needed refrigerators that function either with gas or solar panels. It was further determined that solar panels would be more functional and economical in the long run, albeit with a higher upfront cost.

In August 2000, the Belgian Cooperation, which is working directly with the MOH to improve the health system in Ichilo, pledged to provide any funding over the $6000 that is budgeted in IEF/CEPAC's project for the cold chain. A recent quote for the purchase and installation of cold chain equipment indicates a cost of $12,134.

Training will be conducted for health post personnel, CEPAC mobile unit staff, and MOH supervisory staff on cold chain equipment maintenance. A maintenance plan will be developed for health post personnel, with CEPAC and MOH staff to provide supervision of that plan.

Finally, to insure sustainability, a pledge from the MOH will be requested to ensure that funds are available for cold chain maintenance, particularly solar panel battery replacement. This is extremely important, as one of the current problems is the inability of health post personnel to buy gas to run their refrigerators.

Increase the number of communities that the mobile units visit

A Cost-Analysis of Health Service Delivery in Ichilo Province, Bolivia, a study carried out by James Riva-Clement, MBA, in August 2000, included a scenario analysis varying in one case the frequency of community visits and in the other the size of the mobile team going forward.

A very important means of increasing coverage will be to follow one of these recommendations and increase the number of communities that each mobile unit visits. This analysis showed that CEPAC could increase coverage significantly by simply decreasing the frequency of their visits to each community from every month to every other month, and then doubling the number of communities visited. This doubling will not occur immediately, as CEPAC requests specific information and certain conditions from a community before it will provide services there.

CEPAC is also investigating the possibility of decreasing the size and/or make-up of each team, although no definite conclusion has been reached. These measures would cut costs and allow CEPAC to perhaps add a fourth mobile unit, thus increasing coverage even more.

Implementation of Health Festivals, Community Discussions, and Mass Media campaigns with improved health messages

CEPAC and IEF recognize that improved communication of key health messages is key to meeting the objectives of this Child Survival project. CEPAC's current efforts in this area include:

- **Health Festivals**: Implementation of these festivals began in April 2000. There are 30 festivals scheduled each year, reaching 120 total communities. The festivals consist of two days of training in integrated health for leaders of the community – teachers from each school, auxiliary nurses, community health workers, leaders of local organizations, and women's organizations.
- **Community Talks**: These are health education-related activities that the mobile units carry out during their visits to each community, using some of the health festival materials.
- **Mass Media**: These are health messages sent over the radio through soap operas, short (30 to 45 seconds) health messages (testimonial or informative), and jingles.

This CS project will assist CEPAC by having experts in each CS intervention review the health messages and modes of dissemination, and offer suggestions for improvement. Workshops on improvement in this area will be held.

This line of work will help to boost vaccination coverage by effective dissemination of quality specific information regarding vaccinations and health in general.

Nutritional and Health Behaviors Survey
By Liliana Clement and Kerry Schulze

Objectives for intervention:
Improve nutritional status (protein energy, vitamin A, iron) of children 0-36 months (estimated at 2600 children) in Ichilo Province, Bolivia.

Recommended Approach:

1) **Conduct baseline quantitative nutritional survey:** Assess current protein energy, vitamin A, and iron deficiency using the following indicators: WA, WH, HA Z-scores, bloodspot retinol, in representative sample of 12-36 (or 48) month old children and hemoglobin in the same sample of children and their mothers (see sample size calculations attached). Also conduct survey of parasitic infection. Note that VA is recommended because there is no reliable national data (see proposal comments) and no local data while there have been anecdotal reports of nightblindness).

2) **Baseline qualitative survey:** Assess basic beliefs and knowledge about nutrition, understand health seeking behavior and determine relevant family and community structures.

3) **Utilize a combination of nutrition interventions to improve status.**
   a. Growth monitoring (longitudinal follow-up of self-selected children)
   b. Yearly anthropometry on representative sample of children
   c. "Hearth model"
      - for identifying "positive deviants"
      - primarily used for rehabilitation, should adapt for broader nutritional improvements; disseminating nutrition information at community level

   d. VA capsule supplementation
   e. Iron supplementation
   f. Multivitamin supplementation (zinc)
   g. Deworming

Background: Prior to conducting baseline surveys, the following information will be needed:

1. Linkages breastfeeding data
2. Census
3. PRAs (possibly including customer needs assessment)
4. Report of existing nutrition rehab clinics
5. Report of locally available foods (survey local markets)
6. Report of availability/price of vitamins in local pharmacies

Baseline quantitative survey:

1) Sample size considerations in accompanying table.

2) Recommendations and considerations:
   - Rates of malnutrition as measured by anthropometry reported by MOH (DIP) seem unreasonably high upon investigation (34%WA). The Department of Santa Cruz generally performs well compared to other departments in Bolivia in terms of nutritional status (DHS), so to have rates of malnutrition within one province that are double those of the department as a whole seems suspect. Also, 1990-2 data (Bolivia: Mapa de la Desnutricion) show that among provinces within Santa Cruz, Ichilo province had medium levels of low weight for age (9%WA). Therefore, **current MOH data may overestimate the prevalence of malnutrition**. If malnutrition is more moderate, it will be harder to show an impact of an intervention on improving nutritional status.
   - Likely improvements in vitamin A and iron status as measured by biochemical indicators would be apparent using the currently estimated sample size of 900. Any **improvement** in reports of nightblindness would not be detectable.
   - Iron deficiency (moderate anemia, Hb < 10) seems to be extremely prevalent in Bolivia, with a 40% prevalence of moderate to severe anemia in Santa Cruz department (DHS). Any intervention should include provisions to specifically improve iron status.
   - Any impact assessment must take into consideration that nutritional status has been steadily improving in Bolivia, as evidenced by repeated DHS surveys. It would be necessary to have a control group against which to compare improvements in nutritional status in the study area so that the impact of the study can be properly attributed. This could mean that any intervention be piloted in part of the region and the unintervened communities used as controls, or that data be obtained from surrounding regions at times corresponding to baseline and follow-up surveys.
   - A food frequency, or food consumption survey has not been recommended. This is because the biochemical data being obtained will indicate baseline status and the qualitative survey will indicate which foods are utilized which can be promoted to improve status.
     (For your information the determination not to use a 24 h recall was in part based on the following:
     - Caretakers may not be with the target children all day, and so may not have information about snacks, foods that were eaten when the child was with friends or neighbors, or foods that were given by other siblings.
     - Portion sizes may not be easily recalled if children share foods off of others' plates.
     - The main intent of the 24 h recall is to elicit information about typical "nutrient", rather than typical "food", intake. Evaluation of nutrient

intakes is time-intensive and requires that a local nutrient database be available. Whether 24 h recalls alone could be used to assess patterns of food intake is, I believe, untested. For this, a locally developed FFQ would be more appropriate.

- Note: If "Hearth model" is adopted as intervention strategy, more detailed dietary information will be obtained in positive and negative deviant households. This entails 24 h recalls, interviews, and household observations. If there is an inclination to use this approach to model an intervention, some of the more detailed dietary information to be acquired in the baseline survey could wait until the initiation of this program.)

- A zinc assessment was not included because of the difficulty in measuring zinc levels. If possible, zinc supplementation should be promoted, ideally through the use of multivitamins, in light of recent findings that zinc potentially reduces childhood mortality.

Baseline qualitative survey:

1) Household survey/topics:

Community structure
- Lines of communication

Family structure
- Lines of communication
- "Head of household"
- Primary childcare provider
- Number of children (<5)

Community concern about nutritional status (priority)

Knowledge of nutritional status

PEM
- How undernutrition identified/causes

Vitamin A
- Nightblindness during pregnancy
- Children nightblind
- Term for nightblindness

Complementary feeding/weaning (Linkages)

Food prohibitions/taboos
- During pregnancy and lactation
- During illness

Current dietary practices

- # meals
- snacks for kids
- distinguish snack and meal
- who prepares meals
- decision-making
- handwashing/hygiene

Diet and age

- appropriate meals for infants, toddlers, preschool age, pregnant, lactating, non-pl, dads
- problems encountered feeding kids
- encourage kids to eat?
- Appetite of child(overall eating pattern of child)/activity level of child(low, high, etc)

Food-specific questions

- intake of foods rich in protein, vitamin A, iron—animal vs plant origin, etc
- where foods acquired—home, market
- seasonal availability of foods
- "special" foods (holidays, illness)

Knowledge and perception of vitamins/supplements

Health-seeking behavior

Workload of mother and other key adults

- during pregnancy
- seasonality

2) Focus groups

3) Key informants

Follow-up/impact assessment.

Vitamin A. Because high coverage rates with VACs are known to improve status a follow-up biochemical assessment is not needed.

Anthropometrics. The yearly, random sub-sample will serve as the main impact assessment for the nutrition intervention.

Iron. During the yearly anthropometric survey, hemoglobins should be measured in women and in children. The yearly interval is not necessary to adequately measure improvements in status (every 3 years or so would be sufficient), however, given that the

community is likely to value this immediate feed-back on their health status, completing this yearly is recommended.

Budget:

Nutrition Survey Budget							
Personnel							
	Nutr Survey Coordinator/CS Coordinator				0	0	0
	Interviewers (5)				1500	1 mo	1500
	drivers (1)				200	1 mo	200
Biochemical Assays							
	VA				$20/smp	600	12000
	Iron				$2/smp	600	1200
	Worms				$0.5/smp	600	300
Other							
	vehicle rental				$100/day	30	3000
	antrhopometry equipment						4000
	hemocue				$500 ea	3	1500
	other supplies						700
	copying						450
	communications						1200
	technical consultation (JHU/L.Clement)				$350/day	10	3500
	travel (1 RT)--Coordinator						1200
	housing (60/day*10days SC, $20/day*30days field)--Coordinator						1200
	perdiem (10 days SC@$30, 30 days@$15 field)--Coordinator						750
	TOTAL						32700

DIP TABLE: PROGRAM GOALS AND OBJECTIVES

Program Indicators and Objectives	Measurement method	Major Activities
EPI Intervention: **Objective—Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.**		
Indicator 1: Increase the percentage of children 12-24 months of age fully immunized from 40% (Yap) & 25%(SC/BV) to 85% in all areas.	KPC	-Conduct cost analysis of EPI/VA intervention to assess CEPAC strategies -Submit proposal to adapt CEPAC mobile team strategy to increase coverage while containing costs. -Perform QA assessment of EPI/VA intervention (with focus on supervision, data collection and supply chain)
Indicator 2: Increase the percentage of children fully immunized before one year of age (<13 mo.) from 14% (Yap) & 12% (SC/BV) to 50% in all areas.	KPC	-Assist, promote and improve MOH quarterly (est) campaigns by working with MOH to improve supervision, record keeping, community mobilization, cold chain management and analysis of coverage.
Indicator 3: Increase the percentage of WCBA with at least two TT vaccinations reported on maternal health card from 30% (Yap) & 25% (SC/BV) to 60% in all areas.	KPC	-Promote vaccination at campaigns and CEPAC mobile unit visits through increased community education and increased use of RPS. -Develop regular meetings with MOH and other health partners in Ichilo Province (Ichilo Partners Meeting). -Maintain the Ichilo Partners Meeting throughout the life of the CS project.
Indicator 4: Increase availability of all vaccines at health facilities to 80% (current levels: TB—22%, Polio—42%, DPT--42%, Measles--29%, and TT--42%).	HFA	-Assist with development and implementation of supervisory checklists for new MOH position, "Responsible for Vaccines" (checklist will include review of temperature charts, supply availability, outreach activities, out-of-date supplies, etc.) for monthly reporting.
Indicator 5: Increase from 66% to 100% the number of facilities that have a community vaccination registry.	HFA	-Implement Ichilo Partners plan to train refrigerator maintenance person to train Auxiliary Nurses and other health facility personnel on cold chain equipment maintenance. -MOH "Responsible for Vaccines" trains all MOH Auxiliary Nurses in Ichilo. -Upgrade cold chain equipment in all facilities based on the HFA survey.
Indicator 6: New MOH staff person ("Responsible Para Vacunas") in charge of vaccination supervision visits each facility monthly and reports checklist data to Ichilo Province partners (IEF/CEPAC, Belgian Technical Cooperation).	MOH records	-Complete analysis of MOH EPI/VA Campaigns (cost, coverage, strategy, etc.) and share information with MOH. -MOH implements changes/adaptations on basis of EPI/VA analysis.

<u>Nutrition/VA</u> **<u>Micronutrients Intervention</u>** **Objective : Improve micronutrient status and general nutritional status of WCBA and children under 5 years of age.** Indicator 1: Increase coverage of VA (2 doses) of 12-24 month olds from 3% (KPC) to 85% as verified on health card. Indicator 2: Increase coverage of VA to post-partum women (1 mo.) from 0.7%(Yap) and 2%(SC/BV) to 50% in both areas as verified on the health card. Indicator 3: Increase the percentage of pregnant mothers receiving iron tablets from 15.6%(Yap) & 12.7%(SC/BV) to 50% as verified on health card. Indicator 4: Increase the percentage of children 6-24 months of age who consume vegetables rich in VA from: a. at least twice in 24 hours, 43% (Yap) and 29% (SC/BV) to 70% (Yap) and 60% (SC/BV). b. at least five times in 7 day period, 43% (Yap) and 48% (SC/BV) to 70% in both areas.	KPC KPC KPC KPC	-Implement Nutritional Assessment (qualitative and quantitative) that addresses the following: a. Biochemical levels of VA in serum in children under 5 years old. b. Levels of anemia in children under 6 and their mothers. c. Verbal nightblindness survey of same mothers. d. Collect qualitative data regarding acceptance of micronutrient rich foods, use and compliance with iron supplementation, feeding habits around illness episodes (DCM/PCM) and critical growth periods, and health seeking behaviors. e. Collect growth monitoring data (wt/age, wt/ht, ht/age) -Import donation of VACs from Hoffman-LaRoche -Provide VAC at all MOH quarterly EPI campaigns and through CEPAC Mobile Teams. -Conduct QA assessment of iron supplementation interventions. -Develop micronutrient specific BCC materials based on nutrition survey and based on IEF methods from Guatemala with corresponding evaluation component. -Provide VA to post-partum women through CEPAC Mobile Teams, RPSs, and MOH personnel. -Conduct deworming campaigns with EPI/VA quarterly campaigns. -Continue community level educational activities using BCC materials through the Food Security Project, a) community kitchen demonstrations, b) nutrition fairs and c) participatory group sessions.

<u>Breastfeeding Intervention</u> **Objective: Increase exclusive breastfeeding to 6 months and continued breastfeeding to 24 months of age.**		
Indicator 1: Increase exclusive breastfeeding from 43% (Yap) and 17% SC/BV in children 0-6 months of age, to 70% (Yap) and 50% (SC/BV).	KPC	-Continue community level educational activities using BCC materials developed with Linkages and through the Food Security Project, a) nutrition fairs and b) participatory group sessions. -Continue to incorporate breastfeeding messages and activities into general Health Fairs.
Indicator 2: Increase the percentage of children continuing to breastfeed at 12-24 months from 40%(Yap) and 40%(SC/BV) to 60% in both areas.	KPC	-Maintain existing breastfeeding support groups (3) and develop new breastfeeding groups (3).
Increase the percentage of children initiating breast-feeding immediately post-partum from 64% (Yap) and 45% (SC/BV) to 80% (Yap) and 65% (SC/BV).	KPC	

<u>Diarrheal Disease Management</u> **Objective: Improve home management of children with diarrhea to prevent dehydration and improve appropriate care seeking and quality of health facility services.**		
Indicator 1: Increase the percentage of children less than 2 years of age with diarrhea that receive more breastmilk during the illness from 24%(Yap) & 16% (SC/BV) to 50% (Yap) and 40% (SC/BV).	KPC	-BCC materials for diarrhea (and PCM) developed by the Belgian Technical Cooperation. -Increase and improve community education activities with focus on RPS. -Develop water and sanitation project for submission to USAID and non-USAID donors. -Conduct qualitative research into home-based prevention of dehydration and health seeking practices as part of nutritional assessment.
Indicator 2: Increase the percentage of children less than 2 years of age with diarrhea that receive more food during the illness from 17% (Yap) & 19% (SC/BV) to 40% in both areas.	KPC	
Indicator 3: Increase the % of mothers that give increased fluids from 38.5% (Yap) & 44.1% (SC/BV) to 80% (both sites).	KPC	
Indicator 4 : Increase use of ORT from 27%(Yap) & 17%(SC/BV) to 60%(Yap) and 50% (SC/BV).	KPC	
Indicator 5: Increase the percentage of mothers taking their child to a health facility for prolonged (2 weeks) or bloody diarrhea from 56% (Yap) 58% (SC/BV) to 80%.	KPC	
Indicator 6: Increase the percentage of health workers accurately treating diarrhea from 30% (est) to 60%.	HFA (mid-term and final only)	

<u>Pneumonia Case Management</u> **Objective: Improve 1)access to antibiotics at the community level, 2)recognition of pneumonia by care takers, 3) appropriate care-seeking behavior by care takers, and 4) improve quality of services at health facilities for managing pneumonia.** Indicator 1: Increase the number of RPSs with a pharmacy kit with cotrimoxizole from 15 to 200. Indicator 2: Increase the percentage of mothers who report seeking care from a trained provider when their child has signs of pneumonia from 44% (Yap) and 47% to 80%. Indicator 3: Increase the percentage of health workers accurately treating pneumonia from 30% (est) to 60%. **<u>Cross-cutting Indicators</u>** Indicator 1: Increase the coverage of communities with an RPS from 40% to 80%. Indicator 2: 100% of CEPAC health and MOH counterparts trained in clinical IMCI. Indicator 3: 100% of RPSs trained in community level IMCI.	HFA (mid-term and final)/project records KPC HFA (mid-term and final) HFA/Proj records Project records Project records	-Evaluate home based practices with qualitative research as part of nutritional survey. -Evaluate pharmacy kits from a sustainabilty/cost recovery point-of-view. -Provide all health personnel with access to appropriate timers. -Train all RPSs in community IMCI (treat pneumonia with cotrimoxizole, provide VACs to children and post-partum women, provide nutrition, diarrhea and other general health education). -Conduct HFA at baseline, mid-term and final phase of the project, to monitor quality of care at facility level. -Conduct QA assessments of each intervention with focus on improving supervisory system, collection, dissemination and analysis of data, and supply chain. -Conduct customer needs survey assess quality of facility services from client perspective and assess community ability to pay for services. -Conduct community level census with community mapping. -Conduct qualitative assessment of RPSs regarding retention, motivation and sustainability. -Conduct RRA/customer survey with dissemination of KPC data. -Train all CEPAC and appropriate MOH staff in clinical and community based IMCI -Distribute maternal and child health cards to MOH -Complete monthly visits by CEPAC Coordinators to MOH sectors. -MOH sector supervisor using checklist for visits to sector/auxiliary nurse.

<u>Capacity Building Indicators</u> **Objective: Increase the capacity of CEPAC to deliver sustainable, (USAID/Washington) child survival interventions on a provincial level.**		
Indicator 1: Improve CEPAC's overall management score (based on MSH capacity assessment) from xx to xx.	Project Records	-Completion of Capacity Assessment at start and end of project. -Development of a formal Manual of Operations with following characteristics: a. define function and role of every employee b. define policies for use of equipment and vehicles c. define lines of communication d. define all procedures and policies e. define financial administration f. define reporting to donors
Indicator 2: Improved financial systems in place: a. no cash shortages for monthly payments in one year period and, b. no duplicate entries between field and HQ.	Project Records	
Indicator 3: Implement QA system for continuous improvement and monitoring of CS project; at least 3 QA assessments completed by end of project.	Project Records	
Indicator 4: Increase the average number of visits made by a supervisor (MOH or CEPAC) from 2 per 6 months to 5 per 6 months.	HFA	-Improve financial systems as follows: a. hiring of outside consultant to assist CEPAC to improve system b. ensure improved cash flow c. ensure no duplicate entries (improved networking/compatibility) between HQ and field d. ensure consolidated reporting is up-to-date (daily reports match actual financial situation) e. ensure budgets are adjusted on a quarterly basis f. ensure financial reports by project can be completed on monthly basis in accordance with donor requirements.
Indicator 5: Improve CEPAC's ability to present information and proposals to donors as follows: a. CEPAC website in place b. At least one proposal submitted and accepted by new donor c. At least one partnership developed with private corporation that provides funding or in-kind assistance.	Project Records	
Indicator 6: CEPAC uses financial data in managerial and technical/CS decision making.	Project Records	-Implement QA plan as follows: a. have QA team in place at CEPAC b. train appropriate MOH counterparts c. perform QA assessments (with TA and without) which include the following: --develop supervisory checklists to standardize supervisory visits and improve supervisory schedule.

		--assess current data collection and make improvements. --assess supply chain issues and make improvements. --implement system of regular QA assessments and monitoring. -IEF Project Advisor conducts series of capacity building seminars: a. proposal writing b. web page development c. partnership building d. resource development (diversification, identification of donors, corporate foundations, etc.) e. improving the executive board (diversification, appropriate size, terms, etc.) f. public relations -Cost analysis of EPI/VA intervention conducted and follow-up is as follows: a. CEPAC submits proposal to IEF responding to cost and improved coverage recommendations b. CEPAC is able to utilize financial estimations in future strategy decisions.
Sustainability Indicators Percentage of operating costs recovered from user fees/microenterperise or other resource generating scheme increased from unknown to 30%.	Project Records	--David Green, IEF Sustainability expert conducts sustainability workshop and develops sustainability plan with CEPAC/IEF Bolivia. +note. Other elements of sustainability have been described in the Capacity Building section including: diversification of funds, increased funding from private and public sources, improvements to Executive Board, partnership building, improved public relations, improved quality of services and ability to meet changing customer demand.

IEF STRATEGIC PLAN
ANNUAL REPORT – YEAR 2000
October 1st 1999 – September 30, 2000

Achievements During Year 2000

Background:

Mission

The IEF is dedicated to *helping people see*! Core programs are under the umbrella of *SightReach*^{SM} which has three components addressing disease targets, the barrier of cost, and financial sustainability*:

SightReach^{SM} Prevention

Programs target the 4 conditions responsible for 80% of the world's blindness – cataract, trachoma, onchocerciasis, childhood blindness.

SightReach^{SM} Management

Enhances financial self-sufficiency of eye care providers leading to improved quality of service outcomes and sustainability of eye care services.

SightReach Surgical^{SM}

A social enterprise dedicated to eliminating the barrier of high cost of providing quality eye care and surgery. Offers high quality ophthalmic medical and surgical supplies, instruments and equipment at low cost in order to bring down the price of eye care and surgery while ensuring that the poor and indigent still receive quality care.

* ^{SM} refers to "Service Mark" which IEF uses after these names while they are in review by the US Patent and Trademark Office. When the names are officially proprietary to IEF, the "registered" mark ® will be substituted for the ^{SM}.

Goals

1. Reduce avoidable blindness
2. Create self-sufficiency within IEF to sustain core programs *
3. Create self-sufficient eye care services in partner developing countries
4. Increase capacity within IEF to offer and expand *SightReach*^{SM} programming to partner NGDOs and governments *
5. Build IEF's image, credibility and reputation as a leader in blindness prevention and financial self-sufficiency programming within eye care institutions

*Relates to Low Capacity/High Consensus objectives in DOSA

Executive Summary:

The following report documents accomplishments during the past year by goal and planned activities of the IEF's Strategic Plan. An "Operational Action Steps" table was prepared for each of the five goals (noted as 5.0 to 5.5 in the original Plan.) The table of Action Steps was used for this report. A comment is made after each action step associated with the goals.

Key accomplishments are noted by goal in this Executive Summary.

Goal 5.1: Reduce avoidable blindness

- Child Survival/Vitamin A Coordinator hired at headquarters for SightReach[SM] Prevention program under the Childhood Blindness component.
- Sustainability Specialist hired at headquarters for SightReach® Management program.
- Staff presenting courses and writing papers on financial sustainability planning promoting SightReach® Management program.
- SightReach Surgical[SM] sales increasing as sales representatives and promotion increase.
- IEF website reconstructed to include e-commerce and fundraising via the Internet.

Goal 5.2: Create self-sufficiency within IEF to sustain core programs *

- Initial progress in review and development of comprehensive financial plan.
- IEF Board accepted Strategic Plan with recommendations to expand time limits.
- Increased involvement of Board of Directors in fundraising.

Goal 5.3: Create self-sufficient eye care services in partner developing countries

- Established SightReach® Management programs.
- Identified SightReach® Management partners in Malawi, Guatemala and Egypt.
- Established SightReach Surgical[SM] business plan and increased sales.
- IRS approved IEF's "Change of Activities Letter" authorizing a social enterprise while protecting our tax-exempt status.
- Patent and Trademark Office approved the registration of the name SightReach® while SightReach Surgical[SM] is still pending.

Goal 5.4: Increase capacity within IEF to offer and expand SightReach® Management programming to partner NGDOs and governments *

- Established core team for sustainability planning under SightReach® Management that includes David Green/consultant, Todd Robin/intern working on special assignments, and Raheem Rahmathullah/full time sustainability specialist.

- Mr. Raheem Rahmathullah, from Madurai India, was identified to be a new IEF staff person specializing in hospital sustainability planning. Mr. Rahmathullah has considerable experience with the Aravind Eye Hospitals in Madurai, India and will assist IEF with in-country technical assistance.

- Established improved system for communication and monitoring progress. During the reporting period, regular staff meetings are now scheduled on a weekly basis. Additionally, the program department implemented a monitoring and evaluation system to take place on a quarterly basis. The purpose of the quarterly monitoring meetings are for each staff member to formally brief others on accomplishments; identify constraints and lessons learned; and present planned activities for the next quarter. The first meeting was held in September 2000 and will continue on a calendar basis. Recently discussed was the opportunity to make the quarterly meetings more inclusive of all IEF activities including IEF's strategic objectives. The first expanded quarterly meeting will take place in January 2001.

- Completed revised staff job descriptions and evaluation format. During the reporting period, job descriptions were rewritten to be more explicit and focused on individual staff accountability and performance. A major emphasis of the job descriptions is an increased focus on improving IEF's capacity to supervise, monitor, and evaluate program and strategic activities. The staff evaluation format was also redesigned to provide more objective evaluation of staff performance.

- Established a proposal development strategy. A critical objective is diversification and increased funding. A key strategy is to focus more resources on developing new grant proposals to a variety of corporations and foundations. IEF, with assistance from a Board member have undergone and orientation and training on "presentation skills" for targeting corporations. Additionally, the key program areas have funding targets established and objectives for developing and submitting new proposals to foundations. IEF has also invested in Foundation Center software to search their database of foundations.

Goal 5.5: Build IEF's image, credibility and reputation as a leader in blindness prevention and financial sustainability programming within eye care institutions

- An important part of the strategic plan to increase IEF's visibility is to publish more scientific papers and articles, and make presentations in professional forums on IEF's activities and accomplishments. During this reporting period, the following presentations and papers were completed:

  - SRM results presented by J. Barrows and D. Green at the 6th General Assembly of the IAPB, Beijing, September 1999.

  - Presentation by V. Sheffield and J. Barrows: "Achieving Sustainable Eye Care in Developing Countries. What Do We Need to Know to Get Started?" at the AAO International Forum, Orlando, October 1999.

  - Panel discussion with J. Barrows, D. Green, P. Courtright, M. Chirambo: "Training of Surgeons in Difficult Environments/Sustainability Planning," International Symposium on Sustainable Eye Care in Developing Countries, BCCEIO & the Canadian Ophthalmological Society, Vancouver, June 2000.

- Article published by J. Barrows, C. Baerveldt: "Improving Eye Care in Malawi: Strengthening through Collaboration," IAPB Newsletter, No. 25, January 2000.

- Lecture on "International Ophthalmology" given to Ophthalmic Medical Personnel trainees at Georgetown University Center for Sight, August 2000 (annually.)

- Articles in preparation for publication by P. D. Courtright, J. Barrows, et al: "Cataract Surgical Coverage," "Barriers to Use of Services," and "Outcome of Service in Chikwawa District, Malawi."

- V. Sheffield to speak at the AAO International Forum and at a special International Guest Reception on the role of NGOs in the VISION 2020 program during the AAO meeting in Dallas, October 2000.

- Lecture "Management Planning and Financial Sustainability of Eye Care Programs" to be given to the PHO students at Johns Hopkins by V. Sheffield, J. Barrows, and D. Green, February 2001.

Goal 5.1: Reduce avoidable blindness

Activity 1: Target cataract through IEF's SRM and SRS programs from July 2000

- Make the increase in cataract operation, improvement in cataract surgical outcomes, and decrease in prevalence rate part of the goals in all SRM programs
  - **IEF focuses the increase in volume of cataract surgery and monitoring of surgical outcomes (final vision) within all SightReach Management programs.**
  - **IEF's first initiative is the Lions Sightfirst Hospital in Lilongwe, Malawi.**
- Make indicators that reflect the number of cataract operations performed, cataract surgical outcomes, and prevalence rates where possible in all SRM programs
  - **IEF hired Mr. Raheem Rahmathullah as Sustainability Specialist at IEF/HQ.**
  - **Mr. Rahmathullah, John Barrows, and David Green along with Dr. Moses Chirambo and local staff have developed M/E tools and registers to monitor cataract volume, and follow-up patients for surgical/visual outcome.**
  - **Todd Robin (intern) has completed a cost analysis per patient operated that will be used to monitor costs.**
- Document results
  - **Results are documented at the Lions SightFirst Hospital, Lilongwe, Malawi.**
- Publicize results annually in scientific, technical, and/or lay journals
  - **Results presented by J. Barrows and D. Green at the 6th General Assembly of the IAPB, Beijing, September 1999.**
  - **Presentation by V. Sheffield and J. Barrows: "Achieving Sustainable Eye Care in Developing Countries. What Do We Need to Know to Get Started?" at the AAO International Forum, Orlando, October 1999.**
  - **Panel discussion with J. Barrows, D. Green, P. Courtright, M. Chirambo: "Training of Surgeons in Difficult Environments/Sustainability Planning," International Symposium on Sustainable Eye Care in Developing Countries, BCCEIO & the Canadian Ophthalmological Society, Vancouver, June 2000.**
  - **Article published by J. Barrows, C. Baerveldt: "Improving Eye Care in Malawi: Strengthening through Collaboration," IAPB Newsletter, No. 25, January 2000.**
  - **Articles in preparation for publication by P. D. Courtright, J. Barrows, et al: "Cataract Surgical Coverage," "Barriers to Use of Services," and "Outcome of Service in Chikwawa District, Malawi."**

Activity 2: Establish Trachoma/Onchocerciasis Program Coordinator position at HQ to develop and manage trachoma and onchocerciasis control programs by December 2001

- Design a position description and scope of work for a Trachoma/Onchocerciasis Program Coordinator at HQ by the December 2000
  - **Not finalized. Funds still being sought.**
- Budget funds to support the position at HQ in the FY 2002 budget
  - **Not finalized. Funds still being sought.**
- Solicit candidates in January 2001 **– planned.**
- Choose a candidate by June 2001 – **planned.**

Goal 5.1: Reduce avoidable blindness continued…

Activity 3: Retain Vitamin A/Child Survival Coordinator position at HQ from July 2000 to manage and expand vitamin A/child survival programs by one country every 2 years

- Advertise for new staff member in May 2000 **– completed.**
- Replace staff member by July 2000 **– G. O'Donnell hired September 2000.**

Activity 4: Retain memberships in the following coalitions:

VISION 2020: The Right To Sight - $10,000 per year as a "Supporting Member" **- pending**
IAPB – currently $1,000 per year **- paid**
Partnership Committee - none
WHO "Official Relations" - none
WHO Alliance for the Global Elimination of Trachoma - $5,000 per year **- pending**
NGDO Coordination Group for Ivermectin Distribution - $5,000 per year **- $2,500 paid**

- Budget funds in FY 2001 for dues required as noted above **- completed**

Activity 5: Increase SRS sales to partner NGOs by 10% per year

- Send letters and product lists to all members of the Partnership Committee by July 2000
  - **Postponed until new staff hired for SRS**
  - **Expected early 2001**
- Follow-up with phone calls and meetings **- postponed**
- Invite all NGDOs solicited to the Society of Eye Surgeons (SES) breakfast annually **- done**
- Include a brief presentation about SRS at the SES breakfast annually **– planned (10-24-2000)**
  - **Note: IEF has hired a firm to completely reconstruct its website. The new site will be able to conduct e-commerce and take orders over through the site.**

Goal 5.2: Create self-sufficiency within IEF to sustain core programs *

Activity 1: Review IEF funding sources and list what % of total budget comes from each source by the end of October 2000:

- Foundation grants – EMCF, S&L
- Corporate partnerships – Pfizer, Mail Call
- Government sources - USAID
- Contracts
- Events – Eye Ball
- Board Annual Fund Campaign
- Direct mail marketing
- Endowment income
- Investment income in SRS-"shares"
- Earned income - *SightReach Surgical*^{SM}
- Revolving fund for SRS customers
- GIK – monitize donations?
- Cost sharing by NGDOs, sub-contractors, governments
- Membership – Society of Eye Surgeons

    - **Discussed with Board Development Committee – September 2000.**
    - **% of budget per funding source completed – October 2000.**
    - **To review with Development Committee after annual "Eye Ball" - November 2000.**

Note: IEF has developed a proposal strategy. A critical objective is diversification and increased funding. A key strategy is to focus more resources on developing new grant proposals to a variety of corporations and foundations. IEF, with assistance from a Board member have undergone and orientation and training on "presentation skills" for targeting corporations.

Additionally, the key program areas have funding targets established and objectives for developing and submitting new proposals to foundations. IEF has also invested in Foundation Center software to search their database of foundations.

Activity 2: Board Development Committee and relevant staff review each funding source/activity and prioritize according to income/visibility vs. inputs/cost by December 2000

- August 2000: Staff develops a list describing the percent that each fundraising activity contributes to the overall budget **– completed.**
- September 2000: Staff and Development Committee review each fundraising activity and determine which are the strongest income earners related to inputs and cost by December 2000

    - **Review November 2000 after "Eye Ball."**

Activity 3: Develop indicators to measure non-financial benefits by September 2000

- Staff and Development Committee review the non-financial benefits of each fundraising activity (articles in media, % increase in event patrons, etc.) by September 2000 **- postponed to November 2000**
- Development Committee determines if non-financial benefits give more weight to overall value of each fundraising activity in September 2000 **– postponed to November 2000**

Goal 5.2: Create self-sufficiency within IEF to sustain core programs * continued…

Activity 4: Development Committee writes a policy that at least 60% of IEF's income shall be from private sources by December 2000

- September 2000: Development Committee sets a policy that IEF income from private sources for the year will be at least 60% of overall budget **– postponed to November 2000**

Activity 5: Board Development Committee and staff set targets for each fundraising activity by December 2000

- September through December 2000: Development Committee and staff set fundraising targets for each activity **- ongoing.**
- Identify the most efficient private income sources **– ongoing.**
    - **Note: IEF Executive Director and Public Affairs Officer met over the summer with all Board members to solicit their views on the Strategic Plan which was accepted by the Board at the September 2000 meeting.**
    - **All Board members commented that the Strategic Plan was very ambitious and many activities should be extended.**
    - **The Board recognizes they will be expected to take on a greater responsibility with fundraising.**

Activity 6: Educate staff and key Board members re: fundraising by December 2000

- Development Committee presents results of fundraising activity reviews and shows which are strongest, weakest, and the percent each contributes to IEF's overall budget in December 2000 **– November 2000.**
- Show Board how private income is allocated to core programs in December 2000 **– November 2000.**
- Solicit individual Board member support for specific fundraising activities **– started.**

Activity 7: Set fundraising goals for and with each Board member by October 2000

- Meet with each individual Board member and design a fundraising goal for each by December 2000 and onwards **– process started.**
- Discuss various "give or get" ideas **- done at Board lunch meetings over the summer 2000.**
    - **There has been increased progress in review and development of a comprehensive financial plan.**

Activity 8: Restructure budgeting, bookkeeping, reporting to track income and expenses in terms of profit and loss by March 2001

- Board Finance Committee and relevant staff start the process of reorganizing IEF's Chart of Accounts in September 2000 **- process started.**

Activity 9: Finance Committee considers need for outside accounting firm/new software to assist IEF in setting up a new Chart of Accounts by October 2000

- Finance Committee considers using an outside firm in September 2000 **– determined not necessary.**

Goal 5.2:	**Create self-sufficiency within IEF to sustain core programs * continued…**

Activity 10 Write strategic and/or business plans for all core programs and review at least annually

- Staff write strategic and/or business plans for IEF and each core program from July 2000 onwards
    - **Postponed until after DIPS and annual reports completed.**
- Review each at least annually

Activity 11: Include a cost center for HQ support in all program areas of at least 5%

- From July 2000, staff review all core programs to determine where an income source might come from
    - **Included in SRM program plans.**
- Staff write in an income level for HQ support of at least 5% in each core program **– pending.**

Goal 5.3: Create self-sufficient eye care services in partner developing countries

Activity 1: Include SRM principles and cost recovery in all partner programs from January 2001

- Staff continue to include SRM principles in all new programs
  - **Included in SRM, SRS, and some S2K programs.**
- Write business plans for income generating components of core programs **– pending.**
  - **IEF has established its SightReach Programs.**
  - **IEF has identified SRM partners.**
  - **IEF has completed a Business Plan for SRS. Sales including product sent and invoiced have been:**

20 September 2000:	**$58,184**	**(profit: $8,639.00)***
14 June 2000:	**$50,910**	**(profit: $7,755.00)***
08 March 2000:	**$36,954**	**(profit: $5,500.00)***

This is gross profit reflecting the amount the product was sold for over IEF's procurement cost. It is not a net profit after IEF costs are deducted. At present, SRS is operating at a loss and expects to break even at the six-year point.

  - **Equipment accounts for approximately 90% of all sales.**
  - **With established distributors in Guatemala, Honduras, Nicaragua, and El Salvador, we expect sales of cataract surgical consumables to increase by 200% to 300% during the next year.**
  - **Note: IEF has received an approved "Change of Activities Letter" from the IRS noting that it is implementing an income generating activity.**
  - **Note: IEF has been completed the process of trade marking both SightReach℠ and SightReach Surgical℠ and is awaiting authorization to use the ® mark.**

Activity 2: Identify indicators related to increased production and increased income in partner programs from January 2001

- Include production and income indicators in all M/E components of core programs
  - **Included in SRM and SRS programs.**

Activity 3: Track progress toward production and income indicators from January 2001

- Track production and income indicators at least annually in all core programs **– ongoing.**
- Include this data in monthly, annual, final and all other reports **– ongoing.**
- Share this information with the Public Affairs office for use in publications
  - **IEF Public Affairs Officer meets quarterly with each program staff member to follow-up on accomplishments and data collection.**

Goal 5.3: Create self-sufficient eye care services in partner developing countries continued…

Activity 4: Track the number of patients receiving free and subsidized care from January 2001

- Share this data with IEF's Public Affairs office so this specific program data can be included in informational materials to specifically publicize IEF's commitment to the poor
    - **IEF Public Affairs Officer meets monthly with each program staff member to follow-up on accomplishments and data collection.**
    - **IEF's direct mail consultant manager interviews different program staff monthly to review accomplishments and data.**
- Public Affairs office specifically includes this data in articles about IEF programs
    - **Ongoing.**
    - **Executive Director reports accomplishments in Quarterly Report to Board.**

Activity 5: Develop criteria for HQ to field supervision by December 2000 and evaluate annually

- In September 2000, IEF should begin to develop a set of criteria describing IEF's view of supervision from HQ to the field which will highlight IEF's strong backstopping capacity
- These criteria will be reviewed annually and reported during the annual Strategic Planning meeting
    - **Postponed to January-June 2001.**

Activity 6: Solicit new partner eye care institutions and select one per year for SRM programming from January 2002

- By January 2002, send a solicitation to selected strategic partners to assess their interest in and feasibility of introducing SRM programming **– planned.**
- Send a similar solicitation every January 2003 **– planned.**

Activity 7: Monitor specific differences (management, financial, political, social, cultural) between programs and document these for planning purposes once 2 SRM programs are in place

- Develop criteria that describe the differences between various models of SRM programming by December 2002 **– planned.**

Activity 8: Identify IEF's consulting team that will function within broad health care reform programs by July 2001

- January 2001: Program staff will describe the positions in the program team that will respond to requests for SRM programming
    - **IEF hired Mr. R. Rahmathullah, Sustainability Specialist, to work with J. Barrows and D. Green in SRM programming.**
    - **Position descriptions pending.**
- January 2001: IEF will actively explore opportunities to participate in broad health reform efforts supported by USAID, governments, and bilateral lending institutions
- **IEF exploring health reform opportunities through Board members (eastern Europe, Latin America, Africa) and other forums.**

Goal 5.4: Increase capacity within IEF to offer and expand *SightReach*^{SM} programming to partner NGDOs and governments *

Activity 1: Hire 1 staffer with developing country hospital management & financing experience at HQ

- Identify funds to pay HQ staffer by July 2000 **– completed.**
- Advertise, interview and hire staffer by September 2000 **– IEF hired Mr. Raheem Rahmathullah.**
    - **Note: IEF has established its core team for sustainability planning. They are D. Green, R. Rahmathullah, and T. Robin along with J. Barrows at HQ. (see "Names and Acronyms" at the end of the table.)**
    - **Mr. Raheem Rahmathullah from Madurai, India has been hired as the new IEF staff person specializing in hospital sustainability planning. Mr. Rahmathullah has over 10 years of considerable experience with the Aravind Eye Hospitals System in Madurai, and will provide in-country technical assistance to SRM partners.**

Activity 2: Offer training in for-profit programming relevant to IEF's strategic objectives

- Program staff will explore relevant training opportunities (short-term) and their costs **– ongoing.**
- Budget will reflect a line item for staff development in FY 2001
    - **Item to be edited. IEF offers support training as needed and offered. However, greater emphasis will be put in this area with all staff.**

Activity 3: Develop regional capacity to respond to SRM T/A requests by 2002

- Identify key personnel from regional SRM programs who can serve as consultants to IEF for SRM programming expansion in their region
    - **Personnel being developed in Malawi.**
- Write a concept paper on how these teams will function and use as guidelines and for developing funding proposals **– planned.**

Activity 4: Hold weekly staff meetings even if all staff are not present

- April 2000: Executive Director and staff set a standard time and day for weekly staff meetings to be held by whomever is available even if all staff are not present **– Tuesdays at 10:00 a.m.**
- Proceedings will be minuted, distributed and filed **– ongoing.**
- Agenda items will include items related to the Strategic Plan
    - **IEF established an improved system for communication and monitoring progress.**
    - **IEF's Program Department established a monitoring and evaluation system that will review progress on the annual work plan on a quarterly basis. The purpose of the quarterly monitoring meetings is for each staff member to formally brief others on accomplishments in their planned activities, identify constraints and lessons learned, and present planned activities for the next quarter. The first meeting was held in September 2000 and will continue on a calendar basis. Recently discussed was the opportunity to make the quarterly meetings more inclusive of all IEF activities including IEF's strategic objectives. The first expanded quarterly meeting will take place in January 2001.**
    - **Administrative items are included in the weekly staff meetings as appropriate.**

Goal 5.4: Increase capacity within IEF to offer and expand *SightReach*^{SM} programming to partner NGDOs and governments * continued…

Activity 5: Conducts annual performance evaluations

- Supervisory staff complete annual performance evaluations for all staff under their responsibility in May each year

    - **Completed revised staff job descriptions and evaluation format.**
    - **During the reporting period, job descriptions of staff members were rewritten to be more explicit and focused on individual staff accountability and performance.**
    - **A major emphasis of the job descriptions is an increased focus on improving IEF's capacity to supervise, monitor, and evaluate program and strategic activities.**
    - **The staff evaluation format was also redesigned to allow more objective evaluation of staff performance.**

- New staff evaluations will be completed after six months **– was the case and will continue.**
- Evaluations will be reviewed by the each employee and discussed with the relevant supervisor **- completed or scheduled.**

Activity 6: Actively encourage staff to present at least one paper at scientific and lay meetings, and publish at least one article in scientific and lay journals/media

- Add the development of papers and articles to the weekly staff meeting agenda **– as appropriate.**
- Executive Director and Director of Programs actively assist all staff in the development of publications and presentations **– ongoing.**
- Presentation of papers and/or publication of articles will be an evaluation item on performance evaluations **– added to evaluation form.**

    - **SRM results presented by J. Barrows and D. Green at the 6th General Assembly of the IAPB, Beijing, September 1999.**
    - **Presentation by V. Sheffield and J. Barrows: "Achieving Sustainable Eye Care in Developing Countries. What Do We Need to Know to Get Started?" at the AAO International Forum, Orlando, October 1999.**
    - **Panel discussion with J. Barrows, D. Green, P. Courtright, M. Chirambo: "Training of Surgeons in Difficult Environments/Sustainability Planning," International Symposium on Sustainable Eye Care in Developing Countries, BCCEIO & the Canadian Ophthalmological Society, Vancouver, June 2000.**
    - **Article published by J. Barrows, C. Baerveldt: "Improving Eye Care in Malawi: Strengthening through Collaboration," IAPB Newsletter, No. 25, January 2000.**
    - **Lecture on "International Ophthalmology" given to Ophthalmic Medical Personnel trainees at Georgetown University Center for Sight, August 2000 (annually.)**
    - **Articles in preparation for publication by P. D. Courtright, J. Barrows, et al: "Cataract Surgical Coverage," "Barriers to Use of Services," and "Outcome of Service in Chikwawa District, Malawi."**
    - **V. Sheffield to speak at the AAO International Forum and at a special International Guest Reception on the role of NGOs in the VISION 2020 program during the AAO meeting in Dallas, October 2000.**
    - **Lecture "Management Planning and Financial Sustainability of Eye Care Programs" to be given to the PHO students at Johns Hopkins by V. Sheffield, J. Barrows, and D. Green, February 2001.**

Goal 5.4: Increase capacity within IEF to offer and expand *SightReach*^{SM} programming to partner NGDOs and governments * continued…

Activity 7: Conduct DOSA every three years and follow up on low capacity/high consensus indicators

- Executive Director schedules DOSA exercise every three years **– to be scheduled April/May 2001.**
- Low capacity/high consensus items are included in Strategic Plan **– ongoing.**
- Put the objectives identified as low capacity/high consensus items on the agenda of weekly staff meetings for follow-up **– as appropriate and at quarterly program meetings.**

Activity 8: Review Q/A within HQ annually

- July 2000: IEF staff meet to review areas of administration that should be improved
    - **This process is ongoing. Specific areas are discussed in staff meetings and will be included for the quarterly program meetings. When issues concern the IEF Board of Directors, the Personnel Committee is involved.**
- One staff member will facilitate the discussion and lead the group to identify specific areas and concomitant steps that lead to improvement
    - **This has typically been the Executive Director, Director of Programs, or Director of Finance and Administration depending on the subject and process.**
- Those items will appear on the agenda of weekly staff meetings for follow-up **– ongoing.**

Goal 5.4: Increase capacity within IEF to offer and expand *SightReach*^{SM} programming to partner NGDOs and governments * continued…

Activity 9: Establish "Task Forces" for:

- SRS
  - July 2000: Program staff describe the specific types of expertise they need for the SRS Task Force
  - Invitations are issued to selected individuals to serve
  - Scope of work, term of service, and terms of remuneration are written
- SRM Business
  - July 2000: Program staff describe the specific types of expertise they need for the SRM Task Force
  - Invitations are issued to selected individuals to serve
  - Scope of work, term of service, and terms of remuneration are written
- Seeing 2000
  - July 2000: Program staff describe the specific types of expertise they need for the Seeing 2000 Task Force
  - Invitations are issued to selected individuals to serve
  - Scope of work, term of service, and terms of remuneration are written
- ROP
  - September 2000: Seeing 2000 Task Force determines how this sub-group will function
  - November 2000: Describe the specific types of expertise needed, issue invitations, write scope of work, term of service, and terms of remuneration
- Low Vision
  - September 2000: Seeing 2000 Task Force determines how this sub-group will function
  - November 2000: Describe the specific types of expertise needed, issue invitations, write scope of work, term of service, and terms of remuneration

IEF's Executive Director met with the Medical Advisory Committee in August to review the needs for the various Task Forces. It was felt that one Advisory Group would be able to cover the various medical issues in advising IEF. There may be some additional advisors invited when discussing SRS. IEF staff will review advisory needs and will prepare a Scope of Work for the Task Force by December 2000.

Activity 10: Schedule Task Force meetings at least twice per year

- Relevant program staff set schedule of Task Force meetings **– postponed until December 2000.**
- Produce minutes of each meeting which are reviewed and followed-up **– postponed until December 2000.**

Activity 11: At least one proposal is produced by each staff member either independently or with other staff per year

- Each program staff member writes and gets at least one proposal funded per year for new funds from non-USAID sources **– job descriptions are being rewritten and staff are working together to achieve this objective. This objective falls within the IEF's Proposal Development Strategy.**
- Proposal submissions and successes are an evaluation item on performance evaluations **– this item will be included on the revised evaluation form.**

Goal 5.5: Build IEF's image, credibility and reputation as a leader in blindness prevention and financial sustainability programming within eye care institutions

Activity 1: Collect data on IEF's *SightReach*[SM] program achievements

- IEF Public Affairs Officer meets monthly with each program staffer to gather updates on achievements toward goals and tracking program indicators
    - **Public Affairs Officer will be involved in the Quarterly Program meetings which will highlight achievements and progress toward goals.**
- A review of program achievements is an item on the weekly staff meeting agenda
    - **Staff feels that only key highlights will be discussed at weekly staff meetings with a more full review at quarterly program meetings.**

Activity 2: Prepare a list of relevant scientific and technical journals and meetings which would increase IEF's visibility and credibility

- July 2000: Program staff prepare a list of relevant journals, newsletters, and meetings to which IEF should seek invitations to present papers and/or publish articles **– to be written up by November 2000.**
- List will be reviewed by all staff and reviewed at the first staff meeting of each month **– ongoing.**

Activity 3: Seek invitations to publish, present papers, and/or teach a course

- Executive Director and Director of Programs assist staff in submitting abstracts and networking when relevant meetings are being planned **– ongoing.**

Activity 4: Each staff member publishes at least one article, makes one presentation, and/or teaches one course per year

- Add the development of papers, articles, and/or courses to the weekly staff meeting agenda **– ongoing.**
- Executive Director and Director of Programs actively assist all staff in the development of publications, presentations, and courses **– ongoing.**
- Presentation of papers, publication of articles, and/or teaching of courses will be an evaluation item on performance evaluations **– being included in rewritten job descriptions and evaluation forms.**
- **Note accomplishments in Goal 5.4, Activity 6 above.**

Activity 5: Funds are budgeted to retain memberships in key organizations dedicated to the prevention of blindness (*WHO, IAPB, VISION 2020: The Right To Sight*, etc.)

- Senior staff determine dues amounts for each relevant coalition and see that they are budgeted annually **– review is ongoing and dues are paid where appropriate.**

Goal 5.5: Build IEF's image, credibility and reputation as a leader in blindness prevention and financial sustainability programming within eye care institutions

Activity 6: IEF Public Affairs officer prepares, distributes, and follows up on press releases sent to the media

- Executive Director and Public Affairs Officer set criteria for what should/would rate a press release by June 2000 **– greater attention is being paid to the follow-up and results.**
- Press releases are written and submitted on a timely basis, on the day of or one day after an event **– same.**
- Each press release is followed up with a phone call **– same.**
- Published press releases are collected and presented to the Development Committee, the Board, HQ and field staff **– to be formalized as an activity.**
- Press releases are available to program staff for inclusion with proposals **– incorporated by Public Affairs Officer at Quarterly Program Meetings.**

Activity 7: Seek pro bono support from friendly firms such as Ogilvy Adams and Rinehart for expertise in publicizing IEF's achievements

- September 2000: Executive Director and Public Affairs Officer solicit 5 firms and/or individuals to assist IEF with media expertise
    - **Three firms have been solicited to submit proposals to review IEF's fundraising and publicity programs. One of IEF's Board members has expressed an interest in funding such a review by an outside firm. The firm selected would also be asked to make recommendations to IEF on how to enhance IEF's public relations and fundraising programs.**

Activity 8: IEF technical staff review computer hardware and software at least annually

- Director of Finance and Administration and program staff review computer technology every 3months
- Computer technology is an agenda item at weekly staff meetings
    - **Staff has determined that a scheduled review is not necessary because computer needs are reviewed on an "as needed" basis.**

Activity 9: Make recommendations on necessary hardware upgrades, software updates, and training in the areas of fundraising and sales

- Public Affairs and SRS staff review computer technology and make recommendations to IEF to improve fundraising and SRS sales
    - **IEF's website has been totally reconstructed to allow for e-commerce and donations on line. This objective is being revised to focus only on the "visibility" and promotion of IEF to raise the level of donations made to IEF on line.**
    - **The notation about software related to sales by SRS on line will be incorporated into the SRS objectives in the revised Strategic Plan.**

Activity 10: Budget a minimum amount of funds for technology upgrades annually

- Computer technology is a budget line item for FY 2001
    - **This objective will be removed as technology upgrades are procured on an "as needed" basis.**

Names and Acronyms

Names:

Baerveldt, Calvin	Public Affairs Officer, IEF/HQ
Barrows, John M.	MPH, Director of Programs, IEF/HQ
Chirambo, Moses	MD, Chief Consultant, MOH, Malawi
Courtright, Paul D.	DrPH, Director, BCCEIO, former Country Director, IEF/Malawi, consultant EF/HQ
Green, David	MPH, Consultant working with IEF, Al Noor Foundation, and Seva Foundation
O'Donnell, Gwen E.	MA, MPH, Vitamin A/Child Survival Coordinator at IEF/HQ
Rahmathullah, Raheem	Sustainability Specialist, IEF/HQ (full time)
Robin, Todd	Pre-med, intern working with IEF/HQ

Acronyms:

AAO	American Academy of Ophthalmology
AID	USAID
BCCEIO	British Columbia Centre for Epidemiologic and International Ophthalmology
DIP	Detailed Implementation Plan (prepared for all USAID-funded projects)
IAPB	International Agency for the Prevention of Blindness
IEF	International Eye Foundation
LSEH	Lions SightFirst Eye Hospital, Lilongwe, Malawi
NGDO	Non-governmental Development Organization (usually working internationally)
NGO	Non-governmental organization (usually working domestically)
PHO	Public Health Ophthalmology Program (masters level) at Johns Hopkins School of Hygiene and Public Health
PVO	Private voluntary organization (USAID term for NGDO)
S2K	"Seeing 2000" childhood blindness program (IEF)
SRM	SightReach^{SM} Management program (IEF)
SRP	SightReach^{SM} Prevention program (IEF)
SRS	SightReach Surgical^{SM} program (IEF)
USAID	United States Agency for International Development
VISION 2020	"VISION 2020: The Right to Sight", a global initiative of the IAPB, WHO, and NGDOs to eliminate avoidable blindness by the year 2020.

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Training:

CEPAC and IEF have identified weaknesses in capacity-building areas that must be strengthened in order to implement high-quality child survival programs. These areas must also be strengthened to increase CEPAC's organizational and financial sustainability. The training sessions planned include the following:

Resource Development and General Public Relations: This workshop will focus on donor identification, inter-institutional relations, partnerships with U.S. and European NGOs, corporate resources, and media relations. CEPAC's capacity in these areas has been identified as weak, and CEPAC's Executive Director has requested formal training in each. The Project Advisor will draw on his successful NGO resource development experience to conduct the workshop for key CEPAC staff. The training will take place in the first half of the second year, and will rely on resource development materials designed by the Project Advisor. The product of the training will be a Development Plan with specific objectives and measurable indicators. The Development Plan will then be evaluated and revised, if necessary, by at least two experts. The Project Advisor will also be evaluated by CEPAC staff based on their expectations at the beginning of the training.

Proposal Writing: CEPAC has identified a specific need for significant improvements in proposal writing abilities. For this training the Project Advisor will use proposal training materials he developed at International Planned Parenthood Foundation/ Western Hemisphere Region (IPPF/WHR). The purpose of the workshop will be to upgrade CEPAC's capacity in proposal writing by producing a proposal to be submitted to donors. The training will take place in the first half of the second year of the project. The product of the training, the proposal, will be evaluated by at least two experts. The Project Advisor will also be evaluated by CEPAC staff based on their expectations at the beginning of the training

Web Page Development: CEPAC has identified the need to develop a web page and to become "virtually active." The Project Advisor will lead CEPAC in developing the content of the web page, identifying host services, developing a maintenance and update plan, and generating site publicity. The internet training will produce a plan to establish a quality web page to increase public visibility and CEPAC's ability to generate resources. The workshop will take place in the second half of the second year of the project. The training will be evaluated by the quality of the web site, as judged by at least two experts. The Project Advisor will also be evaluated by CEPAC staff based on their expectations at the beginning of the training.

Executive Board Development: Since its inception, CEPAC has had a Board of Directors consisting of four members plus the Executive Director. The Board is largely honorary and is not particularly active in helping the Executive Director make long-range decisions, or generate resources. The Executive Director has expressed an urgent need for assistance in defining a qualified executive board to assist in strategic planning for CEPAC. The Project Advisor and a Bolivian consultant will therefore lead a training

workshop to develop guidelines for selecting, training, and managing nine individuals who will serve as an active Board of Directors. The training will take place in the first half of the second year of the project. The Project Advisor will be evaluated by CEPAC staff with regard to their expectations at the beginning of the training.

English Classes: Funding has been provided for key CEPAC staff to take intensive English courses. The purpose of English training is to facilitate communication with current and potential donors. The training began in the first year of the project and will continue through the second year. A Bolivian National with extensive English training in the United States conducts the lessons. Classes meet twice a week in Yapacani for a total of eight hours, and combined classes in Santa Cruz and Buena Vista meet three times a week for a total of five hours. Evaluation occurs on an ongoing basis through participant testing. Results will be noted in the mid-term report.

IMCI: Although results from the KPC demonstrated that IMCI knowledge and skills of health personnel were high, CEPAC identified a need for updated IMCI training for CEPAC and MOH staff. Thus, in June of 1999, forty-seven CEPAC and MOH health professionals were trained in community IMCI. The general objectives of the workshop were to reduce the risk of death in children less than 5 years of age, and provide incentives for the use of health services in hospitals and health centers. The training focused on three areas, namely: integrated health for children less than 5 years of age, attention to children 2 months to 4 years of age, and attention to children less than two months of age. Within each age group, the methodologies and protocols used to evaluate, classify, and treat specific illnesses were discussed. These included: re-evaluation and follow-up procedures, recommendations for the caretaker, registration form management, ensuring accuracy in weight and height measurements, developing standards for service quality, and developing standards to locally manage training instruments and methodologies. An evaluation report of the training was completed and is stored in the Project Records.

The second training session will consist of local, community-based IMCI training. This training will take place in the third trimester of the second year. It will involve the training of trainers, namely teaching local health workers how to train mothers to evaluate, classify, and treat children less than 5 years of age. It will focus on optimizing advice given to caretakers and helping them recognize the signs that signal a need to seek professional help.

Cold Chain Maintenance: Training in cold chain/vaccination maintenance and supervision is another area where technical assistance has been requested by CEPAC. The Project Advisor and a refrigerator technician will conduct a “training of trainers” on the technical maintenance and supervision of new cold chain equipment. They will also review the training necessary for equipment that is, at present, adequately functioning. All relevant CEPAC staff, the new MOH Vaccine/ Cold Chain Coordinator, the MOH Regional EPI Supervisor, MOH Area Supervisors, and MOH field health personnel will

participate in this workshop. The three-day workshop will take place in the second trimester of the second year, and will consist of the following elements:

Day	Topics	Participants	Trainer(s)
1	Refrigerator Maintenance	Vaccine/Cold Chain Coordinator, Ichilo Area Supervisors	Refrigerator Technician
2	Adherence to MOH cold chain norms, temperature registration, Emergency Plan development (in case of cold chain failure), supervision and reporting	Departmental EPI Supervisor, Ichilo Area Supervisors, Vaccine/ Cold Chain Coordinator	Dr. Oswaldo Chavez (CEPAC), Abel Monasterio (Distict Director – MOH)
3	Refrigerator maintenance, adhering to the Emergency Plan, temperature registration	Ichilo field health personnel	Vaccine/Cold Chain Coordinator, Ichilo Area Supervisors

QA: The IEF Project Advisor and Child Survival Coordinator expect to attend the QA course offered by Johns Hopkins University during the summer of 2001. Although the Bolivian CS project is not funding the QA training, it will directly impact the project, strengthening IEF's ability to help CEPAC improve the quality of child survival interventions. In addition, QA expert Tom Davis will provide two training workshops for CEPAC staff and invited guests on QA issues. The first training will take place in December of 2000. The second QA training is scheduled for the first trimester of the second year.

Financial Reporting System: A training workshop will take place to improve CEPAC's financial reporting system. This training will be completed in the first trimester of the second year by IEF's Director of Finance and Administration, along with a Bolivian Consultant. While CEPAC's donor reporting system is adequate, based on a new computerized accounting system, information useful for making management decisions is not always readily available. Furthermore, personnel do not have solid decision-making skills using financial documents, nor do they have strong skills for developing financial tools (such as working budgets). The development of a long-term sustainability plan (with the assistance of IEF) and the completion of a cost analysis (July 2000, James Clement, MBA) will be key elements in improving CEPAC's financial reporting procedures. Included in this upgrade will be an improvement of CEPAC's ability to make financial presentations to government personnel and departments (as specifically requested by CEPAC). The IEF Director of Finance and Administration will visit the project to conduct a training workshop focused on improving CEPAC's financial reporting.

Supervisory and Training Systems: CEPAC's supervisory and training systems will be reviewed by Tom Davis, QA expert. Special attention will be given to consistency and transparency. Checklists, formal feedback and a regular supervisory schedule will be implemented to monitor steps taken to improve the system. Tom Davis will meet with key CEPAC staff and train them how to operate and monitor the revised system proposed. This workshop will take place in the first trimester of the second year.

ACTIVITY	**YEAR 1**				**YEAR 2**				**YEAR 3**				**YEAR 4**			
IMMUNIZATION	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Cost Analysis (CA)			X													
Proposal response to CA				X												
Analysis of MOH campaign (cost, coverage, etc.)						X										
Implement Increased Community Visit Schedule by Mobile Team					X											
Assist MOH EPI/VA campaigns		X	X	X		X	X	X	X	X	X		X	X	X	
Quality Assurance (QA)					X											
Cold Chain Improvement						X										
MOH Checklist for Cold Chain Improvement						X	X	X	X	X	X	X	X	X	X	X
Maintenance TOT course for MOH staff, "Responsible for Vaccines"					X											
Maintenance training by MOH TOT						X				X				X		
Mobile Unit EPI Activities	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NUTRITION																
Nutr. Assessment Survey						X										
Import VA					X					X			X			
Provide VA at MOH Campaigns						X	X	X	X	X	X		X	X	X	
BCC Upgrade through Training of specialist in Monitoring and Evaluation							X									
Deworming							X	X	X	X	X		X	X	X	

Community Kitchen Demonstrations and Nutritional Fairs (Clarify with Lily if we are moving into SC/BV with these)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
BREASTFEEDING																
Participatory Sessions and Nutritional Talks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Radio Spots (Linkages)	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Develop BF support groups						X										
DIARRHEA																
Qualitative research						X										
Municipal inventories of Water/Sanitation facilities					X											
Water/Sanitation proposal developed and submitted to donors						X										
Community Talks	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
PNEUMONIA																
Qualitative research																
Evaluate pharmacy kits of the Community Health Promoters																
Equip all personnel with timers/watches																
CROSS-CUTTING ACTIV.																
Conduct KPC survey		X					X								X	
Conduct HFA survey		X					X								X	
Conduct QA Assessments					X			X		X		X		X		X
Conduct customer needs							X									

survey and RRA																
Conduct community census					X	X										
Qualitative assessment of RPSs								X								
Ichilo Partners Meeting	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Support visits by CEPAC coordinators to MOH sectors	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
MOH Sector Supervisors Using Quality Checklist						X	X	X	X	X	X	X	X	X	X	X
Clinical IMCI Training for MOH and CEPAC personnel			X													
Community IMCI for Community Health Promoters							X									
CAPACITY BUILDING																
CEPAC Capacity Assessment (MSH)					X										X	
Develop manual of operations							X									
Improve financial systems						X										
Capacity Building seminars				X					X		X		X			
SUSTAINABILITY																
David Green visit								X								
Sustainability plan developed								X								

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

I. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objective

EPI Objective: Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.

Definition of the Indicator	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
EPI Indicator #1: Increase the percentage of children 12- 24 months of age fully immunized from 40% (Yap) & 25%(SC/BV) to 85% in all areas. *(measurable)*					

Activities

Total Project Activities	Implemented this period or already completed
-Conduct cost analysis of EPI/VA intervention to assess CEPAC strategies -Submit proposal to adapt CEPAC mobile team strategy to increase coverage while containing costs. -Perform QA assessment of EPI/VA intervention (with focus on supervision, data collection and supply chain) -Assist, promote and improve MOH quarterly (est) campaigns by working with MOH to improve supervision, record keeping, community mobilization, cold chain management and analysis of coverage. -Promote vaccination at campaigns and CEPAC mobile unit visits through increased community education and increased use of RPS. -Develop regular meetings with MOH and other health partners in Ichilo Province (Ichilo Partners Meeting). -Maintain the Ichilo Partners Meeting throughout the life of the CS project. -Assist with development and implementation of supervisory checklists for new MOH position, "Responsible for Vaccines" (checklist will include review of temperature charts, supply availability, outreach activities, out-of-date supplies, etc.) for monthly reporting. -Implement Ichilo Partners plan to train refrigerator maintenance person to train Auxiliary Nurses and other health facility personnel on cold chain	

equipment maintenance. -MOH "Responsible for Vaccines" trains all MOH Auxiliary Nurses in Ichilo. -Upgrade cold chain equipment in all facilities based on the HFA survey. -Complete analysis of MOH EPI/VA Campaigns (cost, coverage, strategy, etc.) and share information with MOH. -MOH implements changes/adaptations on basis of EPI/VA analysis.	

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

II. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objective and Activities from the Logical Framework of the project:

Objectives

EPI Objective: Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.

Definition of the Indicator	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
EPI Indicator #2: Increase the percentage of children fully immunized before one year of age (<13 mo.) from 14% (Yap) & 12% (SC/BV) to 50% in all areas. (*not measurable quareterly because MOH does not keep this statistic)*					

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

III. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objective and Activities from the Logical Framework of the project:

Objective

EPI Objective: Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.

Definition of the Indicator	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
EPI Indicator #3: Increase the percentage of WCBA with at least two TT vaccinations reported on maternal health card from 30% (Yap) & 25% (SC/BV) to 60% in all areas. *(this information is measurable, but not "on the cards")*					

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

IV. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objective and Activities from the Logical Framework of the project:

Objective

EPI Objective: Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
EPI Indicator #4: Increase availability of all vaccines at health facilities to 80% (current levels: TB—22%, Polio—42%, DPT--42%, Measles--29%, and TT--42%). *(measurable)*					

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

V. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objective and Activities from the Logical Framework of the project:

Objective

EPI Objective: Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.					
Definition of the Objective	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Indicator 5: Increase from 66% to 100% the number of facilities that have a community vaccination registry. (*Measurable)*					

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

VI. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objective and Activities from the Logical Framework of the project:

Objectives

EPI Objective: Increase coverage and quality of immunizations for women of childbearing age (WCBA) and children under 2 years of age.

Definition of the Indicator	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Indicator #6: New MOH staff person ("Responsable Para Vacunas") in charge of vaccination supervision visits each facility quarterly and checklist data is reported to Ichilo Province partners (IEF/CEPAC, Belgian Technical Cooperation). *(measurable)*					

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

VII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

VIII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

IX. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

X. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XI. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XIII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XIV. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XV. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XVI. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XVII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XVIII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XIX. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XX. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXI. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXIII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXIV. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXV. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXVI. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXVII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXVIII.Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXIX. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXX. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXXI. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Kirk Leach Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

CEPAC: Child Survival Project

QUARTERLY PROGRESS TOWARDS OBJECTIVES REPORT

XXXII. Project Identification

NGOs: IEF/CEPAC			
Project: Child Survival			
Period of Report:		Prepared by: Date of Preparation:	

II. Objectives and Activities from the Logical Framework of the project:

Objectives

Objective # 1.-					
Definition of the Objective (Narrativo)	Goal of the Project		Achieved this period	Accumulated	
	total	percentage	total	total	percentage
Objective X:					

Activities

Total Project Activities	Implemented this period or already completed

Narrative:

- **Analysis of Obstacles**
- **Solutions Proposed**
- **Actions to Follow in the Following Trimester**
- **Project Advisor's Comments**

A Cost-Analysis of Health Services Delivery in Ichilo Province, Bolivia

A report to:
International Eye Foundation
and
Centro de Promocion Agropecuaria Campesina
August 2000
James Riva-Clement, MBA

Table of Contents

Acronyms

CEA	Cost-Effectiveness Analysis
CEPAC	Centro de Promocion Agropecuaria Campesina
CSP	Child Survival Projects
HQ	Headquarters
IEF	International Eye Foundation
PAI	Immunizations
RDA	Recommended Daily Allowance
SNIS	National Health Information System
RPS	Volunteer Community Health Personnel
USAID	United States Agency for International Development
VA	Vitamin A
VAC	Vitamin A Capsules

Executive Summary

Introduction:

This study was undertaken to assist CEPAC in understanding the costs associated with their delivery of health services in the Yapacani Municipality of Bolivia, in preparation for a substantial expansion of services into the other Municipalities that comprise the Ichilo Province, along with an evaluation of strategies employed to deliver those services. The analysis includes both retrospective and prospective components and is designed not to simply be used as a one time source of information, but rather as a model to assist CEPAC in completing similar analysis in the future. In addition to this report CEPAC personnel received informal training in the methods used and described here.

CEPAC currently delivers services through three channels: A clinic, a mobile team and health festivals. Each of these channels was analyzed systematically. Additionally observations regarding CEPAC's general data collecting and reporting practices are also included here.

Key Findings and Recommendations:

Mobile Team:

- The Mobile team represents the greatest opportunity for efficiency improvements through two key changes
  - Less frequent visits to each community would allow the same resources to serve more than three times the number of people. This change alone could allow CEPAC to reach the 80% coverage targets for PAI/VA
  - Reducing the size of the team could reduce direct costs by nearly half.

Taken together these two changes would reduce the per unit cost of providing care by 85%, while greatly improving the health of the population. Additionally all of the analysis was done using Yapacani, the largest of the three municipalities being served, as a model. It is quite likely that further saving/service enhancements can be realized as these results are generalized to the two smaller municipalities.

- Cost recovery in the rural population served by the mobile team would appear to present a significant challenge

Festivals:

- A prospective analysis of the festivals suggests that approximately 78 individuals need to receive care at the average festival for their cost-effectiveness to match that of the mobile team
- If festival attendance greatly exceeds 78 then moving resources from the mobile teams to festivals should be evaluated

Clinic:

- Data from the clinic are not comparable with data from the mobile team because the clinic serves a primarily urban population, while the mobile team serves a primarily rural population. However the results my be used to asses clinic efficiency on a year to year basis
- Cost recovery in the clinic is very much a possibility

Data Collection and Reporting:

- The data collection and reporting systems of CEPAC are not well standardized or optimized for ease of use
  - Most important data is collected, but not necessarily in a well defined, systematic manner
  - Data collected is not consistent from year to year
  - A great deal of data is never collated or reported to individuals that could use it to inform decision making
  - A great deal of data still exists only in hard copy format

Background:

In September of 1999 the International Eye Foundation was awarded a $1 million, USAID funded, Child Survival grant. IEF will be partnering with CEPAC in the execution of the project. The project design calls for CEPAC's extensive regional infrastructure, experience and reputation for delivering high quality care, to be combined with IEF's more than ten years of CS experience, to expand health care services to the entire district of Ichilo. As part of this expansion IEF will work with CEPAC to develop new, population focused tactics to achieve substantially higher coverage rates for several key interventions, with immediate attention focused on immunization (PAI) and vitamin A capsule distribution (VA). This analysis was carried out with three objectives in mind:

1. Help CEPAC to understand, retrospectively, the resources expended in the provision of services, with special attention given to the relative efficiency of various channels of service delivery.
2. Plan cost scenarios prospectively, given various tactical decisions, in order to inform and optimize the expansion of services.
3. Build the capacity of CEPAC to use CEA in their everyday decision making.

Additionally, significant time was spent gathering data from medical and administrative personnel and every opportunity was taken to build CEPAC's capacity to collect and report data in the most systematic, practical and efficient manner possible.

Population:

Ichilo District, is a sparsely populated, mostly rural district within the Department of Santa Cruz, with a total population of 52,780. Ichilo is comprised of three Municipalities: Yapacani—where CEPAC has been working for several years--San Carlos and Buena Vista. Within Ichilo it is estimated that 12,667 individuals are members of the CS target population defined as children five years of age and under, and women of child bearing age (15-49 years). The limited transportation infrastructure within the province, the low quality of many of the existing roads, and the presence of many rivers prone to frequent flooding create a significant logistical challenge in the delivery of health services. According to data obtained from the baseline KPC survey, health indicators in Ichilo are substantially worse than in the rest of the Department of Santa Cruz, and worse than Bolivian national averages.

	Ichilo Province	Dept. of Santa Cruz	National
Under 5 mortality	104	79	105
Prevalence of Diarrhea	38%	--	19%
Malnutrition (wt/age)	34%	24%	8%
Malnutrition (ht/age)	55%	22%	27%
Malnutrition (wt/ht)	15%	10%	1%

The Project:

Currently CEPAC delivers health services to thirty of the one hundred five communities that comprise the Municipality of Yapacani. This is accomplished through three related but distinct mechanisms: A clinic based in urban Yapacani; a mobile medical team that travels daily to hold a clinic in a single community; health festivals held weekends in communities around Yapacani that draw patients from several communities. These festivals are serviced by the mobile medical team as well as some of the medical personnel from the clinic. Historically these services have been available only in Yapacani. However, as part of the CS program two additional mobile unites have been procured and staffed to serve communities in Buena Vista and San Carlos. All analysis was done using Yapacani data. The results can be generalized to the other two municipalities.

Data:

All data examined for the clinic and the mobile team were for calendar year 1999. Because the festivals are a new initiative no 1999 data is available. Data from 2000 was used.

Financial: All of the financial data used in this analysis taken from the CEPAC accounting systems and supplied by Omar Miranda, CEPAC's senior financial manager. All wage information represents actual costs. Some costs, such as monthly vehicle maintenance are estimates made in conjunction with Mr. Miranda based on historical data and/or personal experience. CEPAC's accounting system appears to be well designed, maintained and organized. The necessary data was extracted with little trouble and appears to be highly reliable. In the case of the festivals 1999 actual expenditures did not exist, as such 2000 budget figures were used instead. CEPAC personnel believe the budget to be a reliable estimate of actual costs.

Coverage: The majority of coverage data was gathered through a series of meetings with CEPAC medical personnel, primarily CEPAC's Medical Director, Dr. Mabel Morales. Perhaps owing to various and changing requirements from the MOH and funding organizations, CEPAC's

systems for collecting and reporting data appear to be of inconsistent quality. There is no centralized, comprehensive data repository; little standardization in either collection or reporting methodologies; a continued reliance on hard copy formats; changing collection patterns from year to year. The quality of the clinic data extracted for use in this analysis is adequate and generally reliable, though it was possible only at the expense of significant time and effort on the part of project personnel. The quality of the data extracted for the Mobile Team is questionable, but probably adequate for broadly defined analysis. There were many missing data points and unexplained data patterns that could reflect reality, but more likely reflect problems in the collection or reporting of the data itself. The data extracted for the festival coverage was not adequate and therefor in lieu of analysis parallel to that performed for the Clinic and Mobile Team, a breakeven model was created which provides a festival attendance benchmark and which may be used when more reliable data is available.

Methods:

Each of the three care delivery mechanisms was analyzed independently. Given that they serve different populations and different medical purposes the results are not directly comparable. For example, though it is cheaper to treat an individual in the clinic than with the mobile team, the conclusion cannot not be drawn that the mobile teams ought to be discontinued in favor of more clinics because the clinic is located in the most densely populated area of Ichilo. The CE results of the Yapacani clinic therefore can not be generalized to the more remote areas of Ichilo.

Patient contacts was determined to be the most valuable coverage indicator to analyze. (Several permutations of this indicator are included in the analysis, see details below.) This will help CEPAC understand the relative costs of making contact with patients in the various settings. This information will be valuable to CEPAC as they introduce new strategies to meet the coverage targets of the CS proposal.

However before the analysis of the specific initiatives was completed, a basic top-line analysis was done to provide gross benchmarks for future spending. The entire annual budget was simply divided first by the entire population of the region and second by the total number of target population members. These results serve to demonstrate the per individual resources available depending upon whether CEPAC continues to serve the entire population, or to focus on the target population exclusively.

Clinic: Direct Costs included in the analysis include all costs associated with delivering health services at the clinic. The largest costs (78%), as would be expected, is personnel including physicians. Other costs include depreciation on medical equipment, all the costs of maintaining an

ambulance service as well as the costs of disposables. This totaled $33,859. No capital or maintenance costs for the structure itself is included (though it is estimated to be less than 10% of total costs) This number should be estimated and included in any study of the sustainability of clinic services. Indirect costs were determined as a percentage of CEPAC HQ costs as allocated to the various interventions and totaled $6,647. (Allocated indirect costs do not sum to 100% because health is only one part of CEPAC's activities. Food security and agricultural production is the others.) The coverage data was hand tabulated from hard copies of required MOH reporting forms (SNIS data). The intent was to count each unique patient contact, which is not a number recorded anywhere. Multiple meetings and conversations with the Medical Director resulted in an imperfect, but reasonable estimate of 12,450 unique patient contacts in 1999.

Calculations were also made to estimate the cost per contact with members of the target population. The cost per target population member used the same cost number, but extracted from the SNIS forms all visits by unique children under five as well as prenatal visits by unique women. This results in a somewhat conservative estimate because it shrinks the definition of a woman in the target population from one of child bearing age to one who is pregnant and presents for prenatal care. However it is a reasonable estimate and the best the data will allow.

Additionally, a theoretical cost per individual receiving full vitamin A coverage and full vaccination coverage (PAI/VA) was calculated. This was done by holding the costs and number of patient contacts constant but assuming the target coverage rate was achieved. This number is helpful when comparing various strategies for achieving the target coverage rates.

Each of these numbers was recalculated using a "modified" direct cost. This modified cost excludes the cost of delivering specific medical services. (Specifically it excludes the cost of the ambulance service and the cost of medical consumables.) This produces the fixed cost of staffing the clinic. If you then assume the marginal cost of VAC and PAI to be zero (not strictly true, but helpful for the sake of demonstration) then the "Modified Total Cost per Target Contact" provides one theoretical estimate of what it would cost to provide the most basic services. (Implicit in this estimate is that about 30% of target population visits would come from outside urban Yapacani. In the future this number can be tested empirically using the customer service survey in appendix III.) This number, taken together with the "Modified Total Cost per Full PAI/VA" provides two different ways of estimating the cost of meeting the coverage targets.

Mobile Team: The same method was used for the mobile team as for the clinic. Again, personnel was the largest single costs, though by a narrower margin given the added cost of the vehicles and the more dispersed population being served. The indirect cost of CEPAC HQ overhead was also included at a rate estimated by the senior financial manager. Coverage data was tabulated from

various ad hoc reports and provided by the medical director. Missing data was handled in various ways: In some cases missing data was believed to reflect actual activities (or lack of activities) and in some cases simple reporting errors. The final numbers used resulted from a combination of assumption and while they represent the most reasonable estimates, and are adequate for the purpose of this analysis, they are not believed to be precise.

With the exception of the modified cost analysis, which was not repeated for the mobile team because the variation from full costs was insignificant, all analysis carried out on the clinic data was repeated with the mobile team data. Additionally scenario analysis was completed varying in one case the frequency of community visits and in the other the size of the mobile team going forward. This prospective analysis is designed to assist CEPAC in their planning of future service expansions.

Festivals: The use of festivals is a new method of delivering health services for CEPAC. On a rotating basis CEPAC will go into a community for three days. The first two, consisting of community outreach and training, are run by staffers hired specifically to develop and disseminate training materials at the festivals. On the third day clinical personnel arrive to provide care. Additionally the festivals include entertainment, such as games and music, in an effort to draw the largest possible number of attendees. The financial data needed to analyze the effectiveness of the festivals is available, though they are budget rather than expenditure data. However CEPAC has not yet organized an effective method for collecting and reporting coverage data. As a result adequate coverage data was not available for the completion of a retrospective analysis. Instead, the analysis is a prospective breakeven analysis using the mobile team's cost of patient contact as the benchmark. The budgeted annual cost of the festivals was divided by the per patient cost of the mobile teams to determine the number of patients that must be attended to at the festivals for the two modes of service to be of equal efficiency.

Results and Recommendations:

Results are expressed as cost per patient contact both historically and prospectively. The intention of these data is not to draw direct comparisons with other projects, or even between the different modes of service delivery, but rather to provide benchmarks to be used by CEPAC as they plan service expansions. It is also expected that CEPAC will use the models provided to complete similar analysis as a part of their ongoing project monitoring. The intention of the analysis is not to prescribe a particular course of action to CEPAC, but rather to elucidate their current situation, and provide insight into future scenarios.

This analysis provides a high level benchmark for future spending and helps provide context for the other results. The two given variables are dollars available to spend and individuals to be cared for. The analysis simply makes clear what resources are available per person and what resources are available if only the target population is considered.

Clinic: As described in the Methods section the analysis was completed and the following results obtained:

The analysis indicates that CEPAC is currently spending about $.3.25 per patient contact and $8.65 per contact with members of the target population. However at this expenditure level they are achieving coverage rates far below the USAID targets established in the CS proposal. Using CEPAC's current coverage rate and extrapolating, the total cost per Full PAI/VA was estimated to be over $25. This number may be a bit unfair however. The current coverage rate used was the rate for all of Yapacani, while the clinic serves, primarily, urban Yapacani where they have achieved substantially higher coverage rates. While there are certainly steps that could be taken to improve clinic operations, they would entail simply optimizing operations within the current strategy rather than a dramatic strategic shift. The real strategic shift will be required to serve the rural population in a more effective manner either through the mobile teams or through expanded use of the health festivals.

The modified cost analysis was completed in an attempt to strip out the costs of providing specific patient care, to demonstrate the cost of simply staffing the clinic. If the clinic were to change strategies and begin to focus exclusively on the highest impact interventions, PAI/VA, then the cost of providing just those services would approximate the results above. (This assumes the marginal cost of PAI/VA to be zero. Using capsules and vaccines supplied by the MOH, this assumption is within a few cents of being correct.) This information is helpful only as a benchmark to help CEPAC think about their operations: it is well documented that CS projects provide PAI/VA for a dollar per person per year (2 doses). CEPAC's services are much more costly. This is in no way an indictment of CEPAC, merely a helpful benchmark to remember as CEPAC plans service expansions.

Mobile Team:

Patient Contacts		2,190
Target Patient Contacts		882
Direct Expenditures	$	37,825
Direct Cost per Contact	$	17.28
Direct Cost per Target Contact	$	42.89
Indirect Costs	$	13,085
Total Cost per Contact	$	23.25
Total Cost per Target Contact	$	57.72

This analysis demonstrates that, on a per contact basis, the mobile team is far more costly than the clinic, and far more costly than the maximum expenditures produced by the top-line analysis. Additionally, despite this high per contact cost, VA/PAI coverage rates are extremely low in the rural areas. The challenge then is how does CEPAC serve a much larger number of people without increasing, and perhaps decreasing, total expenditures. There are several strategies that would make this possible. Two are analyzed below:

Mobile Team Scenarios						
Visit Frequency Varied						
Frequency of Visits	Communities Covered	% Com. Covered	Patient contacts	Direct Costs	Total District Covereage	Cost per Full PAI/VA
Monthly	30	29%	2,190	$ 37,825	23%	$ 54.52
Bi-Monthly	60	57%	2,190	$ 37,825	46%	$ 27.26
Quarterly	90	86%	2,190	$ 37,825	69%	$ 18.17
Tri-Annually	105	100%	2,190	$ 37,825	80%	$ 15.58
Team Size Varied						
Tri-Annually	105	100%	2,190	$ 37,825	80%	$ 15.58
Tri-Annually	105	100%	2,190	$ 29,620	80%	$ 12.20
Tri-Annually	105	100%	2,190	$ 20,206	80%	$ 8.32

The easiest and quickest way of increasing coverage rates would simply to visit each community less frequently. As the table above indicates CEPAC is currently covering only 29% of the communities in Yapacani, but doing so on a monthly basis. As a result they are spending over $54 per full PAI/VA. By re-deploying existing resources, far more individuals could be reached. If CEPAC were to shift to a tri-annual visit schedule, expenditures and total patient visits could stay constant, but coverage rate could rise to the target level of 80% and cost per full PAI/VA would fall by 71.4% to $15.58. In addition to these gains, there is reason to believe that this new strategic direction would have corollary benefits. Specifically, if the mobile team visited communities less frequently, it is very reasonable to assume that a greater percent of the community would attend each visit. If this were to happen, the total number of patient contacts would rise, rather than remaining constant. This increase in patient contacts would represent an increase in the productivity of the medical personnel and an improvement in the health of the population.

There are, of course, downsides to less frequent visits. A larger number of acute events would inevitably require individuals to travel to health posts rather than wait for the mobile team, and follow up treatment (of a broken bone that had been set for example) would suffer. One strategy for mitigating at least a portion of this downside would be to take greater advantage of the RPSs. With additional training the RPSs may be able to fill part of the gap left by the less frequent mobile team visits and it may even be possible to help them distribute needed drugs at a nominal cost actually improving the sustainability of the project. Additionally, the frequency of the visits has allowed the mobile team to establish close, personnel relationships with many of their patients. This too would suffer from less frequent visits.

A second quick way of reducing the cost of mobile team services would be to reduce the size of

the team. The team is currently composed of six individuals including a physician, two nurses, a social worker and a driver, plus a supervisor that accompanies the team one or two days a week. This team serves an average of 15-20 patients per day. This is by most measures a very high worker/patient ratio. In the table above title "Team Size Varied" the first line represents the current team size. Line two the team minus the physician and the final line a team made up of a nurse, driver and social worker. If this minimum size team were employed unit costs would fall by nearly 50%. Taken together with the new schedule, unit costs would fall from $54.58 to $8.32 for total savings of 85%. Resulting in both a substantial saving of resources and hundreds of saved lives.

It is true that the smaller team would not deliver exactly the same level of care. However if CEPAC is to change its focus from the delivery of acute care services to a public health focus of delivering preventative services, a smaller team can certainly carry out this new mission. This idea was discussed with Widen Abastoflor who seems open to making changes.

Festivals: The festivals are designed as outreach to provide both health services and education to the most rural areas of Ichilo. The population they serve is most like the population served by the mobile team and therefore the mobile team is the best comparison.

This analysis highlights the breakeven point between the effectiveness of the festivals and the effectiveness of the mobile teams. That is, given the cost and coverage of the mobile team as stated in this report, and taking the budgeted cost of the festivals, we can say that if CEPAC has 30 festivals per year they need to provide medical services to 78 people in order to be just as cost-effective as the mobile teams. If they see more than 78 then they will be more cost-effective. Of course any of the variables can be changed as needed. (As costs go up or down for example.)

There is one important element not included in this analysis: education. In addition to providing direct medical care, both the mobile team and the festivals provide health information. The relative reach and effectiveness of the training provided by these two methods could impact the final decision regarding the relative cost-effectiveness of various service delivery methods.

Quality of Data Collecting and Reporting: If data collected by CEPAC is to be used to perform CEA and to optimize the allocation of resources, to help medical personnel of the project better understand the needs of the communities served, or in any other way inform project decision making, then it is important that the data be collected accurately and reported in a useful and flexible manner. Though the project does a good job of collecting key data, there seem to be significant opportunities for improving the collection, and most importantly the reporting of data to make it more useful to CEPAC managers, medical staff as well as facilitating reporting to CEPAC funders**.**

Conclusion:

The health services program of CEPAC appears to be a well-run program providing high quality services to its patients. However, its focus remains clinical: treating and healing individuals with less emphasis on prevention. As a result the population is not receiving the most high impact services. The challenge facing CEPAC, and IEF, is to balance what has been good and successful about CEPAC, especially its strong relationships with the communities it serves while changing its orientation towards population based services and evaluation; away from treatment and towards prevention.

Relative to public health programs, such as CS programs, CEPAC is a high cost service provider. In the coming years CEPAC must employ new strategies that allow for more patients to be treated, without increasing expenditures. This is going to require the abandonment of some high price/low impact service and the re-deployment of those resources to low cost/high impact interventions. It may require changing the personnel mix of the project (more nurses and fewer physicians for example). Whatever specific tactics CEPAC decides to employ, it seems clear that there are a variety of ways that the coverage goals established in the original proposal can be met given the existing budget.

Cost-Effectiveness Analysis: An Overview

What is Cost-Effectiveness Analysis (CEA)?

Cost-effectiveness analysis is the determination of a unit cost of a particular activity. CEA simply takes the cost of an activity and divides that cost by some unit of effectiveness. For example it may cost one thousand dollars to immunize two thousand children leaving us with a cost-effectiveness ratio of fifty cents or expressed differently, we determined that it costs fifty cents to vaccinate each child. Cost-effectiveness analysis is not the same as cost-benefit analysis. (CBA) Cost-benefit analysis always involves the comparison of currency denominated costs with currency denominated benefits. That is to say project X cost Y dollars and provided Z dollars in benefits. In order to make these currency based comparisons, the effectiveness measurements need to be converted to currency terms: X dollars for a saved life Y dollars for a case of pneumonia averted, etc. This is beyond the scope of CEA.

Once the unit cost has been determined the decision making process is not over, but rather just beginning. CEA is not intended to set policy, but rather to provide decision-makers with useful information as they set policy. It is one piece of information to be used and interpreted by a knowledgeable manager. (See example below.) In theory it would be possible to compare the CEA done on a vitamin A capsule distribution project in Nepal with a vaccination campaign in Honduras, and simply fund the one with the lower unit cost. In practice a variety of other factors need to be considered.

Proper Uses of CEA:

As mentioned above, CEA is not an end in itself but rather a tool to assist managers. CEA is most effective when: it is used to compare extremely similar interventions; used to compare distinct means to a common end; used to compare project performance over time.

In 1997 a cost-effectiveness study of a Child Survival project in the Cobán province of Guatemala evaluated the distribution of vitamin A capsules. This particular project used several different methods of distribution in an attempt to achieve the highest possible coverage rates. One method used was to send extentionist to villages to dose newly post-partum women who did not give birth at the regional hospital (where they would have received a capsule). 719 women were dosed with VA, and the cost of dosing these women was about $8,500. CEA allows us to compare these facts with a second mode of distribution employed by the same project. The analysis indicates that to reach one portion of the target population (these 719 women) it cost $11.68 each, but to distribute 14,977 capsules to children under six, and 2,572 capsules to women giving

birth in the hospital, the cost was only $8,190 or 47 cents each. This is an example of CEA being applied effectively and providing valuable information to a project manager. Note that this information does not imply a course of action. One might argue that $11.68/woman is so much more expensive than the $.47 that the intervention should be dropped and the resources re-allocated. But one could also argue that the marginal cost of $11.68/woman is still quite low given the benefits, and that the intervention should continue. The final decision can only be made by a well-informed manager with access to all the needed facts.

While it is important to recognize the power of CEA, in order to apply it properly, it is equally important to recognize its limitations. Two major limitations include the level of analysis and intensity of intervention.

Intensity of Intervention:

Take for example two health projects each designed to improve health indicators in a particular village. Project A reports spending $1,000 per village and project B reports a cost of $2,000 per village. Without additional information it seems clear that project A is more efficient. In truth, however, we might discover that project A distributes vitamin A capsules, while project B distributes capsules, provides nutrition counseling, and full immunization to all members of the village. Given this additional information it is no longer possible to compare the projects directly, because the intensity of their interventions is dissimilar. In order to make a direct comparison one would need to move from measuring the process indicators (capsules distributed, immunizations provided, etc.) to the impact indicators such as illnesses and deaths averted. While this is possible, it is difficult and expensive, and beyond the scope of simple CEA.

Level of Analysis:

The analogy most frequently used to describe levels of CE analysis is the stream. Money is spent at the top of the stream, and various results occur downstream. For example, money is spent on nutrition education, causing various results downstream: lectures are presented; women attend the lectures; consumption of vitamin A in the population increases; cases of acute respiratory infection are averted; QALYs (quality adjusted life years) are saved.

Clearly the upstream results are the easiest to measure, and the downstream results the most difficult. The choice of what is appropriately measured is an important one. In many ways the further downstream results are the most interesting, but will generally be difficult or even impossible to calculate accurately.

The upstream/downstream indicators are sometimes termed process/impact indicators. The logic to this is clear: an upstream or process indicator is a reflection of the activities of a project: the

number of lectures presented, children vaccinated or latrines dug. They are usually objectively determined, reliable figures. The downstream or impact indicators are such factors as number of individuals reaching vitamin A sufficiency, cases of disease averted or deaths prevented. These figures are more likely to be the subjective results of some type of analysis and are infrequently available for use in simple CEA.

When deciding upon the level of analysis, it is very tempting for the ambitious manager to want to analyze the impact of projects very far downstream. It is important to keep in mind the difficulties that might be faced. Generally speaking, unless one has very specific, sophisticated statistical training.
It should be process indicators that are analyzed, though not as powerful as analysis of impact indicators the rapidity and ease with which process indicators can be analyzed allows managers to receive useful information without burdensome expenditures of time or cash.

The Analysis Process:

Establish Costs:

When the time comes to begin the actual analysis the first step is to calculate the costs of the entire project. For most projects labor will be the largest expense and then there will be other expenses such as supplies, tools, gasoline, vehicle maintenance, etc. Taken together these costs will represent the direct project expenses. Purchases of large pieces of equipment that the project will use for more than a year, such as a vehicle, should be calculated as a capital expense and amortized over its useful life.

One decision that will need to be made is the level of costs to be included. Does one include just the direct labor and materials required to carry out an intervention (What economist call marginal costs, and cost accountants call variable costing) or all costs that are part of a project (total costs or absorption costing). Thinking specifically of CEPAC should the cost effectiveness of the mobile teams measure just the team personnel, the vehicles and supplies, or should overhead such as HQ staff salaries be factored in as well? Generally it is less important which of these expenses is included, than it is to be clear about what is and is not included, and that the same types of expenses are included or excluded consistently every time analysis is conducted. Generally marginal costs are most useful and the expenses measured will be the direct project expenses including amortized capital expenses, but not overhead and HQ. However the decision is strictly a managerial one based on what information will be helpful. Often times it is easy to report several different cost layers in a simple table format. For example:

	Costs	Children Covered with VAC	Cost per Child
Direct Field Costs	$1,000	2000	$.50
Indirect Field Costs	$ 400		
Total Field Costs	**$1,400**	**2000**	**$.70**
HQ Overhead	$ 200		
Total Costs	**$1,600**	**2000**	**$.80**

This allows all the relevant information to be displayed and managers to easily distinguish between various cost levels depending on their needs.

Allocate expenses to appropriate interventions:

Once relevant costs are tabulated for a project, it is necessary to allocate them amongst the interventions being evaluated. This is easiest in projects with relatively few interventions and projects where a single input (in most cases labor) is the dominant expense. In any case, some reasonable model for allocating expenses must be devised. The model is a simple one. If the project being evaluated has interventions X and Y then it follows that:

Total Cost (TC) * % resources devoted to X = TC of X.

There are a couple of ways to create the allocation table, in general the process is to look carefully at the largest expenditures, and be sure to allocate them properly, and then simply expand that model to cover the remaining expenses. That is to say if 80% of project expenses are from labor, then most of the other expenses should be allocated in the same way labor is. So if 17% of the labor on a project goes to intervention A, the approximately 17% of the gasoline expense should be allocated to intervention A. Adjustments can then be made to individual line items based on managerial knowledge. Time sheets, broken down by intervention, are an easy way to keep track of labor resources devoted to various interventions.

Relate allocated costs to measurable events (Unit Cost):

Unit costs = TC/activity.

Once the cost is determined, a measure of effectiveness must be decided upon. (When one is planning the analysis prospectively, the indicators should be set in advance.) The question should be asked, "what did these funds pay for"? It may be a number of people trained, number of patients treated or one of many objective measures of productivity. While looking at expenditures

for a particular time period allows us to put a price tag on particular services, it is the cost of the project over time, relative to fundamental impacts, that is the true measure of success for the project.

While there are a variety of different ways that this type of analysis can be done, and all sorts of interesting models that one might create to help get at cost allocations, it is important to not lose sight of what are ultimately terribly simple questions: how much money was spent? What was it spent on? How can we measure the impact of those expenditures? Those are really the three questions that should be at the heart of any cost-effectiveness analysis. Once these decisions are made, it is important that the needed data be collected as planned, and that the original decisions remain unchanged unless absolutely necessary. One of the real benefits of CEA will be the ability to compare interventions from one year to the next. If there are changes in the indicators analyzed or in the methodology, some or all of this benefit could be lost. For example, if a project were to track the number of capsules distributed and number of immunizations provided during the first two years of a project and then, perhaps because of an upgrade in their data collection and reporting systems, was to begin tracking the number of children under five receiving full, annual PAI/VAC coverage, the data would not be comparable between years one and two, and the subsequent years. Even though the full coverage data is further downstream and in some ways more useful than the simple distribution data, the discontinuity in the indicators detracts from the overall value of the data. In that case it would be appropriate to collect the coverage data, but also to continue to collect the distribution data so that it could be directly compared with previous years.

Scope of Work
Tom Davis, Quality Improvement Consultant
December 4-9

1. Background.

The International Eye Foundation was awarded a 4 year USAID Child Survival project which began in September of 1999. Over the course of the 4 years, the IEF has programmed 3 QI trainings for a total of 40 days work. The breakdown of these trainings requires three in-country trainings of one-one week training and two-two week trainings with five days to be used for preparations.

2. Expected Workshop Results

This overall goal of the project's QI training is to create a proactive team of QI-trained health professionals in Ichilo that will work to improve the quality of services delivered by the MOH and CEPAC. The objective of this component workshop is to begin the process of introduction to and application of QI. This training will set the stage for two further follow-up trainings.

This training will also include health personnel from the neighboring province of Sara, as well as two health professionals from Andean Rural Health Care and Food for the Hungry International/Bolivia.

3. Consultant Responsibilities

-General Orientation to QI (theoretical/class room education, case studies, etc.)
-Implementation of actual QI exercise based on EPI/VA intervention, with a focus on : supervision, quality of data collection and/or supply chain issues.
-Development of follow-up workplan with activities for CEPAC QI team (between this visit and visit in Year 2).
-Finalize dates for Year 2, two week training and agreement on intervention to be studied (may repeat another element of EPI/VA or move to new intervention).
-Develop preliminary SOW for training 2, year 2 (set dates to coincide with Gwen's visit).

Day 1 (Classroom):
- One-hour presentation of CEPAC's work, and two-hour discussion of CEPAC's child survival project with focus on VA/EPI intervention.
- Overview of CQI
- Explanation of how CS Organizations have Used CQI & How CEPAC Can Use CQI

Day 2 (Classroom):
- Identification of Data Sources for EPI and Vitamin A
- Identification of Key Processes in EPI and Vitamin A

Day 3-6 (Project Communities):
- Use of Quality Improvement Checklists
- Field Practicum in the Use of QI Checklists: Data Collection, Analysis, & Modification of the Processes

4. IEF Responsibilities

1. IEF will provide Mr. Davis with a detailed SOW and contract. (Gwen O'Donnell)

2. IEF will send to Mr. Davis an evaluation of the current level of skill of CEPAC staff in QI. (Kirk Leach)
3. IEF will send to Mr. Davis a list of all participants and their title prior to the training. (Kirk Leach)
4. IEF will provide Mr. Davis with a 1-2 page summary of the EPI/VA intervention, including strategies, coverage achieved by each strategy, current coverage rates, description of all personnel involved, description of how intervention is supervised, list of all IEC materials/methods used and brief description of how they were developed, and related information . (Gwen/Kirk—from DIP).
5. IEF will provide Mr. Davis with examples of all data collection forms used by CEPAC, the MOH and communities for this intervention (includes maternal and child health cards, rosters kept at clinics, rosters kept by volunteers, etc. (Gwen/Kirk)
6. IEF will prepare in advance of Mr. Davis' visit a site for the classroom training and for the practicum that can be accessed in the time specified and (in the case of the practicum) allow Mr. Davis and the team the opportunity to see a representative activity.

5. Consultancy Fee

The consultancy fee will be $375/day for full days and $42/hour for partial days, payable within three weeks of submission of an invoice following each training. Materials needed to prepare for the workshop and photocopying of materials given to workshop participants will be reimbursed by IEF and will not exceed $300 per training.

Besides CEPAC, there are a number of other NGOs, both Bolivian and foreign, that are working in Ichilo, as shown in the following table:

Name of NGO	**Types of Projects**	**Interaction with CEPAC?**
British Cooperation	Sexual and Reproductive Health – strengthening MOH program	No
Belgian Technical Cooperation	Strengthening provincial MOH system, including equipment, infrastructure, strategic planning, etc.	Yes – promised funding for cold chain equipment needs as identified by HFA; representative participates in monthly planning meetings with MOH & CEPAC
Plan International	Educational Infrastructure	No
World Vision	Agriculture, Health Care, Education/Literacy	No
Habitat for Humanity	Home Building	No
Save the Children	Health	Yes - Tuberculosis
Cáritas	Revolving and Capital Funds, technical assistance for Agriculture	Yes – Food Security project
Centro De Tecnología Intermedia	Women's rights, Civil Society, Municipal Development	No
Centro de Investigación y Promoción del Campesinado (CIPCA)	Reforestation, Civil Society	No
Unión Nacionál de Pequenos Ganaderos	Revolving and Capital Funds for Agriculture, Large Animal technical assistance	No
PRODEPA	Revolving Funds for Agriculture; technical assistance to small farmers	No
Productividad Biosfera Medio Ambiente	Inversion Capital	No
Plan de Desarollo Ichilo Sara	Loans and technical assistance for for Agriculture	No
Centro de Investigación Agricola Tropical	Technology transfer for small animals, farm management, fruit production	No
MACUCY	Technical Assistance in the implementation of agroforest parcels	No
Care Bolivia	Financing for technical assistance	No

	for integral systems of production in the protected area surrounding Amboró National Park	
Universidad Nur	Technical Assistance in the implementation of agroforest parcels	Yes – Tuberculosis project
QAP (Quality Assurance Project)	Quality Assurance training	Yes – QAP rep. has office in CEPAC's Santa Cruz office
Plan International	Education and Sanitation Infrastructure	No

There are also a number of government agencies working in the district, including:

Government Agency	**Types of Projects**	**Interaction with CEPAC**
Cooperación Rural de Electricidad	Electrification	No
Fondo de Inversión Social	Education and Recreation Infrastructure	No
Fondo de Desarollo Comunal	Agriculture, Business Infrastructure	No
Programa PASE	Education Infrastructure	No
IRFA	Literacy	No

Immunizations Quality Improvement Checklist

Name of CHW:_____ Evaluator:_____

Community: _____ Date: _____

		YES	NO
1.	Did the CHW leave all unopened vaccine vials in the thermos until vaccinations began?	❒	❒
2.	Did the CHW leave all opened vaccine vials in the hole in the briquette while immunizing?	❒	❒
3.	Did the CHW have enough briquettes in the thermos to conserve the vaccines well during the immunization post or the home visit?	❒	❒
4.	Did the CHW clean the top of the vaccine vial with alcohol before filling the syringe?	❒	❒
5.	Did the CHW clean the child's (or woman's) arm with alcohol before he gave the vaccine?	❒	❒
6.	Did the CHW give the person the correct dose of the vaccine?	❒	❒
7.	*If the child received BCG*, was the CHW's intradermal technique good?	❒	❒
8.	Did the CHW tell the mother that the child needs to receive four different Vaccines (DTP, Polio, BCG, and measles) e that she needs TT?	❒	❒
9.	Did the CHW tell the mother which vaccine s/he gave the child/her today?	❒	❒
10.	Did the CHW explain to the mother what diseases the vaccines can prevent?	❒	❒
11.	Did the CHW explain to the mother that the vaccine can give the child a slight fever?	❒	❒
12.	Did the CHW tell the mother to give the child Tylenol if s/he has a fever?	❒	❒
13.	Did the CHW tell the mother that the child (she) will need 3 doses of DTP And Polio (or two or more of TT), and why multiple doses are necessary?	❒	❒
14.	Did the CHW use open verification questions to assure that the mother Understood the key messages?	❒	❒
15.	Did the CHW either throw out the syringe without recapping, or recap		

with the syringe with only one hand? ..... ❒ ❒

	YES	NO
16. Did the CHW put used syringes in a proper puncture-proof container?	❒	❒
17. Did the CHW throw out all dirty syringes, needles, and cotton balls in A place where no one could find them (e.g., down a latrine)?	❒	❒
18. Did the CHW document the vaccination services properly (in the child Register, mother/child's card, and MOH forms?	❒	❒

If the child needed Vitamin A:

19. Did the CHW give the child vitamin A?	❒	❒
20. If the child did *not* need vitamin A, did the CHW explain why to the mother?	❒	❒
21. Did the CHW give the child vitamin A appropriately (drop in mouth)? .	❒	❒
22. Did the CHW give the child the correct dose of vitamin A?	❒	❒
23. Did the CHW tell the mother that s/he was giving the child vitamin A to help him or her avoid eye problems and severe infections?	❒	❒
24. Did the CHW explain that the child should have vitamin A 2 times per year?	❒	❒
25. Did the CHW tell the mother that children over 5m of age should eat Vitamin A rich foods like mangos, carrots, liver and organ meats, green leafy vegetables, and papaya?	❒	❒
26. Did the CHW tell the mother that the child should be given these foods with a little oil so that the vitamin A can enter his body more easily? ..	❒	❒
27. Did the CHW ask the mother verification questions to see if she understood the key educational messages?	❒	❒
28. Did the CHW enter all of the vitamin A data on the correct forms?	❒	❒

COMMENTS: _____

_____

_____

	AID	IEF	Combined		AID	IEF	Combined	Match
Budget	999,703	333,471	1,333,174	Target	800,639	189,008	989,647	19%
Spent (9 mos + projection)	199,064	144,463	343,527	Total	800,639	189,008	989,647	19%
Balance yrs 2,3,4	800,639	189,008	989,647	Variance	0	0	0	67%

IEF CS Bolivia Headquarters Revised

SPENT | **RE-BUDGETED**

	Unit Cost	YEAR 1 AID	YEAR 1 IEF	YEAR 2 AID	YEAR 2 IEF	YEAR 3 AID	YEAR 3 IEF	YEAR 4 AID	YEAR 4 IEF	TOTAL AID	TOTAL IEF	COMBINED
A. PERSONNEL												
1. Salaries												
Director of Programs (10%)												
Salary ($52,000)	5,200	0		1,732	3,000	1,784	3,090	1,838	3,183	5,354	9,273	14,627
Director Admin & Finance (10%)								0	0	0	0	0
Salary ($51,000)	5,100	0	0	1,698	3,000	1,749	3,090	1,801	3,183	5,248	9,273	14,521
Child Survival Coor.(40%)				0		0	0	0	0	0	0	0
Salary ($46,000)	18,400	0	0	6,127	10,815	6,311	11,140	6,500	11,474	18,938	33,429	52,368
Program Assistant (15%)				0		0	0	0	0	0	0	0
Salary ($29,000)	4,350	0	0	2,175	2,175	2,240	2,240	2,307	2,307	6,722	6,722	13,444
Subtotal 1.		0		11,732	18,990	12,084	19,560	12,446	20,147	36,262	58,697	94,959
										0	0	0
2. Fringe (33%)		0	0	3,872	6,267	3,988	6,455	4,107	6,649	11,967	19,371	31,338
SUBTOTAL A		0	0	15,604	25,257	16,072	26,015	16,553	26,796	48,229	78,068	126,297
										0	0	0
B. TRAVEL/PER DIEM										0	0	0
HQ Vists											0	0
RT Airfare @ $1100	1,200	0	0	2,400	2,400	2,400	1,200	1,200	1,100	6,000	4,700	10,700
15 days @ $100 per diem	100	0	0	3,000	3,000	3,000	1,500	1,500	1,500	7,500	6,000	13,500
SUBTOTAL B		0	0	5,400	5,400	5,400	2,700	2,700	2,600	13,500	10,700	24,200
										0	0	0
C. CONSULTANCIES		0	0							0	0	0
1. LRClement support	350			2,100	2,100	0	0	0	0	2,100	2,100	4,200
SUBTOTAL C				2,100	2,100	0	0	0	0	2,100	2,100	4,200
		0	0	0	0	0	0	0	0	0	0	0
										0	0	0
D. PROCUREMENT										0	0	0
1. Supplies										0	0	0
General Office			0		500		500	0	500	0	1,500	1,500
Subtotal 1.		0	0	0	500	0	500	0	500	0	1,500	1,500
2. Equipment										0	0	0
Subtotal 2.		0	0	0	0	0	0	0	0	0	0	0
3. Training			0		2,500		0			0	2,500	2,500
Subtotal 3.		0	0	0	2,500	0	0	0	0	0	2,500	2,500
SUBTOTAL D		0	0	0	3,000	0	500	0	500	0	4,000	4,000
										0	0	0
E. OTHER DIRECT COSTS										0	0	0
1. Communications										0	0	0
Telephone/fax/email			0	0	500	0	500	0	500	0	1,500	1,500
Postage/courier			0	0	500	0	500	0	500	0	1,500	1,500
Subtotal 1.		0	0	0	1,000	0	1,000	0	1,000	0	3,000	3,000
SUBTOTAL E		0	0	0	1,000	0	1,000	0	1,000	0	3,000	3,000
SUBTOTAL A-B-C-D-E		0	0	23,104	36,757	21,472	30,215	19,253	30,896	63,829	97,868	161,697
G&A COSTS 15.33% (no equipment)		0	0	3,542	5,635	3,292	4,632	2,951	4,736	9,785	15,003	24,788
TOTAL IEF HQ COSTS		0	0	26,646	42,392	24,764	34,847	22,204	35,632	73,614	112,871	186,485

IEF CS Bolivia Field Revised 11/00

		YEAR 1 AID	YEAR 1 IEF	YEAR 2 AID	YEAR 2 IEF	YEAR 3 AID	YEAR 3 IEF	YEAR 4 AID	YEAR 4 IEF	TOTAL AID	TOTAL IEF	COMBINED
A. PERSONNEL												
1. Salaries												
Director@20%												
Salary ($60k)	12,000	0		12,360	0	12,731	0	6,556	0	31,647	0	31,647
Technical Advisor@100%				0						0	0	0
Salary ($45,000)	45,000	0	0	46,350	0	47,741	0	24,586	0	118,677	0	118,677
Asst to Tech Advisor@100%		0		0	0	0	0	0	0	0	0	0
Salary ($10,000)	9,800	0		8,163	0	10,094	0	15,000	0	33,257	0	33,257
Subtotal 1.		0	0	66,873	0	70,565	0	46,143	0	183,581	0	183,581
										0	0	0
2. Fringe (15%)		0	0	10,031	0	10,585	0	6,921	0	27,537	0	27,537
SUBTOTAL A		0	0	76,904	0	81,150	0	53,064	0	211,118	0	211,118
										0	0	0
B. TRAVEL/PER DIEM										0	0	0
1. Travel										0	0	0
a. Int'l travel 1 RT	1,200			1,200	0			1,200		2,400	0	2,400
b. Relocation/Home Leave		0	0	0		1,200		2,400	0	3,600	0	3,600
c. Shipping				0				0	1,000	0	1,000	1,000
d. local travel	150	0		750		750		750		2,250	0	2,250
Subtotal 1.		0	0	1,950	0	1,950	0	4,350	1,000	8,250	1,000	9,250
2. Per diem										0	0	0
a. Int'l 10days@$100	100			1,000		0		0		1,000	0	1,000
b. Local		0		1,600		1,600		1,600		4,800	0	4,800
Subtotal 2.		0	0	2,600	0	1,600	0	1,600	0	5,800	0	5,800
SUBTOTAL B		0	0	4,550	0	3,550	0	5,950	1,000	14,050	1,000	15,050
										0	0	0
C. CONSULTANCIES										0	0	0

1. Translations				500		450		400	0	1,350	0	1,350
2. Cost analysis										0	0	0
Fees 30 days @	375									0	0	0
PD 30 days @	100									0	0	0
Airfare USA Bolivia	1,200									0	0	0
3. Quality Assurance										0	0	0
Fees 30 days @	375			5,625		5,625		0		11,250	0	11,250
PD 30 days @	100	0		1,500	0	1,500	0	0	0	3,000	0	3,000
Airfare USA Bolivia	1,200	0		1,200		1,200		0		2,400	0	2,400
4. Sustainability & Cost Recovery										0	0	0
Fees 30 days @	0	0		0		0				0	0	0
PD 30 days @	100	0	0	700	0	0	0		0	700	0	700
Airfare USA Bolivia	1,200	0		1,200		0				1,200	0	1,200
5. Mgt Cpcty Eval		0								0	0	0
Fees 10 days @	150			1,500						1,500	0	1,500
PD 7 days @	100			700						700	0	700
Airfare LP SC	150			150						150	0	150
6. IMCI Training										0	0	0
2 trainings x 11 days x $200		0		0						0	0	0
2 trainings x 3 days x $200				1,200						1,200	0	1,200
7. Capacity building seminars				3,000						3,000	0	3,000
8. English classes				3,750		0				3,750	0	3,750
9. BCC M&E workshop										0	0	0
Fees 20 days @	150			3,000						3,000	0	3,000
PD 15 days @	100			1,500						1,500	0	1,500
Airfare LP SC	150			300						300	0	300
2 trainings x 3 days x $200				1,200						1,200	0	1,200
10. Surveys										0	0	0
KPC EOP				0				3,000		3,000	0	3,000
Nutrition				16,500						16,500	0	16,500
11. Evaluation MTE & EOP									0	0	0	0
Fees 20 days @	350			7,000				7,000		14,000	0	14,000
PD 15 days @	100			1,500				1,500		3,000	0	3,000
Airfare USA Bolivia	1,200			1,200				1,200		2,400	0	2,400
SUBTOTAL C		0	0	53,225	0	8,775	0	13,100	0	75,100	0	75,100
										0	0	0
D. PROCUREMENT										0	0	0
1. SUPPLIES										0	0	0
Office Supplies										0	0	0
Printing/Copying		0		800		800		800		2,400	0	2,400
Project supplies				1,000		750		500		2,250	0	2,250
Misc Supplies		0		500		500		500		1,500	0	1,500
Subtotal 1.		0	0	2,300	0	2,050	0	1,800	0	6,150	0	6,150
2. EQUIPMENT										0	0	0
4wd Vehicle (1)			0			0		0		0	0	0
4wd Vehicle (1)			0							0	0	0
Computer/Printer		0								0	0	0
Copier/Fax		0								0	0	0
Subtotal 2.		0	0	0	0	0	0	0	0	0	0	0
3. Training										0	0	0
		0		1,000	0	1,000	0	450	0	2,450	0	2,450
		0			0					0	0	0
		0			0					0	0	0
		0			0					0	0	0
Subtotal 3.		0	0	1,000	0	1,000	0	450	0	2,450	0	2,450
										0	0	0
SUBTOTAL D		0	0	3,300	0	3,050	0	2,250	0	8,600	0	8,600
										0	0	0
E. OTHER DIRECT COSTS										0	0	0
1. Vehicle Operations											0	0
a. Fuel/oil		0		1,500		1,500		1,500		4,500	0	4,500
b. Maint. (Car & Motorcycle)		0		2,000		2,000		2,000		6,000	0	6,000
c. Insurance/Lic/Regist.		0		1,000		1,000		1,000		3,000	0	3,000
Subtotal 1.		0	0	4,500	0	4,500	0	4,500	0	13,500	0	13,500
2. Office Operations											0	0
a. Rent & Utilities		0	0	1,000	0	1,000	0	1,000	0	3,000	0	3,000
b. Housing		0		5,100	5,100	5,100	5,100	5,100		15,300	10,200	25,500
b. Telephone/fax/email		0	0	1,000	0	1,000	0	1,000	0	3,000	0	3,000
c. Postage/Courier/shipping		0	0	750	0	750	0	750	0	2,250	0	2,250
Subtotal 2.		0	0	7,850	5,100	7,850	5,100	7,850	0	23,550	10,200	33,750
3. Subgrant CEPAC										0	0	0
TOTAL CEPAC		0	0	109,359	21,073	109,359	21,073	109,359	21,073	328,077	63,219	391,296
SUBTOTAL E		0	0	121,709	26,173	121,709	26,173	121,709	21,073	365,127	73,419	438,546
										0	0	0
SUBTOTAL A, B, C, D, E		0	0	259,688	26,173	218,234	26,173	196,073	22,073	673,995	74,419	748,414
										0	0	0
G&A 15.33% (no equipment)		0	0	23,045	782	16,691	782	13,294	154	53,030	1,718	54,748
TOTAL COUNTRY		0	0	282,733	26,955	234,925	26,955	209,367	22,227	727,025	76,137	803,162
TOTAL COUNTRY/HQ COSTS		0	0	309,379	69,347	259,689	61,802	231,571	57,859	800,639	189,008	989,647