

**PLAN INTERNATIONAL ALTIPLANO**

**La Paz, Bolivia**

**FINAL EVALUATION OF THE  
CHILD SURVIVAL CS-IX PROJECT**

**Cooperative Agreement  
(FAO-0500-A-00-3021-00)**

**LA PAZ - BOLIVIA**

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## LIST OF ACRONYMS

ARI	Acute Respiratory Infections
CHR	Child Health Record
DCM	Diarrhea Case Management
DILOS	Local Health Boards
DIP	Detailed Implementation Plan
EIP	Extended Immunization Program
IAC	Information Analysis Committee
KPC	Knowledge, Practice and Coverage Study
NSH	National Secretariat of Health
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Treatment
RSH	Regional Secretariat of Health
SAP	Strategic Action Plan
SCM	Standard Case Management
SNIS	“Sistema Nacional de Informacion en Salud”
SVEN	“Sistema de Vigilancia Epidemiologica Nutritional”
<b>USAID</b>	United States Agency for International Development
VHW	Village Health Workers
WHO	World Health Organization
WRA	Women of Reproductive Age

## Executive Summary

From September 1, 1993 to August 31, 1996 Plan International implemented the CSIX Child Survival Project through a Cooperation Agreement with USAID (FAO-0500-A-00-3021-00). The Project was conducted, as per an agreement with the La Paz Regional Secretariat of Health (RSH), in 281 communities in the Los Andes, Manco Kapac, Ingavi and Jose M. Pando Provinces in the La Paz Department.

A project evaluation is required by the United States Agency for International Development, Bureau for Humanitarian Response, Office of Private and Voluntary Cooperation (USAID/BHR/PVC). This evaluation is to be prepared at the end of the project in order to assess the results reached, its effectiveness and the prospective for its future sustainability. The current evaluation includes a narrative report on the most outstanding project issues, as well as results on the Knowledge, Practice and Coverage Study (KPC), which was performed a few weeks in advance.

In order to perform the evaluation, a multidisciplinary and interinstitutional team was set up. This team obtained the necessary information through in-depth interviews, field trips, meetings with authorities, and interviews with the beneficiary population. The results obtained were discussed in conformance to USAID's guidelines, taking as reference the original and reformulated DIP. Thus, the following aspects were considered:

- a) The CS project's behavior regarding the performance of the National Secretariat of Health's (NSH) basic and priority programs (immunizations, nutrition, nutrition education and growth monitoring, diarrhea control, pneumonia control and maternal care).
- b) Educational programs promoted by the project, focusing on the improvement of District health services. Education for voluntary personnel and midwives in the communities was also included.
- c) Project expenses
- d) Project actions in order to attain the sustainability of the activities performed during the three years of operation.

The following report focuses on the targets to be attained, using previous achievements and lessons learned as guides to determine the methods most suitable to accomplish these ends.

## FINAL EVALUATION OF THE CHILD SURVIVAL CS-IX PROJECT

### BACKGROUND

Plan International Altiplano is a non-political, non-profit private voluntary organization. It executes community development projects in the rural areas of the Bolivian Altiplano, including Child Survival Projects, Integrated Rural Development and Peasants Training. Its main focus is to improve the quality of life of the population, particularly that of children.

From September 1, 1993 to August 31, 1996, Plan International implemented the Child Survival Project through a Cooperation Agreement with USAID (FAO-0500-A-00-302 1-00). The project was conducted as per an agreement with the La Paz Regional Secretariat of Health (RSH), in 281 communities in the Los Andes, Manco Kapac, Ingavi and Jose M. Pando Provinces in the La Paz Department.

These project areas were selected due to their high maternal and child mortality rates and because of the scarce use of health services due to low income levels, illiteracy, and attitudes and beliefs incompatible with the demand for occidental health services.

The CS project began with a base line provided by the previous CS Project (CS VI) (August, 1993). That data, however, only considered a part of the communities involved in the CSIX Project'.

The project was designed to improve the quality of life and the efficiency of the mother-child health services, by strengthening two RSH Health Districts: Los Andes-Manco Kapac and Santiago de Machaca. Thus, the actions had to be implemented at the community, Sector, and even at the Health District level. The project sought to improve the reference, training, supervision, information and logistics systems of priority programs of the NSH.

The CS Project was developed by implementing the following components:

- \* Nutrition Education
- \* Control of Diarrheal Diseases
- \* Control of Pneumonia
- \* Growth Monitoring
- \* Immunizations
- \* Maternal Health

The project was implemented in order to achieve the three following objectives:

1. Decrease the morbidity and mortality of children under five years of age, prioritizing service to the population under two years of age and women of reproductive age, by the implementation of sustainable, planned interventions, and the cooperation of health service providers and community organizations.

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1. Plan International Altiplano (1993) Final Evaluation Report: VI Child Survival Project.

2. Develop and distribute health CS interventions to the RSH Health Districts involved, including referral systems, training, supervision, and health information systems in order to provide integral health services for children under five years of age and women of reproductive age.
3. Strengthen the RSH institutional development by implementing a program addressed to improve the quality of service and the participation of the community at the local level.

It is important to point out that the basic strategy of the CS project to achieve these targets was to provide systematic technical assistance to the NSH Health Districts, by means of economic support and technical assistance.

The final evaluation is a requirement of the United States Agency for International Development, Bureau for Humanitarian Response, Office of Private and Voluntary Cooperation USAID/BHR/PVC, this evaluation is to be prepared at the end of the project in order to assess the results reached, its effectiveness and the perspectives for its future sustainability. The current evaluation includes a narrative report on the most outstanding project issues, as per the guidelines established by USAID: a) Final Evaluation; b) KPC Survey Report, and c) Budget Analysis.

## **EVALUATION METHODOLOGY.**

The current evaluation was carried out in conformance with USAID/BHR/PVC guidelines for the final evaluation of child survival projects ending in 1996. Thus, the first part shows the most outstanding project achievements, as compared to the objectives proposed under the original DIP. The second part reformulated after the mid-term evaluation, describes the positive and negative results attained.

Second, this report includes, in an annex, a copy of the Knowledge, Practices and Coverage Study (KPC) performed on the beneficiary populations. Finally, it incorporates the project's expense flow and an analysis of the economic and administrative procedures followed throughout its implementation.

**1. Evaluation Team.** Plan International Altiplano decided to carry out a participatory evaluation in the public and private sector, including professionals not related to Plan International. This was done with the certainty that they would be able to provide the evaluation process with an external, personal and institutional perspective as well as provide recommendations for future projects.

Thus, an external team was set up with the following people:

1. Erick Roth, external evaluator and team leader
2. Miriam Lopez, external coevaluator, expert in the National Program for Pneumonia Control
3. Ileana Baca, External Evaluator from USAID/Bolivia, Health and Human Resources Division.

4. Joseph Valadez, Plan International, Washington Office, USA.
5. Orlando Moreira, Director of the Santiago de Machaca District/RSH.
6. Erland Tejerina, Director of the Los Andes-Manco Kapac District/RSH.
7. Gonzalo Maldonado, PROCOSI<sup>2</sup> Representative
8. Willy Tellez, NSH International Affairs.
9. Marcelo Castrillo, Health Advisor Plan International Bolivia.
10. Lourdes Aquisé, Field Facilitator Plan International Altiplano.
11. Clotilde Ramos, Field Facilitator Plan International Altiplano.

**2. Evaluation Planning.** The team leader and coevaluator organized a meeting on August 13 to assign the evaluation teams and their responsibilities. The criteria of the meeting were the following:

1. Acquaint and familiarize the evaluation team with the project strategy, philosophy, objectives, targets, and USAID/BHR/PVC evaluation guidelines.
2. Distribute among team members the evaluation responsibilities of the CS Project.
3. Agree on the evaluation procedures and methodologies, as well as on the criteria for report findings.

During the meeting the evaluation team agreed on the overall schedule and activities.

Annex 3 includes the workshop program agenda.

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2. PROCOSI is Bolivian PVO umbrella organization.

### Schedule of Activities for the CS Project Final Evaluation

MONDAY 12	TUESDAY 13	WEDNESDAY 14	THURSDAY 15	FRIDAY 16
<p>Preparation of documents to be distributed during the workshop for the conformation of teams.</p> <p>Finalize logistics details for field work.</p>	<p><b>WORKSHOP TO SET UP TEAMS:</b></p> <ul style="list-style-type: none"> <li>- Presentations</li> <li>- Evaluation objectives</li> <li>- Analysis of USAID/BHR/PVC guidelines</li> <li>- Presentation of CS Project</li> <li>- Results of the KPC Study</li> <li>- Information System (SNIS-Plan)</li> <li>- Set up of the three evaluation teams.</li> <li>- Distribution of tasks and terms.</li> <li>- Preparation for field trip.</li> </ul>	<p><b>FIELD WORK:</b></p> <p>Interviews with authorities, leaders and key informers.</p> <p>Interviews with District personnel.</p>	<p><b>FIELD WORK:</b></p> <p>Interviews with authorities, leaders and key informers.</p>	<p><b>PREPARATION OF THE EVALUATION REPORT.</b></p> <p>Individual and group work for the preparation of reports.</p>
MONDAY 19	TUESDAY 20	WEDNESDAY 21	THURSDAY 22	FRIDAY 23
<p><b>PREPARATION OF THE EVALUATION REPORT.</b></p> <p>Individual and group work.</p>	<p><b>PREPARATION OF THE EVALUATION REPORT.</b></p> <p>Individual and group work.</p>	<p><b>WORK MEETING:</b></p> <p>Analysis of the progress on the drafting of the corresponding reports.</p>	<p><b>PREPARATION OF THE EVALUATION REPORT:</b></p> <p>Individual and group work.</p>	<p><b>SUBMISSION OF REPORTS:</b></p> <p>Compendium of partial reports; begin the final report.</p>

Three work teams were set up during the workshop, the following responsibilities were assigned to them:

EVALUATION TEAM	RESPONSIBILITIES
<p>TEAM 1</p> <p>Willy Tellez Clotilde Ramos Mary Mollinedo</p>	<p>Interinstitutional Affairs Project Management</p>
<p>TEAM 2.</p> <p>Erick Roth Orlando Moreira Gonzalo Maldonado Marcelo Castrillo</p>	<p>Information, Education and Communications Sustainability and Community Participation</p>
<p>TEAM 3.</p> <p>Miriam Lopez Ileana Baca Erland Tejerina Joseph Valadez Lourdes Aquise</p>	<p>Program management: Diarrhea Disease Control, Pneumonia Control, Growth Monitoring. Maternal Health.</p>

**3. Field Work.** The evaluation team agreed that to obtain the corresponding information a number of visits and interviews should be set up with key informers at different levels: at service level, conversations should be held with health personnel (Area Physician, nurse, infirmary assistant), voluntary personnel (VHW) and municipal and community authorities (Mayors, Union Leaders and other native people).

Likewise, some interviews should take place in the project's work area (rural sector), while others should take place in the city of La Paz.

It is for this reason that the following communities were selected for visits:

Los Andes-Manco Kapac District:

Tiquina  
Batallas  
Kharwisa  
Aygachi  
Mucuna

Santiago de Machaca District:

Jalsuri  
Guaqui  
Qurpa  
Tiwanaku

The criteria for the selection of work sites was a differential implementation of the project in both Districts. In other words, communities with outstanding achievements were selected, as well as those that faced problems in the development of CS project activities.

The following are representative findings during the evaluation process:

## I. PROJECT ACHIEVEMENTS AND LESSONS LEARNED

### A. Project Achievements

#### SUMMARY OF MAIN ACHIEVEMENTS

PROJECT TARGET BY ACTIVITY	PROJECT ACHIEVEMENT	ACTIVITIES PERFORMED	RESULTS
<p>(1) Increase the number of children between 12 to 23 months, with a full vaccination scheme, from 52.8% to 80%.</p> <p>80% pregnant women with 2 TT doses. (*)</p>	<p>KPC study shows that nearly 63% of the children received three doses of OPV and DPT.</p>	<p>Strengthen cold chain. Community Records. Review of sector IAC coverage. Continuous Education.</p>	<p>Cold chain in operation, regularity on the supply of provisions, adequate follow up records, EIP in service. A reduced abandonment rate.</p>
<p>(2) Decrease from 19.1% to 15% the number of children between 0 and 23 months who weigh minus two standard deviations.</p>	<p>KPC study shows 24% M-2.</p> <p>District data reveals an average 50% decrease compared to 1995.</p>	<p>Reformulate appropriate targets.</p> <p>Use of Child Health Records, Nutritional Education, Educational Material.</p>	<p>Acceptance of vaccinations.</p> <p>Health personnel handle the concept of growth trends. VHWs perform follow up, effective training.</p>
<p>(3) Increase from 47 to 80% the number of children between 0 and 23 months who are treated with ORS, homemade liquids, homemade serum and breastfeeding continuation.</p>	<p>KPC report shows 77% of the children receive ORT and 85% maintain or increase breastfeeding.</p>	<p>Training, Training Material, Access to Oral Rehydration Salts.</p>	<p>Popular-Oral Rehydration Unit operating. Adequate provision of ORS. Diagnosis and reference criteria properly applied</p>
<p>(4) Increase from 40% to 60% the number of children between 0 and 23 months who are coughing and have agitated breathing, who are identified by the mother or referred by the VHW to the health services (*).</p>	<p>KPC shows that 42% of the mothers seek help. 78% VHW recognize reference signs.</p>	<p>Community courses, Educational Material, Follow up Cards, Community Records</p>	<p>Mothers recognize and treat non-pneumonia ARIs at home. Adequate community training strategy. An increase in confidence of the services.</p>
<p>80% of the children who are coughing and have accelerated breathing who are referred to VHW or to health services will be treated as per NSH protocols.</p>	<p>The reference system based on screening criteria is used. 80% of the cases receive first line treatment with Cotrimoxazol.</p>	<p>Reformulate targets, Clinic Training, VHW Training, Supervision, Adequate Material, Medicine Supply.</p>	<p>Health personnel and VHW trained in SCM for PCM. Supplies available. Strengthen solution capacity at support hospitals.</p>

## SYNTHESIS OF MAIN ACHIEVEMENTS

TARGET	PROJECT ACHIEVEMENT	ACTIVITIES PERFORMED	RESULTS
(5) 80% of the women, and their spouses, with children under two years of age will recognize pregnancy risk signs.	The VHW describe the signs of danger with some precision.	Educational material. Training courses for VHW.	Detection of pregnant women by means of information from the communities or the midwives.
(6) 80% of the women with risk signs will be treated as per NSH protocols.	Dystocia problems are detected and solved, many services do not use NSH protocols.	Supervision, Maternity Insurance (from September 1996).	It is expected that the resolution capacity will increase with the new maternity and child insurance.
(7) 30% of the pregnant women will receive at least 3 visits by the VHW.	VHW only detect pregnancies; the visits are performed by midwives.	Training. Appropriate Educational Material.	VHW knows the signs of risk and communicates the pregnancy to his/her community.
80% of the pregnant women listed in the community records will receive at least one prenatal visit by health service personnel.	Health personnel perform two to three prenatal visits on the pregnant women enrolled.	Community records. Educational Material. Training, Supervision, IAC.	Confidence in the service. Moderate increase in institutional deliveries.
The number of home deliveries which use the clean birth package will increase from 20% to 50%.	Health personnel indicate that all mothers with three or more visits, near the 8th month, receive the packages.  Several mothers who will have institutional deliveries have the package.	Provision of delivery packages. Use of instruction leaflet.	Appropriate distribution of packages.

## (\*) Target reformulated as a result of recommendations from the mid-term evaluation.

During the mid-term evaluation (performed between August and September, 1995) and after a review of the project background, the original targets were modified. The reformulation was necessary within the framework of the Social Reforms which occurred at a national level. This promoted change in the sector's perspective on health problems to one that is more intersectorial and participatory and also furthers the growth of the municipal governments.

In essence, the targets formulated by the project maintain coherence with a focus on the current Strategic Actions Plan (SAP) under the Human Development Ministry. The following aspects are highlighted.

1. Contribute to the reduction of mortality and morbidity levels in children under five years of

age, priority given to children under two years of age.

2. Contribute to the reduction of high maternal mortality rates, with priority given to women of reproductive age.
3. Develop planned and sustainable processes; transfer the systems to the services network.
4. Implement institutional strengthening programs, developing programs to improve the quality of service while involving the community.

**LESSON LEARNED:**

The CS project has performed genuine efforts to adjust its schedule to the country's new social and political conditions, subordinating its work to the new health policies under the National Secretariat of Health. However, it has also kept to the terms of its contract with USAID.

## ANALYSIS OF THE PROJECT'S ACHIEVEMENTS AND RESULTS

### Achievements Related to Immunizations

**80% of the children between 12 and 23 Months will have a Complete Vaccine Program (BCG, DPT3, OPV3, and Measles).**

**80% of the Pregnant Women will have two doses of Tetanus Toxoid.**

The project estimated, as a Base Line in 1993<sup>3</sup>, that 52.8% of the children between 12 and 23 months of age would have a complete immunization scheme. The mid-term evaluation suggests, by means of a coverage analysis, that 82% of the target population was vaccinated. The KPC study shows that 63 % of the children had completed the DPT3 and OPV3 scheme, 62% for measles and 64.5% for BCG. These figures are the result of the verification of doses records under the Child Health Report.

The analysis of coverage (as per SNIS's information) for the six month evaluation performed in the Los Andes-Manco Kapac and Santiago de Machaca Districts, forecasts -by the end of the year - a 60% coverage, almost similar to the KPC for OPV3 and DPT3. However, there is an overestimation regarding coverage and forecasts for the measles vaccine (children between 12 and 23 months). For BCG the coverage and forecasts reflect diverse analyses. The Santiago de Machaca District forecasts an 84% coverage by years end. Pucarani forecasts a 48% coverage and Puerto Perez a 75 % : these two areas reflect the highest population concentration in the Los Andes-Manco Kapac District.

Abandonment rates are at an average of 5.8% (SNIS information); however, the denominators used for the analysis make reference to populations under one year of age, which reveals the need to make a revision of the denominators before inferring the final results.

#### **LESSON LEARNED:**

It is important to establish targets which take into consideration the denominators available in the official records. **Project achievements should be reported per preject norms and also reported per current national public health control program policies.**

In general, the forecast for the mid-term evaluation overestimated the target's scope. A retrospective analysis for coverage in prior years (taken from records and statistics available at the "Sistema Nacional de Información en Salud") showed a behavior almost **similar to the one** currently found.

Field trips to health centers revealed that the most important aspect was the implementation of the cold chain which allows, among other things, the application of vaccinations as an additional responsibility during **visits**. This favors the user population's contact with the

3. The Base Line Study did not follow the standard deviations of the key indicators for Child Survival Projects, provided by the Johns Hopkins University P.A.S.I.

service because other services can be provided during this visit (e.g.. health education).

The use of the vaccine coverage charts within project activities confirms that there is a systematic monitoring of the forecasted targets.

The educational cards produced by Plan International Altiplano are a very important educational element to facilitate the acceptance of vaccinations by the community. Undoubtedly the community record is one of the elements that has strengthened the information system and decision making at a local level.

An issue, which hinders the regular application of BCG and measles vaccines, is the use of the multidose vials. Many times a vaccination is not given when there is only one child to vaccinate. This policy avoids waste. However, it also hinders the regular application of the Extended Program on Immunization.

Modifications made by the NSH regarding the EIP scheme, the introduction of new criteria for pneumonia control, and the interpretation of indicators hinder the RSH's operational levels, because these changes took place without proper training. Furthermore, the services received instructions to vaccinate children older than two years of age during nationwide campaigns; these activities do not take into consideration the schedule of activities of health workers.

#### **LESSON LEARNED:**

In light of the data available at the local level, it is important to support the local strategies formulated to increase vaccination coverage.

Regarding the second target of the component, the DIP proposed the application of TT5 for mothers, the target was reformulated after the mid-term evaluation. The current goal is reasonable: the application of TT2 is more feasible in pregnant women than it is to extend it to women of reproductive age (WRA). KPC indicates that about 24% of pregnant women received the vaccine. The district's evaluation data reveals a much lower figure, probably because, just as in the SNIS data, they have a different denominator than the one proposed in the original target.

EIP uses the TT2 as a vaccine coverage parameter. This forces the Districts to make adjustments regarding the expectations of the project and the NSH.

The personnel interviewed at the project sites indicate that the mothers have begun to accept the application of TT, which is closely related to the target population. That is to say - pregnant women instead of WRA. The last point is one of the obstacles which, even at a national level, have hindered achieving wider coverage.

#### **LESSON LEARNED:**

The project appropriately proposed that the TT should be applied to pregnant women instead of women of reproductive age; this allows for a greater acceptance.

It is important to point out that the project reviewed the evaluation indicator of TT2, but the policy to apply this vaccine to all women of reproductive age is still in force. Thus, if the TT coverage is to be evaluated for WRA, a cross section study should be performed on this population.

### **Achievements in Growth Monitoring**

**Decrease, from 19% to 15%, the number of children between 0 to 23 months who weigh minus two standard deviations.**

The NSH proposed that education in the field of nutrition and nutrition practices are the axis for the interventions developed in this age group, which at a nationwide level shows the highest prevalence of moderate and severe malnutrition. The purpose of growth monitoring through the CHR is to monitor the effect of education in children under five years of age.

#### **LESSON LEARNED:**

The project consultants' recommendations regarding the emphasis on Nutrition Education or in the negotiations with the mothers in order to produce a change in eating habits will have a significant impact in reducing moderate and severe malnutrition.

The mid-term evaluation revealed that the Epidemiological Nutritional Surveillance System had reached the target, a 10% reduction. However, the individual analysis on the children's growth rates shows, in a better way, the impact of the messages regarding child nutrition, based on eating practices, frequency and quality.

The KPC study shows that 65 % of the children under two years have been weighed during the last four months, however SNIS's data shows that only 24% of the children under two years of age were captured for new visits to the project sites. On average there were 2.4/visits per child, and from that total, 80% had an increasing growth trend.

The exchange of criteria with the project personnel shows that the concept of growth trend has been introduced as an indicator which reflects the children's health condition. To this one may add the support of the educational cards which guide the interpretation of adequate growth (increasing trend) and inadequate (flat or decreasing trend) and nutritional guidance, aside from emphasizing general criteria on early stimulation.

The curve shows that the use of CHR has doubled at the project sites, although follow-up of children with inadequate growth levels is not made at the intervals recommended by national regulations.

The attitude changes regarding the nutritional practices of the population should be subject to intensive educational interventions.

This intervention is one of the weakest within the NSH and PLAN Altiplano's CS Project.

**LESSON LEARNED:**

Although the CHR is a tool to monitor the effects of education on nutrition, the CHR should be the tool that goes together with all services, not only as part of an intervention but also as part of community monitoring of the children.

**Achievements in Acute Diarrhea Control.**

**80% of the children between 0 to 23 months of age are to be treated with ORS, homemade solutions and breastfeeding.**

In general, the interventions developed in diarrhea control have been successful. The mid-term evaluation shows that 93% of the mothers applied ORT during diarrhea episodes as a result of the educational interventions in the project areas. This achievement surpasses the expectations of the national target.

In spite of that, however, diarrhea incidence is a little higher than the national average. In Tiwanaku, the doctor interviewed stated that it does not even have a relation to seasonal changes. In the future this situation should be subject to field research.

Most episodes are treated in the household. The fact that there are some ORS suppliers in the communities has reduced mortality rates. Institutional coverage is low. Since 1994 they have maintained more or less the same rate, between 10% to 12% of episodes per year.

**LESSON LEARNED:**

Training and follow-up of VHW in treating diarrhea cases has allowed learning about the episodes at an earlier stage, thus significantly reducing mortality rates caused by serious dehydration and shock.

The health personnel are aware of the treatment plans and apply the criteria to evaluate rehydration. The VHW interviewed know the rules for the appropriate treatment of household cases and they clearly distinguish the reference criteria. Most begin oral rehydration with ORS at the community level -P when deemed necessary, and they also provide appropriate advice to mothers for adequate household treatment.

Supplies have been regularly provided by the project and VHW have sufficient ORS in stock.

One obstacle that could potentially limit the work of service providers at the community level is the application of the Maternity and Child Insurance, as a large portion of the episodes currently treated in the household would be channeled to health services. Another potential obstacle is the existence of an open market for ORSs. These aspects should be discussed with the Municipal governments and the communities.

### **Achievements in Pneumonia Control**

**Increase from 41% to 60% the number of children between 0 to 23 months that are coughing or have breathing difficulties and are identified by the mothers or referred by the VHW to the health services.**

**80% of the coughing and breathing difficulty cases will be treated as per the protocol recommended by the NSH.**

Pneumonia control was introduced in the project due to a pilot experience developed by the NSH in the work areas. In 1991 this intervention promoted the development of two joint operations research studies between NSH/UNICEF/WHO and JHU.<sup>4</sup>

#### **LESSON LEARNED:**

The cooperation between project officers and the NSH regulating team for this particular intervention has been successful, and could be replicated in other sectors and programs.

It is necessary to reiterate that the protocol for Standard Case Management of Pneumonia (SCM-P) is the most complex protocol in operative terms because it emphasizes clinic screening. It requires the existence of a service network with sufficient authority to attend the most serious cases, in addition to personnel that are acquiring experience and expertise in treating children.

The mid-term evaluation and the Starbuck Report state the need to strengthen critical areas related to the main topics in the Standard Case Management (SCM).

Effectively train personnel in the Standard Case Management of Pneumonia.

Make access and use of health services possible for the population.

Provide training strategies for the community, facilitate the early identification of pneumonia signs and facilitate access to health services or other health service suppliers.

### **Treatment of Cases**

The health personnel received theoretic training in national regulations for the treatment of cases. The first class in practical training is implemented periodically at the Clinical Training Centers.

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4. Ethnographic studies of ALRI attitudes and practices. Evaluation of the promoters knowledge in ALRI treatment.

Regarding the application of the SCM/Pneumonia protocol, the field interviewers evaluated the knowledge of the health personnel at different levels. The doctors are aware of the national rules and are trained at the pre-graduate level. One of them also participated in regular clinic training for refreshing purposes. Infirmity personnel are aware of the protocol, although their responsibilities at the hospitals do not include direct treatment of cases. The assistants evaluated are aware of the main diagnosis signs, that is to say, respiratory frequency ranges, identification of intercostal in-drawing.

Finally, the evaluation group had the opportunity of speaking with three VHW from different communities, who correctly defined the breathing frequency ranges by age and intercostal in-drawing, in addition to other risk signs such as difficulty in breastfeeding and deciding the type of treatment that should be applied in each case.

**LESSON LEARNED:**

The treatment of pneumonia cases should be periodically monitored, for each year new personnel are assigned to the project areas as a result of obligatory rural service or the inclusion of new VHW at the request of the community.

The medicine stock available at the service includes, mainly, cotrimoxazol, paracetamol and procaine penicillin. These medicines are used most frequently, especially at the centers served by the assistants. Occasionally the medical personnel break the protocol by prescribing benzilpenicillin benzatine in cases where it is not indicated. The prescription is filled due to routine treatment practices acquired during the internship period or during training. This really requires a negotiation process.

The project and the NSH supplied the project sites with cotrimoxazol paracetamol to be given to the users. This forced the substitution of products sold. This mechanism is a result of the acquisition and double regulations by the National Medicine Network and by PNMBOL.

This is a structural problem which is now duly regulated by the NSH. In addition, the Maternity and Child Insurance states that the only medicines prescribed should be those recommended under the NSH regulations for the control of pneumonia. After the first evaluation the preparation of additional regulations for the cases that require second level medicines remained pending - such treatment should be documented.

**LESSON LEARNED:**

It is best to maintain a regular provision of first level supplies in order to avoid the orescription of alternative medicines which are more expensive and difficult to sustain.

A second issue that is related to case treatment is based on the strengthening of the service

network and the introduction of programs that will help improve the quality of the services. This issue is gradually being introduced to the project and the NSH.

#### **LESSON LEARNED:**

Pneumonia control is a complex intervention, which requires strengthening the services and reference systems in order to attain a real impact.

#### **The Population's Access to the Project Services**

This issue is much more critical, for the ethnographic studies performed in Aymara communities show a number of barriers (other than geographic access) that hinder the contact between the project and the communities. Interventions inherent to the community's educational process may be showing gradual changes.

For this reason the project refocused to target the mothers and relatives seeking help from health services and community suppliers.

In analyzing quantitative issues, until July this year 25% of the cases expected from the Districts had been captured. This is opposed to 1995, when a manifest decrease was noticed in coverage due to the modification posed under the sanitizing model and the municipalization (as a result of the reorganization of the regional division of health and the adoption of new sector policies). Currently, coverage projections for pneumonia, until the end of the year, show that nearly 40% of the expected cases could be captured, taking into consideration that the NSH has included this pathology as a core issue in the Mother and Child Insurance service.

Regarding the level at which most cases are solved, it is noteworthy that most cases receive ambulatory treatment. This is in spite of the existence of hospitals admitting children with serious pneumonia.

#### **Service Demand**

Although treatment of non-pneumonia (common colds) at the household is not significant, the personnel interviewed indicated that the mothers appropriately take care of these episodes. The KPC study also shows that 78% of the mothers recognize pneumonia signs.

The KPC study, contrary to the observations made by the evaluation team, ratifies that 42% of the time children are ill mothers seek help at the health centers. This implies that education of mothers and relatives continues to be of fundamental value. By consulting the VHW more frequently the mothers are ensuring an adequate service demand in the future.

Aside from the obstacles in the NSH's SCM Pneumonia protocol, which involves clinic aspects, it is important to work with the community regarding the cultural practices that interfere with seeking help for children under two months. Almost all health services pose this as a problem. Most child deaths in this age range are recorded at the community level and indicate no contact with service providers.

**LESSON LEARNED:**

Death by pneumonia in children under two months of age is the highest and is an indicator of the quality of health services. Thus, future interventions should place priority on interventions addressed to children under two months of age, due to their vulnerability as well as the community's perceptions and practices.

**Community Providers of Standard Case Management**

The community provides ambulatory treatment for children between two months and four years who have pneumonia not classified as serious. Although the NSH authorizes this treatment, it is not delivered due to internal policies of the Health Districts and pressure from the Union of Infirmary Assistants. The doctors interviewed agreed to apply this recommendation in a pilot fashion, in communities with no health centers who have VHW trained in clinic procedures receiving adequate supervision.

**LESSON LEARNED:**

The extension of services from community providers requires a negotiation process within the Local Health Boards, where it should be clearly established that it is the only strategy that guarantees universal access to the Pneumonia Control Program.

**Additional Comments**

The pneumonia incidence parameter (10 to 15%) adopted by the country is suggested by WHO. This is in spite of the existence of data under the Demographic and Health Surveys which are valid for ARIs but do not allow inferring the incidence of ARIs vs. Pneumonia. To that end one of the doctors interviewed pointed out the difficulties in calculating targets on the basis of the recommended standards and insisted on the need to work the AR1 and pneumonia data separately to establish more realistic targets. In any case the references are useful to analyze coverage.

Another interesting aspect is to take into consideration the impact of malaria under the SCM Pneumonia. We must point out that currently the NSH is working in adapting the Strategy of Integrated Service for Diseases Prevailing in Infants, which includes an algorithm for malaria. Eventually this is useful in zones affected by malaria, but not for the areas under this particular project.

**Policies of the National Secretariat of Health and its Effects on the CS Project**

The issues which could have hindered achievement of this target during Dr. Starbuck's technical visit were related to the lack of knowledge and treatment application protocols by the health personnel. The provision of antibiotics, supervision and lack of local policies that

allowed the ambulatory treatment by the VHW are being adequately addressed in a joint effort between the NSH and the project.

Nonetheless, some structural obstacles remain as they are inherent to the social reforms themselves and restrict the achievement of the main target. The Popular Participation Law permits establishing the role of the Executive Branch in areas related to the Social Policy. Current regulations require maintaining traditional structures such as the Sanitary Districts. A participatory service “Model” favors the community and asks for reorganization of social policy.

### **Achievements in Reduction of Maternal Mortality Rates**

**80% of the women and their spouses, with children under two years of age, will be able to recognize pregnancy risk signs**

**80% of the women with risk signs will be treated as per the NSH protocol.**

**30% of the pregnant women will receive at least three visits by trained midwives.**

**80% of the pregnant women that are registered under the community records will receive at least one prenatal visit by infirmary assistants.**

**Increase from 20% to 50% the number of household childbirths using the clean birth package.**

The purpose of proposing these objectives is intended to achieve the early detection and reference of obstetric risks, which would eventually facilitate the access of pregnant women to the health services and increase the demand for institutional childbirth.

Coverage at an institutional level reflects modest changes: preference for household childbirth is strong. It is expected that the implementation of the Maternity and Child Insurance will increase the number of users.

The hospitals do not have standard protocols for treatment of normal childbirth, complicated childbirth and attention for newborns. However, the NSH has already prepared material on these topics for distribution with accompanying training.

Personnel interviewed at the project sites mentioned that the mothers go to the centers for prenatal visits more than once, but this does not guarantee institutional childbirth. There is also some resistance to more complex services: obstetric emergencies treated at hospitals are mostly for dystocia. This was previously treated by midwives or relatives and often resulted in fetal death.

The clean birth package is provided to all pregnant women who have been served more than three times or are in the eighth month of pregnancy; however, it is necessary to find out if they are actually used.

**LESSON LEARNED:**

Considering the users preferences, offering home birth services by the Project is necessary; however, promoting institutional childbirth is essential.

It must be pointed out that the NSH started the National Program for the Reduction of the High Mother Mortality Rates in 1995. Since then protocols developed to treat obstetric complications are being reviewed. Training the Area and District physicians is necessary to ensure application of the protocols. However, since the program is quite new, Plan International Altiplano is only distributing the clean birth packages (which we do not believe will reduce the mortality rates due to complications during and after childbirth). Plan International will continue to research the activities of this intervention.

**ADDITIONAL CONSIDERATIONS****Coverage Analysis, Project Intervention Areas**

For coverage analysis only three indicators were selected, the interpretation criteria are:

Growth and development monitoring. Regular visits are a good service indicator, which means there is a link between the community and the service.

Pneumonia case management is an indicator that allows analyzing the access to the use of service and standard case management.

Diarrhea control is an indicator which shows the community's demand for service, taking into account that there are other service providers.

The Los Andes-Manco Kapac District only captured 21.8% of the children under two years of age for the first control during the first half of 1996. From that total 36% and at least 1.16 repeated controls. 90% showed an adequate growth, which means that 10% of the children had inadequate growth trends. In Santiago de Machaca, 24% of the children were captured for the first visit, 20% of them had 2.6 visits and 91% recorded an adequate growth trend. With these averages, and examining the immunization coverage reflected in the Districts' data, one can assume there are missed opportunities for growth monitoring.

The Los Andes-Manco Kapac District estimated that by the end of the year they would capture 1,207 pneumonia cases; only 15% of the cases received SCM for pneumonia. If this projection is maintained until year's end, only 30% of the expected cases will be treated.

The data show the population's access to the services is limited, especially taking into account that a good percentage recognize risk signs. Seemingly, strategies need to be designed in order to expand coverage by means of a service promotion or by setting up networks with other SCM providers, such as the VHW.

Regarding diarrhea services, the Los Andes-Manco Kapac District captured only 1.8% of 24,142 episodes programmed for service. Santiago de Machaca expected at least 19,011 episodes, only 2.8% sought attention. Most of them were treated with Plan A and only four cases received Plan C.

Considering that most episodes are treated in the household and that a good percentage of the mothers recognize risk signs, it would be expected that most children treated at the service are for diarrhea cases with dehydration. It would be informative to include the total episodes captured and treated by VHW, in a separate analysis.

## ACHIEVEMENTS IN INFORMATION, EDUCATION, COMMUNICATION (IEC) Synthesis of the Main Achievements

PROJECT TARGET	PROJECT ACHIEVEMENT	ACTIVITIES PERFORMED	RESULTS
For the VHW:			
1. Training in managing participatory educational techniques.	One course per year for 200 VHW in administration of educational techniques.	Training and provision of materials to the VHW. Follow up of Sector IACs.	200 VHW benefited.
2. Production and validation of educational material.	Production of two types of materials. a) Household sheets, and b) Educational techniques package.	Design, validation and printing of educational material.	23,000 household sheets edited and 400 packages produced.
3. Organization of community courses and meetings. Identify and train leaders, and promote participatory activities.	Six annual meetings in 260 communities.	Meeting, reflection and feedback from the communities.	260 communities benefited.
4. Training in the administration of basic messages of each one of the programs promoted by the project and the appropriate application of the NSH protocols.	Two annual courses in 44 of the 45 planned communities, subject ARI.	Educational meetings at the communities.	1.614 families benefited.
	One annual course to 170 communities from the 200 planned communities, subject ARI. DCM, EIP.	Educational meetings at the communities.	6,646 families benefited.
5. Community records. Anthropometric control. Child Health Records.	One course executed from the two courses planned on pneumonia.	Training of VHW.	50 VHW benefited.
	One course executed from one planned on pneumonia.	Training of VHW.	150 VHW trained.
6. Midwives training.	One meeting from the two planned on the information network.	Training of VHW.	180 VHW trained.
	Two courses implemented from the two planned.	Recycling of midwives in the area of mother health.	80 midwives benefited.

<p>For Infirmiry Assistants</p> <p>1. Training in handling of participatory educational techniques.</p> <p>2. Production and validation of educational material.</p> <p>3. Organization of courses, promote leadership and motivate the organization and community participation. Execution of sector <b>IACs</b>.</p> <p>4. Training in the administration of basic messages for each one of the programs that the project promotes and correct application of the NSH protocols.</p> <p>5. Community records. Child Health Records. Handling of SVEN. Completion of EIM 7. Completion of UNITAS-TB Handling of SNIS. Program records.</p>	<p>Three annual courses on treatment techniques and educational material.</p> <p>Three types of materials: a) Household sheets, b) Techniques package, and c) "Our Pregnancy, Our Delivery" Package.</p> <p>638 Sector <b>IACs</b> implemented from the 471 planned.</p> <p>Two courses per year on pneumonia. One course on Management and Service Quality.</p> <p>One course per year and follow up on 12 Area <b>IACs</b> per year.</p>	<p>Training, provision and follow up on the use of educational materials.</p> <p>Design, validation and printing of educational material.</p> <p>Information analysis and recycling .</p> <p>Theoretical training - practice for infirmiry assistants.</p> <p>Training and feedback on <b>IACs</b>.</p>	<p>53 assistants participated in the preparation of the household sheets and the packages.</p> <p>23,000 household sheets 400 technique packages 150 packages "Our Pregnancy, Our Delivery".</p> <p>146 participating VHW and 53 infirmiry assistants.</p> <p>53 infirmiry assistants benefited.</p> <p>53 infirmiry assistants benefited.</p>
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<p><b>For the Area Physician:</b></p> <ol style="list-style-type: none"> <li>1. Participatory Educational Techniques, interpersonal communication. Handling of audiovisual material and techniques for health education.</li> <li>2. Support the preparation and validation of educational material.</li> <li>3. Organization of workshops for infirmiry assistants.</li> <li>4. Support the community organization and promote the participatory diagnosis.</li> <li>5. Train rural teachers to incorporate health messages in formal education.</li> <li>6. Training on service quality.</li> <li>7. Correct application of the NSH protocols and preparation of the consolidated sector and area information. Handling of statistics and reports' preparation. IAC meetings.</li> <li>8. Training of project personnel.</li> </ol>	<p>One course per year on handling of educational material.</p> <p>Support in the elaboration and validation of three types of materials.</p> <p>Two workshops per Area every year, on basic intervention messages. -----</p> <p>One course per year from the two planned on program planning and pneumonia.</p> <p>120 from the 140 Area IACs executed during the year.</p> <p>One course executed from one planned.</p>	<p>Training, provision and follow up on the use of educational material in Area IACs and focused use.</p> <p>Participate in the design, validation and printing of the materials.</p> <p>Participate in the training and recycling of the infirmiry assistants.</p> <p>-----</p> <p>Training for area nurses and doctors.</p> <p>Analysis of the area information.</p> <p>Training of pneumonia facilitators.</p>	<p>!0 doctors and nurses benefited.</p> <p>Household sheets. Educational Techniques Package. "Our Pregnancy, Our Delivery" Package.</p> <p>53 infirmiry assistants benefited and 20 doctors and nurses participated.</p> <p>-----</p> <p>-----</p> <p>20 doctors and nurses benefited.</p> <p>55 health workers participated.</p> <p>6 facilitators benefited.</p>
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<p><b>For the District Doctor:</b></p> <ol style="list-style-type: none"> <li>1. Interpersonal communication.</li> <li>2. Organization of update workshops for the area physicians. IAC meetings.</li> <li>3. Training on service quality. Consolidation of the area information.</li> </ol> <p>Preparation of epidemiological reports.</p>	<p>Two District Directors and performance of supervision.</p> <p>20 IAC meetings promoted from the 24 planned.</p> <p>Attendance at specialization course on planning and management of health services.</p>	<p>Training of two District Directors in supervision systems.</p> <p>Information analysis and recycling.</p> <p>Attendance at specialization course in Puno, Peru.</p>	<p>Two District Directors benefited.</p> <p>50 health workers benefited.</p> <p>Two District Directors benefited.</p>
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## ANALYSIS OF THE ACHIEVEMENTS AND RESULTS OF THE PROJECT ON IEC

### Achievements Related to Training of Institutional Personnel

The educational activities undertaken by the CS Project were defined in 1993 through a diagnosis of training needs.<sup>5</sup> Such diagnosis also determined the preparation of a curriculum which oriented the training work forecasted in the DIP.

Practically all of the Health District activities which promoted the training of human resources were sponsored by the Project. The CS project made all training activities possible through the provision of transportation and meals for the participants in courses and workshops. This treatment included the sector IAC meetings<sup>6</sup>. Workshops were not only used to analyze the sector's information, but also to share lessons learned and update ideas related to daily responsibilities of Infirmery Assistants and VHW.

In addition to the achievements indicated in the above chart, the personnel at the Health Centers reported that they attended a workshop organized by the project where the Diarrhea Disease Control, Maternal Health and Pneumonia service regulations were reviewed. Also, discussions were held on the methods and expectations of the CS Project. Workshops generally are held for new District personnel (the internship physicians) to explain project objectives and progress.

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5. Barrera S. (1993) Curriculum Design and Continuous Institutional Training Program, applied in the area of health. La Paz: PIA/PROCOSI. Consultant's Report.
  6. IAC: Information Analysis Committee. It is a level instituted by the NSH to facilitate the flow of information in the different levels. Thus, there is a Sector IAC in charge of the Infirmery Assistants, and Area IAC, in charge of the Area Doctor and a District IAC in charge of the District Director.

Likewise, the infirmity assistants participated in a theoretical-practical course on clinic training on the same subjects (Diarrhea Disease Control, Maternal Health and Pneumonia). This took place at “Hospital del Nino” in the city of La Paz, the pneumonia training center of the Pan-American Health Organization.

Through the District’s scheduled program, the services of PROSALUD<sup>7</sup> were secured to provide personnel with a course on service quality.

#### **LESSON LEARNED:**

The project facilitated the training of the institutional personnel by providing financial assistance and materials. However, it must also be noted that this support promotes a dependence from the Districts on Plan Internacional Altiplano, so that the Districts have less incentive to undertake educational activities on their own.

Finally, it must be pointed out that the trainings were complemented with monitoring, follow-up and evaluation activities. The project developed specific guidelines to accompany the educational process and this provided close monitoring on progress. (See Annex 3.)

#### **Achievements Related to Training of Community Personnel (Training of VHW).**

The project provided the most training and educational benefits to the community volunteers. The trainings focused on the key messages disseminated to the local population regarding the basic programs: DCM, Growth Monitoring, Pneumonia, Eating and Nutrition, Immunizations and Maternal Health. This training placed special emphasis on the structure of the protocols and the regulations of the National Secretariat of Health.

The VHW also received training in handling and interpretation of the project’s educational materials. These trainings were offered during several two-hour daily periods for seven consecutive days which were programmed with other Area activities.

Certainly, the time allocated for these trainings seems insufficient. However, due to the scarce time the VHW have to perform their voluntary work, this deficiency will be compensated in the future with on *the job training* activities. Direct supervision will add to their learning experience.

Finally, the VHW received several sessions (specially in the Sector IACs) on handling of community records and the basics of the information system. However, during conversations with the assistants it became clear, especially for new personnel, that the handling of the community record format demands careful attention and trainings need to be repeated.

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7. PRO-SALUD is a project financed by USAID, which currently provides health services in suburban sectors, it is based on the concept of service quality.

The interviews showed that the training received for providing maternal health messages demanded greater skills and knowledge for the health personnel as well as for the VHW. This demonstrated a need to focus greater technical assistance on this component. In spite of the recommendations of the mid-term evaluation and the project efforts, there is still a weakness in the transmission of maternal and reproductive health messages.

Finally, Plan International Altiplano understands that the training of the VHW is not a purpose in itself, but a means to reach the target population. Likewise, Plan International Altiplano is aware that these human resources are temporary and constant retraining must be provided.

#### **LESSON LEARNED:**

The time available for the training of the VHW is certainly not enough because the VHWs themselves do not have adequate time to offer to the project.

**Midwives Training.** The training of midwives was implemented at a much slower pace than that of the voluntary personnel. It was a complicated task just to identify them and arrange common meetings. Much work is still needed to counterbalance their unwillingness to participate in the programmed training sessions. Nonetheless, each Area has been implementing the corresponding training at their own pace.

The project promoted the formation of an Empirical Midwives Association in all program Districts. This association has been useful in coordinating the training activities. Currently the association represents 80 midwives who are gaining independence from the supervision of Plan International Altiplano.

**Health Fairs.** Occasionally, with the assistance of the local authorities, health fairs are set up in larger centers. Generally, these are organized in the town's plaza, where the people are enjoying entertainment and music. Different educational activities take place in which the whole family can participate. Precautionary health messages are given with information on traditional beliefs and practices. This modality was not planned under the original proposal of the CS project, however it is an interesting complement to the other educational activities.

It is important to point out that during the past months the CS project has presented audiovisual material in the Aymara language at the fairs to support the population's education through mass media. These materials have not been distributed to the different health services, although they have been requested.

**Other Training Measures.** Each District or Area can perform other complementary activities at will, such as work in schools and with the teachers, in an attempt to effectively reach the children and youth in the community. Specialized trainings have also been developed such as the Health Center in Tiquina (home to a military base) designing training activities for the Army recruits.

**Training Methodology.** Although the original project proposal recommends executing the

educational activities in the most participatory fashion possible, field research shows that “talks” are still the most common method used during educational activities. There are reasons to believe that these or other explanatory methods are not effective enough to change the population’s behavior. Experience has taught us that adult education is more effective when it is based on participatory activities including discussions and exchanges with other adults about their daily practices.

Although participatory methods are not absent from the project’s work , it is imperative that it becomes more the rule than the exception. The physicians are most likely to resist participatory procedures.

#### **LESSON LEARNED:**

Even with adequate planning, training may have a reduced effectiveness if it is not provided using techniques and methods appropriate to the area. Efforts should be made to make the educational process more participatory.

**Educational Material.** The CS project has developed and distributed a significant amount of high quality educational material through the health services. During the field visit it was observed that health materials are being properly used by the personnel at the Center, as well as by the VHW (also, the use of material by health personnel from other projects and institutions was verified; for example, the Altiplano Health Team in **Qurpa**). Likewise, consensus was unanimous from personnel at the health services regarding the importance and usefulness of this material in educating community members. The use of drawings and bright colors are considered attributes that make the training process highly effective.

The material produced by the project and found at the Health Centers include:

1. Guide for participatory techniques applied to the area of health including a package of colored cards.
2. Household sheets on basic health issues: pregnancy, delivery, postnatal care, pneumonia, diarrhea, vaccinations and growth monitoring.
3. Guide to handle Household Sheets.
4. “Our Pregnancy, Our Delivery” package including five different flip charts with several colored illustrations.
5. Flip charts with descriptions of programs that are a priority for the NSH, one on oral health and another on the community record system.
6. Manual on pneumonia.

Most of the material developed by the project offers clear directions for appropriate use. It was

also noticed that the materials can be used in innovative and creative ways which encourage interaction between the trainers and community members. The “Our Pregnancy, Our Delivery” material is so big and cumbersome it poses some transportation difficulties. It would be worthwhile to find a way to transport it as the community showed a lot of interest in these large and colorful materials.

**Radio Programs.** During the past year the project issued a weekly radio program in the Aymara language on subjects related to the priority programs (Diarrhea Disease Control, Pneumonia, Growth Monitoring, Nutrition and Maternal Health). Each program lasted 15 minutes and was broadcast through Radio San Gabriel, a radio station with nationwide coverage.

Each program was recorded by the radio personnel with prior approval of the script given by the project facilitators. In general, a drama format was adopted. although some documentaries, stories and local songs were also broadcast.

#### **LESSON LEARNED:**

The project’s educational material received positive comments from the health services personnel. They pointed out its usefulness and versatility in dealing with basic health problems. Except for the conventional flip charts, the material facilitated participatory training.

#### **FINAL KPC STUDY**

The data obtained from this study was used to review the knowledge, practices and coverage reached by the CS project throughout its final term. This information was compared with that obtained from the base line. Although this type of study was designed as a project management tool to observe trends and progress, it also provides information that can be used for evaluation purposes.

The current study was performed to provide information for Plan International Altiplano in the following areas:

1. The knowledge of mothers of children under two years of age regarding a) the threats to children’s health and b) the ways to prevent diseases or reduce the consequences, including the use of immunization, appropriate treatment for diarrhea and treatment of pneumonia, growth monitoring, discontinuing breastfeeding and appropriate nourishment.
2. Current mothers’ practices regarding the above-mentioned interventions.
3. Immunization coverage rates for children between 12 and 23 months.
4. Diarrhea prevalence during the two weeks prior to the study, focusing on the

mothers' practices regarding these diseases.

5. Mothers' practices regarding treatment for diarrhea and dehydration.
6. Practices regarding breastfeeding, discontinuing breastfeeding, beginning of complementary food and growth monitoring.
7. Women's knowledge and practices regarding pregnancy and maternal health.

This recompilation of data will assist the executive personnel and the field team of Plan International Altiplano to become aware of the health activities developed by the CS project, as well as assess the progress and project activities. The data will also be useful to compare the results with those obtained in the base line and mid-term evaluation.

The FHA/PVC/CSH Office of USAID/Washington included this methodology as one of the requirements for base line studies and final evaluations of Child Survival Studies. The analysis of data and the submission of the report are considered an integral part of the study. It is therefore necessary to complete them during the first week after the study.

See annex 3 for the KPC Study Report. The following is a summary of the behavior of the key indicators.

## LIST OF INDICATORS

Definition of the Indicator	Formula	Calculation	Percentage
Percentage of Children under 24 months of age who were breastfed within one hour after childbirth	Answer #1 to generic question 7 ----- Total mothers interviewed	<u>192</u> 303	63.40
Percentage of Children under 24 months of age who were breastfed within eight hours after childbirth	Answer #1 & #2 to generic question 7 ----- Total mothers interviewed	240; 303	79.20
Percentage of Children under 4 months of age who were only breastfed	Number of mothers who answered 'no' to all questions # 8 c-d-e-f-g-h-i ----- Total number of children 0, 1, 2, 3 months old	<u>36</u> 36	100
Percentage of Children between six and ten months of age who are receiving solid and semisolid food	Number of mothers who answered 'no' to all questions # 8 c-d-e-f-g-h-i ----- Total number of children 6, 7, 8, 9 months old	<u>57</u> 62	91.9
Percentage of children between 20 and 23 months of age who are still being breastfed (while they also receive solid and semisolid food)	"Yes" answers to generic question #5 ----- Total number of children 20, 21, 22 and 23 months old	<u>47</u> 47	66
Percentage of children with diarrhea during the last two weeks, who received the usual amount of breastfeeding	Answer #1 and #2 to generic question #15 ----- Number of "yes" answers to question #14 less the number of #5 answers to question 15	<u>97</u> 113	85.8
Percentage of children under 24 months, who had diarrhea during the last two weeks, who received the same or greater amount of liquids other than the mother's milk	Answer #1 and #2 to generic question #16 ----- Number of "yes" answers to question #14 less the number of #5 answers to question 16	<u>82</u> 105	78.10
Percentage of children under 24 months of age with diarrhea during the past two weeks, who have received the same or greater amount of food.		71 106	67
Percentage of children under 24 months of age with diarrhea during the past two weeks, who have received ORT	Number of mothers who answered generic question #18 with any of the following answers a, b or c ----- Number of "yes" answers to question #14	<u>89</u> 115	77.4

Percentage of mothers who sought medical treatment for children under 24 months, who were coughing or had respiratory diseases during the past two weeks	Number of mothers who answered generic question #27 with any of the following answers a, b or c ----- Number of "yes" answers to question # 25	<u>60</u> 143	42
Percentage of children between 12 to 23 months who have received DPT1	Generic question 34 - DPT1 records ----- Total number of children between 12 to 23 months old	<u>109</u> 158,	69
Percentage of children between 12 to 23 months who have received OPV3	Generic question 34 - OPV3 records ----- Total number of children between 12 to 23 months old	<u>100</u> 158	63.30
Percentage of children between 12 to 23 months who have received shots against measles	Generic question 34 - measles records ----- Total number of children 12 to 23 months old	<u>98</u> 158	62
Desertion percentage between DPT1 & DPT3	Number of children vaccinated against DPT1 minus the number of children vaccinated with DOT3 ----- Total number of children between 12 to 23 months old-vaccinated with DPT1	<u>8</u> 109	7.3
Percentage of mothers who have the Mother's Health Records	"Yes" answers to generic question #35 ----- Total number of mothers surveyed	90 303	29.70
Percentage of mothers vaccinated with Tetanus Toxoid (Records)	Answer #2 to generic question 36 ----- Total number of mothers surveyed	<u>75</u> 303	24.80
Percentage of mothers who have at least had one pregnancy visit (Records)	Answers #1 & #2 to generic question # 38 ----- Total number of mothers surveyed	<u>48</u> 303	15.80
Percentage of mothers who have at least had one pregnancy visit before the last pregnancy (as per their testimony)	Answers #1 to generic question # 46 ----- Total number of mothers surveyed	<u>118</u> 303	61.1
Percentage of mothers who do not wish to have any more children during the next two years, who are using modern contraceptive methods	Answers #1 to #9 to generic question #42 ----- Answers #7. to #3 to generic question #40	<u>12</u> 288	4.2
Percentage of mothers who know that the measles vaccine should be administered on the 9 <sup>th</sup> month	"9 months" answer to generic question #30 ----- Total number of mothers surveyed	<u>194</u> 303	64

Percentage of mothers who know that the TT vaccine protects the mother and the child as well	Answers #1 to generic question #31 ----- Total number of mothers surveyed	<u>218</u> 303	71.90
Percentage of mothers who know that pregnant women should go to a pregnancy visit during the first quarter	Answers #1 & #2 to generic question # 43 ----- Total number of mothers surveyed	<u>251</u> 303	82.80

## B. PROJECT EXPENSES

The following observations may be made from the attached chart:

1. In the item under Consultants there is an excess expenditure of \$7,054.00.
2. In the item under Supplies there is an overdraft of \$9,740.00, corresponding to expenses in educational material.

In conformance to an administrative report the project has executed 90 per cent of its expenses strictly abiding to the original DIP planning. The differences observed above imply a rescheduling of funds, which are justified as follows:

1. The excess expenses in consultancy work correspond to disbursements made to cover complementary training (not planned), which were thought of as necessary for the project, in order to improve the technical and managerial quality of the Health Districts with which the work was developed.
2. The excess expenses under Supplies occurred because the original quotations for the production of educational material were too low. A delay in the administrative processes delayed the decisions, which in turn diverged the costs originally estimated. Likewise, the materials produced were of a higher quality, which also increased the costs.

The assessment could not verify the existence of formal amendments, to allow budget rescheduling, between the Project and USAID.

### LESSON LEARNED:

As far as funds administration is concerned the project experienced a decentralization process which allowed partial administration (for minor expenses) by the Districts. This modality may be considered as an educational experience for the District's administration.

## II. PROJECT SUSTAINABILITY

### A. Community Participation

A great project effort was made to establish a wide social base as a link between the health service and the community. This social base is set up by the VHW, who occasionally are responsible for sustaining community health activities.

It is important to point out that VHW are voluntary personnel and as such their contribution is very important for the projects's future sustainability plans.

However, although the VHW perform a very important operating role as a sustainability tool, they face many problems:

- \* The VHW often experience resistance from the people in the community when performing their duties because the people feel the work should be performed by the assistants and not by the volunteers. Also, the VHW accept the fact that being men sometimes poses insurmountable problems in establishing a trustworthy relationship with women. The relationship between people of opposite sexes is based on very strict social conventions, which are very difficult to change. For example, it is not accepted for an "unknown" man to examine a pregnant woman.
- \* The VHW also recognize that in order to be trusted by the community they need to receive more training, so that they feel confident when dealing with health issues. The assistants' expertise is an important resource for this purpose.
- \* In general the VHW do not receive the necessary support from the authorities, who often do not acknowledge the importance of their responsibilities. This has been acknowledged by the authorities, who see the selection of the VHW as a formal requirement, rather than a responsibility that benefits the community.
- \* Another problem is related to the selection of VHW. In some communities very young people are appointed (in Tiquina the VHW are girls who have not finished school), who can read and write, but are not viewed as credible by the older people and therefore lack the ability to persuade people to attend meetings, etc.

#### **LESSON LEARNED:**

The VHW encounters many problems that hinder their optimum performance and affects the project's sustainability. Most of the difficulties stem from the designation, entitlement, social support and time availability of the volunteers.

An important project achievement has been to support Sector IACs with the participation of community authorities or leaders, so that the latter become aware of the community's health problems, as well as the solutions being provided by the project. This action strengthens the sustainability of the project activities.

Unfortunately, the authorities participate in only a few of the sector IACs. The effort should expand in the future to involve local decision makers in the analysis of health information.

### **B. Relationship with NGOs**

Plan International Altiplano has established formal agreements defining areas of activity with other institutions, such as “Choquenaira”, “Suma Mancayani”, “Equipo de Salud Altiplano” and “Mision Mundial”. All work within a framework of cooperation which identifies their responsibilities and optimizes resources. For example, in the area of Qurpa, the project has established a very close relation with “Equipo de Salud Altiplano” (ESA). They perform joint activities to benefit the District and the population served by both institutions.

However, there are no records of arrangements or agreements which stipulate future commitments (or budget allocations) in order to finance the project’s sustainability.

### **C. Capacity of Counterpart Institutions to Sustain Activities**

The Child Survival Project has focused its strategy in the strengthening of the Health Districts within which it works. Thus, the CS project and District have joined together for program planning. The Districts have become direct CS project beneficiaries, assimilating contributions and activities to avoid duplication and overlapping. This strategy has also guaranteed the project assuming and promoting current health policies. We believe this is a significant achievement for the CS project. The closely related and coordinated work between the project and the Districts is an issue that will promote the project’s sustainability.

#### **LESSON LEARNED:**

We have learned that when the project institutionalizes its activities in the local health services, its achievements are greater and its efforts more sustainable than when work is performed in an isolated and non-coordinated fashion.

At project completion the two beneficiary Health Districts are better trained to serve the health requirements of the rural population under their area of influence. Likewise, they are better equipped with educational materials to fulfill the extension of their education and training efforts for the target population.

The quality of the service is closely related to sustainability. High quality services create a greater demand, as well as the social acceptance required for community participation. Nonetheless, the service offered by the State counterpart (RSH) has serious problems related to the structural conditions of poverty, illiteracy and marginality of the populations served. In addition there are dangerous conditions for physical access to services which worsens the problems for referrals of high risk cases.

### D. Plans, Objectives and Steps Taken by the Project in Order to Attain Sustainability

TARGET	FINAL OBJECTIVES	STEPS TAKEN	RESULTS
Create the counterpart capacity (RSH/Districts)	<p>Each District will manage a service network providing attention on priority programs.</p> <p>64 health centers will operate as fix posts for the administration of immunization and will provide reference services for malnourished children and diarrhea cases.</p> <p>Eleven services will operate as reference centers for pneumonia cases and mother care.</p> <p>281 VHW will provide services to the communities on priority programs.</p>	<p>The project worked to strengthen the capacity of the District personnel, training area physicians and nurses, infirmity assistants in the treatment of DCM, pneumonia, maternal health, eating and nutrition and growth monitoring.</p> <p>The project has worked together with the Districts to strengthen the existing centers.</p> <p>The project has allowed the qualification of human resources and other services to improve references.</p> <p>The project has allowed the continuous and systematic training of the voluntary personnel at the communities.</p>	<p>See the project's IEC achievements.</p> <p>53 Health Centers are currently operating as a permanent base for the regular EIP and to refer diarrhea and malnutrition cases.</p> <p>12 centers (6 in each District) are currently operating as reference posts for pneumonia cases and mother care.</p> <p>281 VHW have been trained to provide services to the community, although only 200 perform these duties.</p>
Strengthen the voluntary community personnel	<p>The VHW will be trained for the standard treatment of diarrhea, pneumonia, maternal health and other cases and on its referral.</p>	<p>Training courses for VHW will take place in each area in both project Districts.</p>	<p>An annual training course took place, educating 200 VHW and 80 midwives.</p>
Strengthen the Health Information Network.	<p>The project's information system will operate as a part of the National Health Information System (SNIS) and will provide information to the communities.</p>	<p>A Community Register was introduced to collect the sectors health information. Assistants and VHW were trained to handle such register.</p>	<p>12 Area IACs took place per year and an annual encounter to strengthen the Information System of the sectors and areas.</p>

Improve the local authorities participation in decision making on the community's health.	The sector IACs will involve the communities' political authorities.	Some sector IAC meet regularly with the General Secretary to the Agrarian Union.	10 per cent of the sector IACs included the communities union authorities.
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### E. Other Considerations

The new juridical framework which regulates the socio-political dynamics of the country through Popular Participation Law No. 1551 (implemented in 1994) grants the Municipalities the administrative responsibility for education and health services. This law has introduced a change of great significance in the operations of the organizations that provide these services in the rural areas. Now, the Municipality assumes, on the basis of the funds of tax co-participation, responsibility for the partial funding of the health services (mainly regarding infrastructure and equipment). This change has given the Municipality new authority and responsibilities in the execution of health policies developed in project areas.

#### LESSON LEARNED:

We have learned that the Municipality is currently one of the most important players in the area of planning and administration of the health services in the rural areas. However, their relation with the health sector (the Local Health Board) is still being defined.

The Districts have, on their own, started reaching out to the municipalities in order to integrate their roles and reach agreements for budget allocation in the area of health. The Child Survival project could have, in this last stage, made more progress in signing agreements with the municipalities, in order to gain ground for the economic sustainability of the health program.

In the municipal area the Local Health Board (DILOS) is the primary decision maker. It is comprised of the Mayor or a representative, the District Director or a representative, the Area Physician and an alternate from the Surveillance Committee. Until now the DILOS have not routinely performed their duties due to lack of definition regarding their tasks and responsibilities.

#### LESSON LEARNED:

The DILOS are a good mechanism to institutionalize decision making in the area of health for the municipalities. They will also allow health plans to have the necessary political support so that they are incorporated in long term municipal plans. Likewise, the DILOS may act as the technical assistance bodies for the municipality in the area of health program planning.

### **III. RECOMMENDATIONS FOR THE FUTURE ACTIVITIES OF PLAN INTERNACIONAL ALTIPLANO**

The current document is a final evaluation report and thus, it seems that a section with “recommendations” does not have a practical value for the project. However, due to the fact that Plan Internacional Altiplano will continue working in the area, it is appropriate to mention some recommendations that could improve future activities.

#### **Recommendations on Program Management:**

In general it can be stated that the interventions in project areas have been successful, especially because critical aspects have been addressed, however, from this perspective the following can be inferred:

1. Based on the project expectations listed under Perspectives, it is worthwhile to emphasize the promotion of growth monitoring and development. These are basic elements for the control of nutritional practices which preserve the children’s development and guarantee the quality of life.
2. In addition, it is important to reinforce the nutritional education curriculum to ensure that health personnel have appropriate materials available during consultations (i.e., a guide for nourishment anamnesis and nutritional recommendations by age group including recommendations for the sick child).
3. It is important to design strategies that allow maintaining the provision of basic supplies for the treatment of prevailing diseases.
4. Reinforce the training of assistants with clinical practice and supervise behavior changes regarding the rules. This procedure should be applied for a term no longer than 15 to 30 days after training, to allow reinforcement of some critical aspects.
5. Incorporate Pneumonia Case Treatment Surveys in the programs to improve the quality of service.
6. Develop negotiation processes with the DILOS, taking as a reference the official statistics to improve the population’s access to the services.
7. Develop educational processes regarding Maternal and Child Insurance.
8. Design studies which will allow verifying the use of clean birth packages by the beneficiaries.
9. Continue with support activities on pneumonia interventions, for these are considered critical to reduce child mortality rates.
10. Design strategies to make the EIP feasible at the service.

### **Recommendations regarding IEC:**

1. In an almost unanimous fashion the interviewees recommended the introduction of audiovisual material in native language. These have, in their opinion, the virtue of being novel, something which has been lost with the use of flip charts and other expository materials. Nonetheless, we must be aware of the essential limitations in the rural context.
2. In some places the District personnel have shown certain insecurity in managing the community training processes, in spite of the requirements for a greater presence of project personnel in the different areas. In future projects the institution personnel should maintain the same level of involvement, for this may contribute to future sustainability. A greater project presence (through its personnel) would only reduce the responsibilities assumed by the Districts.
3. It seems that the handling of the messages and training related to maternal health is more complex than that of the other programs. This is probably due to the need to optimize the training processes for health personnel in the area of counseling and to better manage the corresponding messages. It may also imply a clarification of the component's regulations and protocol. It may be advisable to become acquainted with MotherCare's work in different country Districts.
4. We should study the possibility of developing an in-service training procedure for the VHW who have difficulties in providing more time to the project. Complementary educational activities could be planned during the supervision tasks.
5. Since the Municipalities are assuming an increasing role in the administration of health in the rural sector, it would be advisable for Plan International Altiplano to include systematic training activities for municipal staff. This could optimize and strengthen politic decisions related to health administration.
6. In the future, Plan International Altiplano should study the need to gradually reduce budget allocations to support educational activities of the District health personnel and facilitate finding alternatives within the District itself.

### **Recommendations for Sustainability:**

1. Plan International Altiplano should promote the signing of agreements with the municipalities in order to assume joint rights and obligations on child health.
2. Plan International Altiplano should provide technical and administrative support to the DILOS in order to attain the sustainability of the health activities.
3. There is a need for the institution in general, and the infirmiry assistants in particular, to become involved in dissemination and social marketing activities of the VHW. Thereby reaching the target populations as well as the authorities.
4. A review should be carried out, together with local authorities, on the selection and designation criteria of VHW, resulting in attractive benefits in social incentives.