Catholic Relief Services - USCCB

Child Survival and Health Grant Project

Implemented by: CRS-Nicaragua, Caritas Matagalpa Diocese and the Ministry of Health-Nicaragua

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Project Location: Municipalities of Matiguás and Río Blanco in the Province of Matagalpa; Municipality of Waslala in the North Atlantic Autonomous Region and Municipality of Bocana de Paiwas in the South Atlantic Autonomous Region

Mid Term Evaluation

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ACRONYMS

AINMA	Integral Care for Women, Children and Adolescents
AMTSL	Active Management of the Third Stage of Labor
ANC	Antenatal Care
BCA	Behavior Change Agent (Promotor de Cambio de Comportamiento)
BCC	Behavior Change Communication
BF	Breast Feeding
BFHI	Baby Friendly Health Initiative
BL	Baseline
Caritas	Social Services Arm of the Catholic Church
CHA	Community Health Agent (Salubrista)
CHW	Community Health Worker (Brigadista)
CIES	Center for Health Research and Studies
CSP	Child Survival Project
CRS	Catholic Relief Services
DIP	Detailed Implementation Plan
EBF	Exclusive Breastfeeding
EOC	Emergency Obstetric Care
ETB	Emergency Transport Brigade (BTEO)
FGD	Focus Group Discussion
HCI	Health Care Improvement Project
HF	Health Facility (Center and Post)
HFA	Health Facility Assessment
HIS	Health Information System
HQ	Headquarters (of CRS in Baltimore, Maryland)
KPC	Knowledge, Practice and Coverage
LQAS	Lot Quality Assurance Sampling
M&E	Monitoring and Evaluation
MINSA	Ministry of Health of Nicaragua
MNC	Maternal - Neonatal Care
MOH	Ministry of Health
MTE	Mid Term Evaluation
MWH	Maternity Waiting Home (Casa Materna)
N-IMCI	Neonatal Integrated Management of Childhood Illnesses
NGO	Non-Governmental Organization
NICASALUD	Nicaraguan NGO Health Network
OR	Operational Research
PAHO	Pan-American Health Organization
SICO	Community Information System (MINSA & Project)
SILAIS	Departmental level of MINSA
TBA	Traditional Birth Attendant (Partera)
UNAN	Autonomous University of Nicaragua
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WHO	World Health Organization

A. Executive Summary

Catholic Relief Services (CRS) received funding from USAID for the implementation of a four year Child Survival Project in Nicaragua (October 2008-September 2012). **Goal:** Contribute to the reduction of maternal and neonatal morbidity and mortality in the municipalities of Matiguas, Río Blanco, Paiwas and Waslala of the Matagalpa SILAIS by 2012. There are 125 target communities and 13 Ministry of Health (MINSA) facilities. The project is being implemented by three principal partners; CRS is leading efforts in institutional strengthening for MINSA facilities under Objective 2: Increased families' access to quality maternal and neonatal services and Caritas Matagalpa Diocese is implementing community activities in coordination with MINSA under Objective 1: Improved knowledge and behaviors for maternal and neonatal health among families and communities.

The overall project plan is to implement with MINSA a complete "package" of household, community and health facility (HF) activities to strengthen maternal neonatal care. These include: Neonatal IMCI at both clinical and community levels, Birth Planning , Live Saving Skills, Nutrition During Pregnancy, Breastfeeding, Institutional Strengthening for MINSA (Training, equipment, Quality Improvement). The main implementation strategy for working at community level is the formation, training and support to a network of volunteers in activities specific to improving maternal newborn care (70% level of effort) and nutrition (30% level of effort). At the community level volunteers counsel families, provide group education, and monitor and refer women for required services.

The CSP includes two innovations:
Innovation N° 1: *Engaging Men to improve Care-Seeking* in 20 communities where 60 Behavior Change volunteers have been trained. Qualitative research was conducted to understand the situation and opinions of men, to identify barriers and facilitators, and negotiate new behaviors. This methodology is being implemented by NICASALUD, and Center for Health Research and Studies is measuring impact through a series of surveys.
Innovation N° 2 *Improving Community Response to Maternal and Neonatal Complications* to increase access to emergency health services in 25 isolated rural communities by use of a higher level volunteer trained in lifesaving skills, emergency care, neonatal IMCI. They have been equipped with essential supplies and materials for emergencies and are monitored monthly by the Caritas staff. There is no operations research planned for this innovation.

Project implementation is on track to achieve planned results. The majority of planned activities have been completed, the project suffered from a slow start up and some activities are slightly behind schedule. Positive aspects evident during the MTE include:

- Respondents cited perceived impact; increased use of health services, Maternity Waiting Homes, institutional births, and antenatal care and a decline in maternal mortality.
- Two especially positive interventions were cultural adaptation of births and involvement of men in health including accompanying the woman to antenatal care and during childbirth.
- Use of Quality Improvement activities has helped to improve the quality of services
- Network of volunteers is active and strengthened and has improved links with MINSA
- Emergency response has been strengthened through recognition of danger signs, Emergency Transport Brigade, referrals, and improved emergency response at facilities
- Basic medicines and equipment are available for MNC

Conclusions

One of the most of pressing problems is the dependency the project has inadvertently created in both MINSA and the volunteers. The project was designed in such a way as to provide a strong staff presence in all communities. In a country with limited human resources it is only natural that MINSA would see project staff as an extension of their staff.

The project has much to contribute to the Child Survival knowledge base, most notable the experience involving men in care seeking and shared decision making. Also the experience in cultural adaptation and use of waiting homes should be documented and disseminated.

The M&E system is cumbersome and overloads both volunteers and Caritas staff with unnecessary information, at the expense of analysis and use of information for decision making. There has been more emphasis placed on the indicators from the workplan and less on the M&E plan.

The various MINSA strategies that the project is implementing is beginning to reach its potential as an effective means of diminishing maternal/neonatal morbidity and mortality from the synergy among interventions, but the CSP continues to implement strategies as parallel programs, rather than taking a more integrated holistic approach.

Recommendations

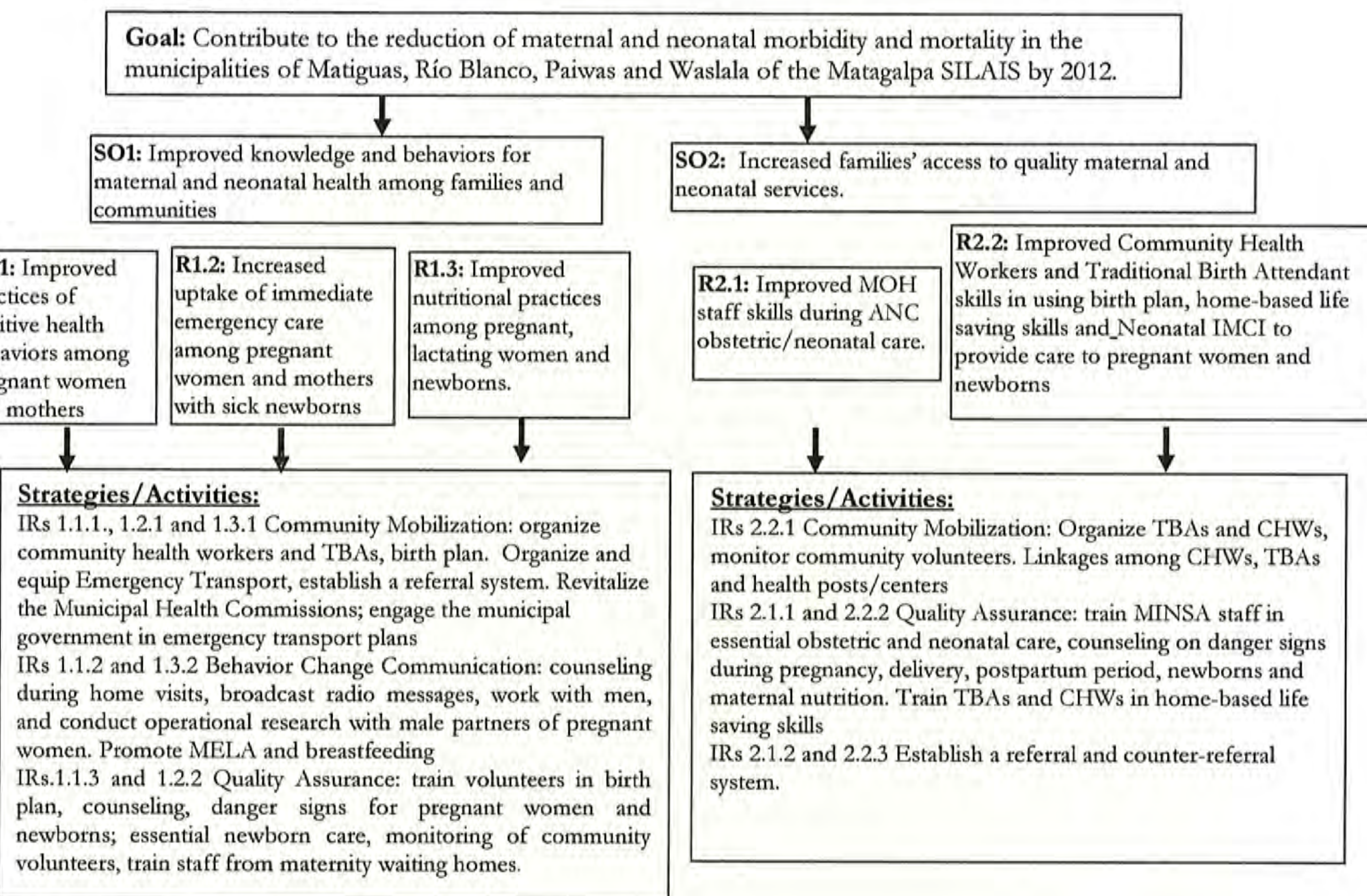
- All data collected in the field by CSP staff should be shared so that all partners can appreciate project advances and weaknesses and be involved in decision making.
- The use of qualitative methodologies to understand the *how* and the *why* of project implementation should be included to complement quantitative methods.
- Supervision and counseling should be integrated. Counseling visits should be based on the needs of the family, so counselors should be versed in a broad spectrum of health topics.
- Conduct training according to the needs of the volunteers; alternatives should be explored with the volunteers decentralized location, shorter duration, using mentoring not courses.
- Develop a supervision guide and tool to support integrated supportive supervision at both the community and Caritas staff levels and develop a joint plan for supervising.
- Strengthen MINSA's volunteer meetings as a sustainable strategy for indirect supervision and continuous training.
- Support the maternity waiting homes to identify alternatives for funding and develop sustainable financial strategies including the reactivation of the steering committee.
- The two communication methodologies of counseling and group charlas should be strengthened through the development of quality checklists and counseling guides.
- Improve the effectiveness of technical assistance provided by field staff to the communities and the commitment to completing all programmed visits.
- Annual meetings with the CSP, MINSA and other partners should be held as they are an important opportunity to share information, evaluate and plan together.
- Develop a sustainability plan through a participatory process involving MINSA, municipalities, and the communities in defining their role in the future.
- Help communities to identify alternative methods for providing financial or in-kind support to community volunteers, especially when they attend trainings.

Table 1: Summary of Major Project Accomplishments			
SO1: Improved knowledge and behaviors for maternal and neonatal health among families and communities			
Project Inputs	**Activities**	**Outputs**	**Outcomes**
• Radio Time, IEC and BCC Materials • Community volunteers (CHW, TBA, BCA, ETB) MINSA and project staff • Birth Plan and SICO forms • Equipment for ETB • Partners: CIES, NICASALUD	• Contracting of NICA SALUD and CIES to implement and measure innovation for improved involvement of men in MNC • Implementation of four MINSA strategies for MNC (Birth Planning, Community Neonatal IMCI, Life Saving Skills, Nutrition during Pregnancy) still pending (Safe Motherhood & BF) • Educational activities through home visits, counseling, and group charlas • Monitoring and supervision	• Communities with functioning ETBs with equipment and emergency savings plans • Communities with functioning SICO • Trained Volunteers referring, educating and monitoring pregnant women and newborns • Increased knowledge of danger signs and improved practices • Involvement of men in MNC and care seeking • Referral/counter-referral system	• Increase in use of services- ANC, institutional births, MWH, referrals • Anecdotal reporting of decreased maternal and neonatal mortality
SO2: Increased families' access to quality maternal and neonatal services.			
Project Inputs	**Activities**	**Outputs**	**Outcomes**
• IEC and BCC Materials • Trainers • MINSA staff in 3 health Centers and 10 Health Posts and project staff • MWH staff and facilities • Community volunteers (CHAs and TBAs) • MINSA protocols and quality standards tools • Partners: UNAN, HCI • Essential equipment and supplies in HFs for MNC	• Implementation of innovation for improved community management of MNC by use of highly trained CHA • Cultural adaptation of birthing developed including training in HFs and MWH • Training for HF staff in emergency obstetric and neonatal care, IMCI, other project strategies • Monitoring of quality standards and supervision • Refresher meetings • Equipping HF with essential supplies for MNC and some remodeling of HFs • Establishment of Center for Training of health staff in Matiguas • Reactivation of QI teams	• Trained MINSA staff providing improved maternal and neonatal services • HFs and MWHs offering improved cultural services; traditional diet, position during delivery, presence of family at birth • Increased emphasis on recognition of danger signs; pregnancy, delivery, postpartum, neonatal • Improved quality of care for MNC, including counseling during ANC • CHAs providing services in isolated communities	• Increase in use of services- ANC, institutional births, MWH, referrals • Anecdotal reporting of decreased maternal and neonatal mortality

B. Overview of the Project

Catholic Relief Services (CRS) received funding from USAID for the implementation of a four year Child Survival Project (CSP) in Nicaragua. Funding was provided from October 2008 until September 2012. The project has two interventions; maternal and neonatal care (MNC) with 70% level of effort and nutrition with 30% level of effort. The project is being implemented by three principal partners; CRS is leading efforts in institutional strengthening for Ministry of Health (MINSA) facilities and staff under Strategic Objective 2 and Caritas Matagalpa Diocese is implementing community activities in coordination with MINSA under Strategic Objective 1:

Results Framework



Project Location

The project is located in the municipalities of Matiguás and Río Blanco in the Province of Matagalpa; Municipality of Waslala in the North Atlantic Autonomous Region and Municipality of Bocana de Paiwas in the South Atlantic Autonomous Region. There are 125 target communities- 100 with all activities and 25 with only the Community Health Agent (CHA) innovation (see Section E). The CSP works with three MINSA Health Centers and 10 Health Posts in Matiguas, Paiwas and Rio Blanco. The CSP also provides limited support to the Health Center and Maternal Waiting Home (MWH) in Waslala.

Project Beneficiaries

	Matiguas	Paiwas y Rio Blanco	Total Beneficiaries
Infants < 12 months:	1,150	1,993	3,543
Children 12-23 months:	1,175	2,056	3,231
Children 0-23 months:	2,325	4,049	6,374
Children 24-59 months:	3,633	6,342	9,975
Children 0-59 months:	5,958	10,391	16,349
Women 15-49 years:	11,124	16,646	27,770
Population of Target Area:	44,971	68,589	113,560
Communities	62	26 P & 37 RB	125

Implementation Strategy

The main implementation strategy for working at community level is the formation, training and support to a network of volunteers; Community Health Workers (CHW), Traditional Birth Attendants (TBA), Community Health Agents (CHA) and Behavior Change Agents (BCA) in activities specific to improving maternal newborn care (MNC) and nutrition. Other strategies include; community organization and mobilization; household, community and MINSA behavioral changes; and strengthening of MINSA capacities. The MNC component has an impact on the three delays that contribute to maternal and neonatal morbidity and mortality: the delay *in recognizing danger signs and decision making* addressed through the behavioral change strategy and the principal innovation of Engaging Men to Improve Care-Seeking; the delay *in seeking help* addressed through community organization and the formation of Emergency Transport Brigades (ETB); and the delay *in diagnosing and providing timely care* through the strengthening of MINSA capacity and by improving community response to maternal and neonatal complications. The nutrition component works through ongoing improvement of the quality of antenatal care (ANC), focusing on improvement in the capacity of health care personnel to provide counseling to pregnant women regarding the frequency and quality of foods in the diet and counseling mothers in breastfeeding (BF) and complementary feeding during ANC, and Neonatal Integrated Management of Childhood Illnesses (N-IMCI) care. At the community level TBAs and CHWs counsel women during home visits and provide group education in charlas and monitor and refer pregnant and post partum women for required services.

The overall CSP plan was to implement with MINSA a complete "package" of household, community and health facility (HF) activities to strengthen maternal neonatal care. These include:

- Neonatal IMCI at both clinical and community levels
- Birth Planning (Plan de Parto) including support for use of MWH and cultural adaptation of birth
- Live Saving Skills

- Nutrition During Pregnancy
- Breastfeeding
- Institutional Strengthening for MINSA (Training, equipment, Quality Improvement (QI) process)

The project provided training to MINSA staff in N-IMCI and Emergency Obstetric Care (EOC) while lending technical assistance in implementing systems to monitor and improve the quality of maternal and newborn care. According to the Detailed Implementation Plan (DIP), during the second phase of implementation the project plans to take the documented experience and procedures of the innovation Engaging Men to Improve Care-Seeking to replicate it to other communities of Matiguas, Rio Blanco and Paiwas, as a test for the potential for scaling up. During the final year, the project will work with MINSA at the SILAIS (departmental level of MINSA) level to refine the approaches and to widely share experiences, lessons learned and results to encourage replication by other municipalities and agencies.

A strong element of the CSP is a behavioral change strategy to increase knowledge of danger signs and healthy practices by pregnant women and their partners that includes different methodologies. At the household level, trained TBAs use birth plan formats to counsel and negotiate the application of new practices with pregnant women and their partners on how to plan for the delivery and the importance of seeking ANC, institutional deliveries, and postpartum and newborn care. These messages are also reinforced by programs on the local radio stations.

The CSP includes two innovations:
Innovation Nº 1: Engaging Men to Improve Care-Seeking in 20 communities of the municipalities of Matiguas, Rio Blanco and Paiwas. Approximately 60 BCAs have been trained to attend 10 families each in these communities. A series of focus groups and interviews have been conducted to better understand the situation and opinions of men, to identify barriers and facilitators from their perspective, and to negotiate with them regarding new behaviors, such as: joint decision making with their partners on where to go for ANC, delivery, and postpartum/newborn care, distribution of household tasks, and male participation during ANC and delivery. Behavior Change Communication (BCC) activities with men will include sports events as a means to change behaviors among men. This methodology has been implemented and documented by NICASALUD, and CIES (Center for Health Research and Studies) is responsible for measuring impact through a series of surveys.
Innovation Nº 2 Improving Community Response to Maternal and Neonatal Complications to increase access to emergency MNC in 25 rural communities that are more than three hours travel from the closest HF. Twenty-five CHAs have been identified and trained on lifesaving skills, emergency care to stabilize pregnant women and newborns before transferring them, neonatal IMCI and other topics that set them apart from regular CHWs. They are assigned two to four communities near to the communities where they live to offer MNC and to attend other emergencies. They have been equipped with essential supplies and materials for emergencies and are monitored monthly by the Caritas staff. There is no operations research planned for this innovation.

Work Plan
Annex 4 includes the workplan table as presented in the DIP with an explanation of what was achieved or changed during the first half of the CSP. Other activities not specified in the workplan but which are being carried out include integrated outreach visits with MINSA and support of national vaccination campaigns. Future activities which will be added to the Workplan for the next two years include sustainability planning, advocacy for replication, diffusion of lessons learned and positive experiences, annual meetings with partners, and USAID activities.

Collaboration with USAID Mission

CRS sees USAID Nicaragua as a critical partner and they share similar objectives in terms of strengthening MINSA's efforts through complementary programming to maximize impact in Nicaragua. USAID provides an important opportunity to improve the scale of project interventions and to provide a forum for exploring ways to scale up.

According to the USAID representative the project is contributing to the Mission's overall health objectives as related to improved health and decreased mortality for women and newborns. The mission is striving to create synergy among Non Governmental Organizations (NGO) partners and urged CRS to participate more actively in Partner Meetings. USAID and CRS have had regular meetings, exchange of information and other activities such as USAID's role in the approval of materials developed for the innovation. CRS has invited USAID to participate in project activities, and has extended an invitation to visit project activities.

Visits and Communication with USAID- Nicaragua

Date	Objectives	Participants USAID	Participants CRS
Dec 2008	Discuss the pending project proposal for Child Survival	Iván Tercero	José Mendieta, Oscar Boza, Elena McEwan and Conor Walsh
Jan 2009	Meet the new Project Development Specialist for the Health and Education Office USAID-Nicaragua	Mr. Callagan, US Ambassador to Nicaragua, Iván Tercero, Marianéla Corriols and other NGOs	José Mendieta, Oscar Boza
Feb 2009	Present results from baselines and discuss the DIP	Marianela Corriols	José Mendieta, Oscar Boza
April 2009	NGO meeting to present advances of projects financed by USAID	Marianela Corriols, Dr Valverde	José Mendieta, Oscar Boza
March 2010	To present results, objectives and planned activities of the Project	Marianela Corriols, Dr Valverde	Hugh Aprile, Kristin Rosenow, Jose Mendieta, Elena McEwan, Oscar Boza
March-Nov 2010	Frequent email communications with Dr. Corriols to provide updates and to discuss ideas and suggestions related to the educational materials the Project developed		

Mid Term Evaluation

During November 2010, a midterm evaluation (MTE) was conducted by a multi-disciplinary team with 20 members (see Annex 8 for team members). The team utilized a participatory methodology (see Annex 9 for a summary of MTE methodology) to derive conclusions and recommendations to guide the CSP during the next two years. Additional interviews were conducted by an external evaluator, and principal author of this report. (see Annex 10 for a list of people interviewed). MTE team recommendations are included in this report marked in **Bold** and summarized in Section G Conclusions and Recommendations. There were no substantial changes in the CSP since approval of the DIP that requires a modification to the Cooperative Agreement. The M&E plan from the DIP is included in this report and due to recommended changes in some indicators, and several errors in the original M&E matrix, a number of changes in indicators are recommended in Annex 13.

C. Data Quality: Strengths and Limitations

Effectiveness of System

The CSP has developed several systems for Monitoring and Evaluation (M&E) that are effective in measuring progress towards project objectives. There are two sets of indicators that the project is tracking- the M&E Plan as presented in the DIP and indicators from the workplan. There are some weaknesses in this system that will be discussed in this section. The positive aspects are that the CSP is using and supporting MINSA community information system (SICO) and using the standardized Knowledge, Practice and Coverage (KPC) survey tool for evaluation. The main weakness of the system is that it collects too much information and is burdensome for volunteers and field staff. Use of data for decision making has not been a focus.

The project has suffered from lack of adequate staff for monitoring and supervision. This has been remedied; in July 2010 Caritas contracted an M&E Supervisor (who was previously a field technician). CRS's M&E coordinator began with the CSP September 2009 and left in August of 2010. They are currently interviewing to fill this critical position.

Evaluation Activities

A KPC survey using 30 cluster sampling was conducted at baseline and will be repeated as part of the final evaluation approximately June/July 2012. The sampling frame was 100 communities. The KPC survey report clearly described the indicator definitions but there are some problem with the quality of the report, for example in the table below it is impossible to have more women receiving "quality" ANC than those who received ANC:

Prenatal Care Percentage of mothers of children age 0-23 months who had four or more prenatal visits when they were pregnant with the youngest child.	Number of mothers of children age 0-23 months who had at least four prenatal visits while pregnant with their youngest child **(Q4– A, B, or C) and (Q7 ≥ 4 and Q7 ≤ 99)** ——————————————— Total number of mothers of children age 0-23 months in the survey	124/302 – 41.0%	CI–35.34% - 46.77%
Quality of Prenatal Care Percentage of mothers of children age 0-23 months who had four or more prenatal visits with a qualified provider and who were properly counseled when they were pregnant with their youngest child.	Number of mothers of children age 0-23 months who had "quality" prenatal care and at least four prenatal care visits and that were properly counseled during the pregnancy with their youngest child **(Q4 – A, B or C) and (Q7 ≥ 4) and (Q8 – A1, B1, C1, D1) and (Q9–1 and Q10 – 1)** ——————————————— Total number of mothers of children age 0-23 months in the survey	220/302 – 72.8%	CI– 67.66% - 78.03%

An additional problem with the KPC survey is that the answers to some questions do not correspond to the educational messages of MINSA and the CSP. For example the danger signs during pregnancy

According to the Birth Plan format	Considered correct answers in the KPC
hemorrhaging, convulsions, no fetal movement, intense abdominal pain, as well as headache with flashes of light and swelling of feet and hands.	hemorrhaging, convulsions, no fetal movement, intense abdominal pain, as well as headache with blurred vision, rapid or difficult breathing, fever, and vaginal secretions- foul smelling, brownish or green in color

It is suggested that in future surveys, CRS utilize the format suggested for writing CSP[1] survey reports so that all necessary information is included and that the KPC survey report be reviewed for consistency and clarity. The USAID required Rapid CATCH indicators were incomplete on the Child Survival Technical Support website; a corrected version is included in Annex 5.

In addition to the KPC survey, one of the main sources of information listed in the M&E Plan was a Health Facility Assessment (HFA). The CSP chose to not use a standardized HFA, but developed a combination of tools which included observation of ANC, exit interviews and a quality checklist for chart reviews. The results of this assessment were not available, except where narrative information was included on ANC observations as part of the KPC Survey report and in the DIP. It is recommended that some of the indicators be modified from the M&E Plan to align with MINSA quality indicators and be monitored through the QI tools currently being used. (See Annex 13)

Monitoring Activities

SICO- the national community information system of MINSA- is being supported by the CSP. The basic instruments for monitoring the Birth Plan are from MINSA and these tools will continue being used in the future. But additional tools have been added by the CSP that overburden the volunteers and field staff. The community and field staff levels of the HIS are overly complicated and collect an excessive amount of information. The quality of the data at the community level is questionable because many of the volunteers do not read and write and the tools are not well adapted for people with low literacy levels. A great deal of time is spent on collected information, which could be better dedicated to improving the quality of project activities. **Analyze the HIS to prioritize what should be collected based on project indicators and needs, and in conjunction with MINSA, simplify and decrease the number of instruments used in the collection of data at the community level and improve their quality.** Once the instruments have been defined, they should be validated by field staff and community volunteers and subsequently training provided.

The main focus of M&E has been, not on the M&E plan, but on indicators developed for each activity in the workplan. This represents about 100 indicators. More of a focus in the future should be on the M&E table, and these should be the indicators reported on in the annual report. One of the steps in streamlining the system is to look for alternative ways to monitor, rather than through the monthly collection of all indicators by volunteers and field staff. One option discussed was the use of Lot Quality Assurance Sampling (LQAS) as part of the supervisory system. **The project should begin monitoring key indicators as part of the supervision system using LQAS sampling as was planned to do annually in 2010, 2011 and 2012.**

A database has been developed of community volunteers, with contact information, personal information and training received. This database is shared with MINSA, but this aspect could be strengthened. This information will be used by MINSA to provide accreditation to CHWs. This process has not been clearly understood by CHWs and other volunteers and needs to be spelled out- what more do they need to do to get accredited, and when will that happen. **Provide a clear path for the accreditation of volunteers.**

Caritas staff has developed information files for each community that includes a community diagnosis, map, information about each volunteer, reports on field visits, monitoring information, information on the ETB (statutes for the brigade and use of emergency credit, and a transportation plan), report

[1] How to Write a Survey Report http://www.mchipngo.net/controllers/link.cfc?method=tools_mande

on outreach visits and other information. HFs have found this information to be helpful and some have started similar files.

Use of Information
One of the weaknesses of the CSP identified by the MTE team was the flow of information. The CSP field staff plays a pivotal role in collecting information in the field and this information is not always shared appropriately. The CSP does participate in monthly MINSA Technical Council meetings to report on project activities. One of the strengths of SICO is having a feedback mechanism for communities to use the information collected for decision making. This aspect has been overlooked and should be improved in the future. **All data collected in the field by CSP staff should be shared with MINSA and the communities monthly and with SILIAS quarterly so that all partners can appreciate project advances and weaknesses and be involved in decision making.**

An ongoing challenge to the CSP is that MINSA is crisis driven, with little time for reflection and analysis and use of information, for example from the SICO. The CSP needs to analyze, with MINSA, solutions to this problem and identify appropriate opportunities for sharing and using data. Numbers need to be put into context; to say there have been 234 home visits does not provide much information unless it is compared with the number of pregnant women. A much better indicator to monitor would be the percentage of pregnant women that receive a home visit.

During MTE interviews with volunteers, when asked how the information they collect helps them, the main response was to report to MINSA and Caritas, they also mentioned to provide proof of the work they have done, and to know the number of pregnant women and referrals made. There was little insight into using the information to prioritize or take specific actions based on the data.

The use of qualitative methodologies to understand the *how* and the *why* of project implementation has been weak. Focus groups were conducted as part of the proposal development, as part of baseline activities, and for the innovation on men's role. Other than that, there has been more of an emphasis on quantitative methods of monitoring, without have sufficient focus on the quality of activities or understanding the barriers or facilitators to implementing project activities. Some activities- such as the reactivation of municipal structures, quality improvement actions, etc. could benefit from a greater understanding of why these structures failed in the past and look for more creative solutions, not simply reactivating a structure that will fail again. **The use of qualitative methodologies to understand the *how* and the *why* of project implementation should be included to complement quantitative methods.**

D. Assessment of progress toward the achievement of project results

Table 2: M&E Matrix–Progress at Mid-Term

Project Indicators	Data Source	Matiguas		Río Blanco /Paiwas		Explanation of Progress
		BL	Final	BL	Final	
Objective 1: Improved knowledge and behaviors for maternal and neonatal health among families and communities						
1.1.1: Children age 0-23 months who were dried and wrapped with warm clothes or sheets immediately following delivery.	KPC BL/ final survey	95.7	100	92.6	100	Training provided to HF staff, increase in institutional births, will be difficult to detect statistically significant change
1.1.2: Mothers with child age 0-23m reported taking iron and folic acid supplements during the first trimester of pregnancy. *	KPC BL/ final survey	47.4	60	44.3	60	Women are attending ANC and TBAs are monitoring and educating in community, ANC observation found all received iron & folic acid
1.1.3: Mothers with child age 0-23m who can name two or more danger signs during pregnancy.	KPC BL/ final survey	6.3	50	10	50	Use of birth plan card, home visits, radio messages, charlas, educational materials has strengthen message
1.1.4: Mothers with child age 0-23m who can name two or more danger signs during delivery.	KPC BL/ final survey	13	50	11.1	50	Use of birth plan card, home visits, radio messages, charlas, educational materials has strengthen message
1.1.5: Mothers with child age 0-23m who can name two or more danger signs during the postpartum period.	KPC BL/ final survey	27.5	50	30.5	50	Use of birth plan card, home visits, radio messages, charlas, educational materials has strengthen message
1.1.6: Men that live in the house of the mother interviewed who can name two or more danger signs during pregnancy.	KPC BL/ final survey	16	40	15.4	40	Increased involvement of men More strategies to engage men needed in all communities (not just for innovation)
1.1.7: Men that live in the house of the mother interviewed who can name two or more danger signs during delivery.	KPC BL/final survey	12.6	40	9.7	40	Increased involvement of men More strategies to engage men needed in all communities, and increased involvement in birth planning
1.1.8: Men that live in the house of the mother interviewed who can name 2 or more danger signs during postpartum	KPC BL/ final survey	10.3	40	11.7	40	Increased involvement of men More strategies to engage men needed in all communities and increased involvement in birth planning
1.1.9: Mothers with child age 0-23m who completed the birth plan card. *	KPC BL/ final		70		70	The majority of women are completing plan. Knowledge of TBAs on use of the tool still needs to be strengthened
1.1.10: Mothers with child age 0-23m who had savings during the pregnancy with their youngest child.	KPC BL/ final survey	78.5	89	68.8	80	Most families are receiving message through birth plan tool. The majority of women are completing a Birth Plan

Project Indicators	Data Source	Matiguas		Río Blanco /Paiwas		Explanation of Progress
		BL	Final	BL	Final	
1.1.11: Newborns who received an examination within 48 hours of delivery*	KPC BL/ final survey	50.3	66	44.6	61	Due to increase in institutional births this should be reached
1.2.1: Mothers with child age 0-23ms who sought care within 24 hours in the health center when their newborns were sick.*	KPC BL/ final survey	55.6	66	58.3	69	This message needs to be strengthened for neonates. CHWs have been trained in Neonatal IMCI
1.2.2: Mothers with child age 0-23m who can name two or more danger signs in newborns.	KPC BL/ final survey	16.5	40	18.4	40	CHWs trained in Neonatal IMCI; strong emphasis on danger signs, newborn knowledge is weakest
1.2.4: Fathers with child age 0-23m who can name two or more danger signs in newborns.	KPC BL/ final survey	15.6	40	10	40	CHWs trained in Neonatal IMCI; strong emphasis on danger signs, newborn knowledge is weakest
1.3.1: Newborns who were put to the breast within 1 hour of delivery and did not receive any pre-breastfeeding foods.*	KPC BL/ final survey	66.5	82	58.4	74	Neonatal IMCI training done, BF training to be completed early 2011, Nutrition needs to be more of a focus.
1.3.2 Children age 0-5m who were exclusively breastfed during the last 24 hours.	KPC BL/ final survey	34.5	56	26.6	47	Neonatal IMCI training done, BF training to be completed early 2011, Nutrition needs to be more of a focus.
1.3.3 % Mothers with child 0 - 23m report eating more than normal during the last pregnancy and lactation.*	KPC BL/ final survey		50		50	Nutrition needs to be more of a focus in integrated counseling. TBAs trained in nutrition during pregnancy
Objective 2:Increased families' access to quality maternal and neonatal services.						
2.1.1: % Neonatal consultations provided according to the neonatal IMCI guides.	BL/ Final HFA/ IMCI checklist	0	30	0	30	HF staff has been trained in Neonatal IMCI. Monitoring quality indicators
2.1.2: % Mothers with child 0-23m receive counseling by health workers on breastfeeding.	HFA/ IMCI checklist	4.5	70	32.5	70	During ANC, BF training has not been completed, need to reinforce skills in counseling
2.1.3: % MOH personnel who have received supervision using the neonatal IMCI supervision guides.*	BL/ Final HFA/ IMCI checklist	0	50	0	50	Not being monitored
2.1.4: % Women with child 0-23m with 4 or more prenatal visits when pregnant with youngest child.	BL/ Final Project HIS	41	70	53.4	70	Reported increase in ANC, women being monitored and referred by volunteers, difficult to reach women during 1st trimester
2.1.5: Mothers with child age 0-23m who delivered their youngest child in a health unit. *	KPC BL/ final Project HIS	66.6	77	76.5	85	Reported increase in institutional births seen in project area
2.1.6: Children 0-23m received a post-natal visit by a properly trained health worker within 3 days of delivery. *	KPC BL/ final Project HIS	50.3	66	44.6	60	Due to increase in institutional births this should be reached

Project Indicators	Data Source	Matiguas		Río Blanco /Paiwas		Explanation of Progress
		BL	Final	BL	Final	
2.1.8: Mothers with child age 0-23m who received a postpartum visit from a properly trained health worker within three days of the delivery of their youngest child. *	KPC BL/ final survey Project HIS	56	72	48.6	65	Due to increase in institutional births this should be reached
2.1.9: Mothers with child age 0-23m who received active management of the third stage of labor during the delivery of their youngest child in a health center.	KPC baseline and final survey	30	47	28.5	44	Increase in institutional births, training provided to HF staff, monitoring of quality indicators
2.1.10: Public health facilities in the 4 project municipalities certified as child friendly. *	Certification by the MOH	0	100	0	100	MTE recommends omitting this indicator and this activity
2.2.1: Communities who have benefited from a transport plan for emergency obstetric running. *	KPC BL/ final Project HIS		80		80	Omit this indicator as project working to prevent emergencies
2.2.2: % Children age 0-23m who received clean cord care at the time of delivery.	KPC BL/ final survey	30.5	70	25.8	70	Training provided to HF staff, monitoring of quality indicators
2.2.3: % CHWs and TBAs from remote communities with skills in neonatal resuscitation and/or emergency obstetrical first aid.*	KPC BL/ final survey		50		50	This should specify CHA only, TBAs will not be trained, MINSA, Caritas and MWH staff trained
2.2.4: % Communities who have a functioning SICO	Project HIS	0	50	0	50	All communities have system, need to define "functioning", low level of literacy an issue
2.2.5: % CHWs and TBAs that promote birth plan.	Project HIS	0	50	0	50	Most TBAs are doing this, need to improve quality
2.2.6: % CHWs who received a supportive supervision visit at least one in the past 3 months.	Project HIS	0	100	0	100	All CHWs supervised by CSP, MINSA sporadically visits
2.2.7: % of CHWs who are trained in neonatal IMCI.	Project HIS	0	100	0	100	176 of 200 CHWs trained, will also train TBAs
2.2.8: % of CHWs who have been trained in behavioral change and in adult education methods.*	Project HIS	0	100	0	100	This should specify for BCA, not all volunteers- target has been reached
2.2.9: % Communities who have a support group for breastfeeding and safe motherhood.*	KPC BL/ final survey	0	100	0	100	MTE recommends omitting indicator replace with strengthened counseling and group education
2.2.10: Number of Male leaders who are trained in education for dialogue. *	Project HIS	0	50	0	50	Completed for 61 men who are BCA

* A change in this indicator is suggested. See Annex 13 for details.

E. Discussion of the Progress toward Achieving Results

Overall Design Factors that Are Influencing Progress Toward Results

The majority of planned activities have been completed (with the exception of training on BF); the project suffered from a slow start up and some activities are slightly behind schedule. There are a number of positive indications evident during the MTE:

- The majority of respondents cited examples of perceived impact; increased use of health services, institutional births, use of MWH, and ANC. A number of people mentioned a decline in maternal mortality.
- The two most frequently mentioned positive interventions were cultural adaptation of births and involvement of men in health issues including accompanying the woman to ANC visits and during childbirth.
- There has been a great deal of emphasis placed on knowledge of danger signs during pregnancy, delivery, puerperal, and for the newborn, with most of the volunteers being able to mention signs during pregnancy and for the newborn with less emphasis on signs during delivery and postpartum.
- Use of Quality Improvement (QI) activities has helped to improve the quality of services in Health Facilities (HFs)
- The network of volunteers is active and strengthened and provides good mutual support within each community and has improved links with HFs
- The emergency response system has been strengthened through recognition of danger signs, ETB, referrals, and improved emergency response at HFs.
- Basic medicines and equipment are available for MNC

Some of the identified weaknesses include:

- Weak appropriation of implementation strategies by MINSA and lack of supervision and follow-up in the communities
- Minimal coordination between MINSA and the municipalities due to political divisions
- The flow of information is inadequate between CSP and HFs, municipal MINSA, and the communities
- Project design has inadvertently created an environment of dependency on CSP field staff by both MINSA and the communities

The project is implementing various MINSA national strategies for improving the health of women and newborns. The strength of this design is the synergy between the various activities and at various levels (community, HF, municipality) but the CSP is using a very vertical approach, where each strategy is compartmentalized and being implemented independently.

A more holistic vision is needed so that the strategies blend together into a cohesive package at the community level. There are many activities that are the same or similar in all of the strategies and human resources can be shared to more effectively influence behaviors. **Supervision should be integrated, as well as counseling visits. Counseling visits should be based on the needs of the family, so counselors should be versed in a broad spectrum of health topics. Human resources can be shared effectively for example; the counselors for Birth Planning could also be the counselors for BF, as the same action is required, only the topic differs. This allows the project to strengthen the skills of a manageable sized group within the communities.** This holistic approach includes both objectives-

improved quality of care can not be separated from community behaviors, they are mutually dependent. This means that clear, frequent communication between CRS (Objective 2) and Caritas (Objective 1) is critical.

Contribution toward Objectives/Results

SO1: Improved knowledge and behaviors for maternal and neonatal health among families and communities

Role of Community Health Workers

A principal implementation strategy is the use of community volunteers as a mechanism to increase health services, identify and monitor pregnant and postpartum women, and recognize danger signs and actions to take to solve identified problems. Some of the types of volunteers are those who have traditionally existed in Nicaragua (CHWs and TBAs) and some are new (BCAs, ETBs and CHAs). All of the volunteers are community based and are not government cadres. The CHW matrix in Annex 7 provides details on training the various cadres have received. One of the project innovations is the formation of CHAs, which will be discussed under Objective 2.

The project has identified, strengthened and supported the following volunteers:

60 BCAs, including religious leaders
100 TBAs (and counselors who are younger women that assume some of the roles of the TBA, without the expectation that they will assist at home births)
200 CHWs
400 Community Committee Members
500 ETB Members
25 CHAs

Most of the CHWs and TBAs involved in the CSP have been working as volunteers for many years. Of the CHWs interviewed during the MTE (20/33) 61% had worked more than five years. Of the TBAs interviewed (15/34) 44% had worked more than five years. The CHAs are newly formed and (7/10) 70% had worked two years or less.

One of the real strengths of the projects has been the mutual support afforded by the network of volunteers. There were many reports during the MTE of coordination among the various volunteers. The ETB works closely with the TBAs, and the CHWs are seen as a valuable resource in the community. This support helps to provide motivation for the volunteers to continue working in the future and helps to compensate if volunteers have certain limitations, e.g. migration during certain periods or illiteracy.

During the MTE the volunteers reported that they work closely with the Catholic Church, but no mention was made of other churches. They also frequently work with other NGOs and link with HF staff through MINSA monthly meetings.

Training/Education

The project employs a methodology of cascade training whereby Caritas and MINSA staff are trained and they provide training to the community volunteers who then educate community members. There were several weak links identified during the MTE in this chain of training. The involvement of MINSA has been less than optimal in their attendance at training (many times inappropriate people

are sent to attend the training) and their replication of training for volunteers. Another major issue is the quality of training received by the volunteers and that the volunteers provide.

If an analysis is made of the cascade, all steps need to be strengthened. Caritas staff has limited experience in community work and educational techniques and there needs to be an increased opportunity for sharing, mentoring and improved skills through the dedication of one day per month for CRS & Caritas to meet together. One of the challenges in training volunteers is their limited literacy skills. **Caritas needs to be strengthened in their ability to work with low literacy populations.**

During the MTE, a quiz was given to volunteers (who were pre-selected by staff) about their knowledge of danger signs and nutrition. The results of this quiz showed strengths in some areas, but weaknesses in others.

	TBA n=29	CHW n=25	CHA n=9	BCA n=7
Danger signs during pregnancy	0 or 1 3% 2 or more 97%	0 or 1 0% 2 or more 100%	0 or 1 11% 2 or more 89%	0 or 1 14% 2 or more 86%
Danger signs during birth	0 or 1 45% 2 or more 55%	0 or 1 52% 2 or more 48%	0 or 1 44% 2 or more 56%	0 or 1 43% 2 or more 57%
Danger signs postpartum	0 or 1 37% 2 or more 63%	0 or 1 64% 2 or more 36%	0 or 1 55% 2 or more 45%	0 or 1 43% 2 or more 57%
Danger signs for newborn	0 or 1 17% 2 or more 83%	0 or 1 24% 2 or more 76%	0 or 1 33% 2 or more 67%	0 or 1 0% 2 or more 100%
When TBAs were asked what advice they gave women about their diet during pregnancy, 14% could not mention any advice, 62% mentioned 1 idea (increase frequency, diversity or quantity) only 24% were able to mention 2 or more.				

During MTE interviews, all volunteers requested refresher training, but this does not necessarily mean multi-day training courses. There was a persuasive attitude among CSP staff that people are trained during a course, and they then knew the information and training was over. There was limited vision that a training course is just the first step in an educational process and a lack of creativity in how to train through alternative methods- monthly meetings, mentoring, exchange visits, etc.. A weak link is also the follow-up to training to make sure new knowledge is being appropriately applied. **Provide refresher training for volunteers and HF staff on project strategies.**

Some important ideas for improving training were presented by volunteers during MTE group interviews- fewer days during training courses, more frequent training, less use of technical language, and more practical application. **Conduct training according to the needs of the volunteers to increase attendance and participation- alternatives should be explored with the volunteers for example; at decentralized locations, for a shorter duration, using mentoring rather than courses.**

When volunteers were asked in the MTE about perceived behavior changes, two of the three groups mentioned an improvement in hygiene, which is not a specific message in this project. Improved hygiene is good, but the key messages of the project may not be being transmitted as assumed. There has been a great deal done to improve knowledge about danger signs, but some other important messages have not received the same coverage. Nutrition messages also need to be reinforced.

The quality of education being provided by volunteers is also of concern. Because of the presence of CSP field staff in communities (with their higher educational level and self-confidence), it is easy for volunteers to become dependent on them for making home visits and conducting charlas. Volunteers have received some training on communication but only the BCAs have received dialogue for

education as part of their training in behavior change for the innovation. Good communication needs to be taught, then practiced, then supervised and supported. Volunteers need more support in developing educational methodologies that they can use for all topics. **Improve the quality of counseling and charlas- to make group activities not a one way "talk" but to include elements of group discussion and analysis and provide a forum for exchanging ideas and experiences. Develop quality checklists for counseling and group education, and counseling guides to improve negotiation and clear message delivery.** An improvement in these key educational channels will serve to strengthen all aspects of the CSP. This improvement should not be limited to the community level, but also include an institutional focus.

A method for strengthening knowledge and sharing information that was suggested a multiple levels during the MTE was exchange visits. **Use exchange visits for families, volunteers, HF staff and municipal authorities as a method to motivate and increase creativity in problem solving.** One of the forums for the exchange of positive experiences for families would be improved charlas.

Behavior Change Communication (BCC)

The CSP has not developed an overall strategy for behavior change. There is a compartmentalization of the concept of BCC- staff see it as only applying to the innovation and the development of a BCC strategy for the rest of the project has been forgotten. Increased focus on the M&E plan, as was previously mentioned, will redirect staff towards an overall vision of changing key behaviors at the community and HF level.

The CSP has obtained materials to support the communication process including 120 flipcharts on danger signs for CHWs developed by MINSA; TBAs received 113 sets of four maternal nutrition counseling cards (out of the total MINSA nutrition package); 700 calendar with danger signs were distributed to some CHWs, leaders and HFs (5-7 per community); 2000 Birth Plan cards were distributed; and a Manual for Birth Planning from MINSA was given to volunteers trained in Birth Planning. The project made good use of materials that were already developed by MINSA.

The CSP developed some materials to cover gaps where no materials were available. Some of these materials are of minimal quality and should be improved if they are used in the future. The guide for Maternal Nutrition provides picture of foods divided into four categories, but the categorization is questionable as meat, eggs, peanuts, and cheese are all included in the "energy" category, rather than as protein sources. Sweet potatoes and beets are also classified as "energy", rather than with fruits and vegetables, especially since sweet potatoes represent such an important source of Vitamin A.

The manual for Neonatal IMCI contains information about danger signs (and in some cases confuses danger signs with risk factors) that is different from other materials in use by the project. This dilutes the messages about danger signs by confusing people as to which are the correct signs. The reading level of the manual is inadequate for community members. None of the materials emphasize the importance of a post-natal visit for the mother and newborn.

Some materials are still pending, and where not available during training, this includes N-IMCI materials from MINSA and material for BCAs on the innovations of men's involvement in MNC.

Radio has been an important way in which messages have been transmitted. According to MTE interviews with MWH staff, they felt radio messages was one of the contributing factors for an increase in use of the homes, and HF staff felt radio had helped increase use of the facilities. Radio

was mentioned by men and women in interviews as an effective method for transmitting health messages. Effectiveness of radio messages has not been evaluated.

There are many materials available to support counseling skills of volunteers; FANTA working with NICASALUD and other partners developed a quality checklist to be used as a tool for routine monitoring of the quality of volunteer counseling, for providing coaching and feedback and as an outline for trainers. Caritas implemented a project in the same geographic area as the CSP, with Spanish funding that would be another resource for counseling materials.

Supervision

Project supervision targets two separate levels- the supervision by Caritas management staff of the field technicians, and the supervision of volunteers by MINSA and CSP staff. Both systems need to be strengthened. The primary tool being used is the Birth Planning supervision tool developed by MINSA. While this tool is good, it leads to the compartmentalization of strategies, rather than a holistic view of all of the activities that volunteers are doing in the community. By using this tool with staff, it leads to the perception that the staff is responsible for completing activities, rather than motivating the volunteers to take more responsibility. There is also a separate function for supervising the community plans developed by the CHWs as part of the N-IMCI strategy.

Develop a supervision guide and tool to support integrated supportive supervision at both the community and Caritas staff levels (staff supervision should be based on the role of each member of the management team (M&E, Training, and Coordination)) and develop a joint plan for supervising, based on a prioritization of needs.

One of the project indicators is the percent of CHWs who receive regular supervision, but the indicator does not specify who is responsible for providing the supervision. All volunteers are supervised by CSP staff, but not by MINSA. Is the expectation that MINSA can provide supervision and follow-up realistic? Reports from MTE interviews with HF staff showed a good level of supervision- usually during outreach visits and monthly meetings. **MINSA needs to make supervision visits on a regular basis; support them in identifying strategies to improve supervision including using integrated outreach visits as an opportunity for MINSA to supervise volunteers.** The monthly meetings are a good sustainable way to follow-up with volunteers and should be supported and improved by the project. **Strengthen MINSA's volunteer meetings as a sustainable strategy for indirect supervision and continuous training.**

Referral system

The referral system is a cross cutting mechanism for both maternal and child health care seeking. This is a national MINSA system that the project has been supporting and improving. Of the six HFs visited during the MTE, all had referral and counter-referral forms and the majority of volunteers are actively referring patients.

There are some issues with the system as most people have the expectation that if they get a referral, they go to the head of the line, even if it is not an emergency. The MINSA format being used does not differentiate between routine health care (immunizations, ANC) and emergencies. There is an alternate system for emergencies where a special bandana is used to signify an emergency, but this has not yet been implemented by MINSA. Volunteers reported that the biggest problem with referrals was that the HF staff did not place any importance on the referral.

The other issue is the lack of use of the counter-referral; it is frequently not completed by HF staff and returned to the person referring. According to CSP records, 350 pregnant women were referred to HFs by community volunteers, but the volunteers had only received 68 counter-referrals from MINSA. In a MTE interview, it was suggested by a CHW that the solution to the lack of counter-referrals was to encourage people to ask HF staff for the form to take back to the CHW.

Provide additional education at various levels to improve the referral system:

- **strengthen CHWs' knowledge of what constitutes an emergency,**
- **educate community members to understand their rights and responsibilities in receiving a referral and subsequent care and create a demand for the counter-referral by encouraging people to ask for it**
- **train HF staff to recognize the usefulness of the counter-referral in patient follow-up**

Emergency Transport

Emergency transport brigades (ETB) existed in many communities before the CSP began, but most were inactive. The ETB system is part of the national Birth Planning strategy and is designed for obstetrical emergencies but obviously is used for any type of emergency. The members of the brigade have been trained in Birth Planning and they reported during the MTE that they are making home visits to encourage institutional birth, use of the MWH, and recognition of danger signs. The focus has been on danger signs during pregnancy, but should be expanded to newborn danger signs also.

Each team is composed of five members (most are men but some communities have incorporated women). All have received basic equipment- hammock, flashlight and water bottle. The majority of communities have a savings fund for medical emergencies, with statutes to guide their use. During MTE interviews most communities could relate how the transport system had been used in an emergency situation and how funds had been allocated. The ETBs are active in collecting funds for the emergency fund; have linked with private vehicle owners, not just the MINSA ambulance; and are referring people to the HFs and MWHs. Funds are loaned to most families, but donated to very poor families. The fund is not necessarily sustainable with the original money collected, but follows the tradition of collecting money when a family is in need so that money will need to be continuously replenished.

The systems appear to be functioning in most communities but as a reflection as part of sustainability planning, the project should determine why the systems previously became inactive.

Birth Planning (Plan de Parto)

This is the most firmly established of the MINSA strategies and was the first to be introduced by the CSP. The Birth Plan is designed to overcome delays in recognizing and seeking care in childbirth and includes filling out a Birth Plan format during a counseling session with the TBA or HF staff, and the pregnant woman and her family (preferably with the husband). The format includes messages and actions on danger signs, ANC, saving money for expenses, where the birth will take place, use of the MWH, transport in case of an emergency, who will accompany the woman, and other preparations. The TBAs also maintain a list of pregnant women and a map showing where they are located. They are supposed to make home visits to monitor the woman throughout her pregnancy and postpartum and provide counseling. In case of a problem, the TBA can refer patients to the HFs and MWH and works closely with the ETB in case of an emergency.

Many of the TBAs are illiterate, making filling out the pregnancy register and other SICO formats difficult. Many times the CSP field staff helps with completing the paperwork. During MTE

interviews, some weaknesses were detected in the TBAs understanding of the process and they should receive refresher training especially in use of the Birth Plan format, SICO, and counseling/ negotiation. Refresher training for HF staff would also strengthen the implementation. Only TBAs have been trained, but CHWs and CHAs should be trained in this strategy.

Maternity Waiting Home (MWH)

The MWH is an excellent strategy for increasing institutional births and many of the homes have been functioning for many years (See Annex 1 for highlight on use of the MWH). During interviews with women in the MWH- out of the 50 previous children borne to these 20 women, 40 had been at home. The women traveled about 2-8 hours from their homes. Of the 20 women interviewed 16 had brought some food item as a donation, eight women had come by themselves, seven with their partner, and five with another family member. There were few women available postpartum, but of the three interviewed, two said they had someone accompany them during delivery (TBA and mother), were given a choice in the birthing position, and provided adequate privacy.

All cadres of volunteers and HF staff actively support and refer women to the MWH. Volunteers reported that they convince women to use the MWH by soliciting support from their partners and families, and by sharing with them positive experiences of other women who have used the MWH, but reportedly some experiences have been negative. Only one group specified a reason for the nonconformity- that being "*there was little food and many women*".

The increase in use of the MWH has caused an increase in expenses, which are not covered by their current budgets. Different strategies are being used by the MWH to continue operations:

- Seeking funds from various organizations, including the municipality, MINSA, and NGOs
- Each woman is asked to voluntarily bring some food item with her
- MWHs have received help from NGOs to establish income generating projects; rental of tables and chairs and the establishment of a small store

Support the MWH to identify alternatives for funding and develop sustainable strategies (income generating activities) including the reactivation of the steering committee.

Neonatal-IMCI

Beginning in June 2010, the CSP trained 178 CHWs in N-IMCI and they plan to train TBAs in the future. NICASALUD gave the training with co-facilitation by Caritas and MINSA. MINSA materials were not available so the project developed their own materials and will introduce the MINSA materials at a later date.

Live Saving Skills

CRS Nicaragua received technical assistance from CRS Honduras on developing this strategy, but in Honduras the focus is on improving home births, whereas in Nicaragua the focus is on encouraging institutional births. Only Caritas field staff, MINSA and staff from the MWHs were trained but CHAs will be trained in the future. The project plans to develop a flipchart which focus on prevention and management of complications during pregnancy, birth, postpartum and for the newborn. TBAs will be trained on use of the flipchart.

Nutrition during Pregnancy

Nutrition represents 30% of the CSP level of effort, but has not been a priority focus. With the training in BF in 2011 this should improve. TBAs and CHAs have been trained and they received part of the MINSA set of nutrition counseling cards pertaining to nutrition in pregnancy.

Key nutrition messages need to include:

- Early initiation of breastfeeding without giving any pre-BF food
- Exclusive BF until about six months old
- Exclusive breastfeeding as a means of birth spacing
- Continued BF for 24 months with the introduction of complementary foods around 6 months
- Increased energy intake during pregnancy and reducing the workload
- Dealing with side effects of iron tablets and folic acid provided by the MINSA during pregnancy
- Increased intake of foods, particularly fruits and vegetables during pregnancy and lactation, there needs to be a clear message that woman while pregnant and BF needs one additional serving of the staple food per day
- Provision of a post-partum vitamin A supplement in the post or health center

During 18 observations of ANC during the MTE, 17 weighed the pregnant woman, only 6 discussed BF and none discussed care of the newborn. All talked about danger signs and institutional birth but none mentioned the Birth Plan. All women received iron and folic acid supplements. None of the staff used the graph for monitoring uterine growth.

Even though the weight is taken, this is not routinely graphed to show if weight gain is adequate. **A greater focus is required on weight gain during pregnancy; including reorienting HF staff as to the importance of monitoring weight gain.**

Breastfeeding (BF)

The training in this strategy has not yet been conducted and is planned for 2011. The BF strategy initially included a number of activities that are no longer feasible and should be modified for the following reasons:

The implementation of the Baby Friendly Health Initiative (BFHI) was based on the assumption that it would support a national initiative. The national committee for BFHI was disintegrated due to shifting government priorities and has only recently been reactivated. Given the number of activities that the project is doing, and the length of time required to implement the 11 steps and do BFHI well, **It is recommended that the BFHI be eliminated and the CSP focus more on BF activities at the community and HF levels.**

Another strategy was to form BF support groups in each community. Given that volunteers are already implementing a number of national initiatives using counseling and group charlas, **It is recommended that the two communication methodologies of counseling and group charlas be strengthened for all topics, rather than adding the third methodology of support groups that would serve to dilute the quality of education at the community level.** This change needs to be complimented with a strong focus on improving the quality of counseling and charlas. An improvement in these key educational channels would serve to strengthen all aspects of the CSP.

The original focus was to promote natural family planning methods, but it is suggested that the project only emphasize Lactational Amenorrhea which will serve to strengthen the use of exclusive breastfeeding.

Innovation

Innovation 1- *Engaging Men to Improve Care-Seeking* is being carried out in 20 communities with technical assistance from NICASALUD. The innovation follows a "Trials in Improved Practices" design where behaviors were identified by the communities for men to practice and then an analysis carried out to determine which were the most feasible. Three BCAs were trained in each community who work with men to support behavior change in improved MNC. They use venues such as sporting events as educational opportunities, as well as counseling.

CIES develop an Operations Research (OR) design based on 20 target communities and 20 control communities (within the 100 communities where the CSP is being implemented). CIES conducted a baseline, and will conduct a midterm and final survey to measure changes in the population. A summary of the NICASALUD report on the innovation and CIES baseline study is included in Annex 12.

The way the major innovation is being conducted is not replicable as there are too many inputs included as incentives for the population to be realistically introduced on a larger scale or by MINSA or other NGOs. The CSP needs to identify ways to lower the cost before it can be scaled-up. During the MTE a discussion was held with the team to analyze the possibility of making changes to the innovation currently. The field staff strongly felt that community expectations had been raised concerning the incentives they would receive and it would put the field staff in an intolerable situation to make any changes. One of the recommendations from the HF staff was to continue promoting the involvement of men in other communities through simpler methods.

The project underestimated the amount of time and funds that would need to be dedicated to the innovation and OR. A contract for $35,000 was awarded to NICASALUD and CRS and Caritas staff estimates that implementation of the innovation requires approximately 50% of their time. Staff received 400 hours of training on the innovation and BCAs received 40 hours. Materials were developed for education but due to a lengthy process of validation and approval the BCAs only received a photocopy of the materials, which include a guide for diagnosis and a counseling guide. **Provide materials for counseling and negotiation for BCAs working with the innovation for men's behavior change.**

An important step is getting people to change is getting them to articulate their beliefs. During the MTE in a group interview with men involved in the innovation, some were able to clearly articulate their modified views on shared responsibilities and decision making. They tended to focus on housework as a change, while little focus was on care seeking and other priority activities. For example during MTE interviews when women were asked what behaviors they had been able to change, they mentioned saving money for the birth, attending ANC, and institutional birth. The men answered cooking, tending the fire, washing clothes and changing diapers. They did later state that there was increased joint decision making in the household. **Prioritize behaviors being introduced by the innovation for men's behavior change and omit behaviors that are not going to have a large impact on project objectives; for example whether a man changes diapers is not going to impact the health of the mother and child as much as agreeing to seek ANC.**

The innovation is located in communities where other volunteers are working. By providing special treatment for the BCA, this causes jealousies and discord between the volunteers (This is also a problem with CHA, who also receive preferential treatment). **Material incentives should be uniform for all volunteers.**

SO2: Increased families' access to quality maternal and neonatal services.

There is substantial overlap between the two objectives and some points were previously described. This section will focus on improvement of the quality of MNC services in MINSA HFs and the innovation of introducing CHAs. A number of activities have been carried out during the first two years of the CSP:

- Training of HF staff
- Supply of essential materials and equipment for MNC
- Reactivation of QI activities including the monitoring of quality indicators
- Humanization and cultural adaptation of childbirth in coordination with Health Care Improvement (HCI) project of USAID
- Alliance with Autonomous University of Nicaragua (UNAN) in León to develop a training plan using specialists from the university and the creation of a training center in Matiguas
- Coordination with, and referral to the MWH, particularly for women from isolated communities
- Annual planning in each municipality
- Use of national protocols for standardized routine treatment and in case of emergencies

Most people felt that services had improved in HFs, although negative comments still were prevalent. According to MTE interviews with HF staff, they felt the quality of services had been improved through project activities in the following ways:

- Involving TBAs in institutional childbirth had improved client-doctor relations
- Access to essential supplies for quality care
- Better communication between the community and MINSA.
- Monitoring and follow-up on quality standards for MNC
- Having flexibility in the birthing process, according to the wishes of the woman
- More counseling and attention paid to pregnant women
- Improvement in the way people are treated at the HFs
- Improved patient charting (Clinical History)
- Has helped MINSA to reach their national indicators

Exit interviews with 25 patients conducted as part of the MTE found that most clients classified their care as good and HF staff as excellent or good. The majority of people felt the wait time was acceptable or little, even though some people waited over an hour. The majority thought the time spent with them by the medical professional was acceptable. The main complaint was about the lack of cleanliness at the HF.

Some reported weaknesses include:

- HF staff felt that further work is needed to continue improving patient-doctor relations (and this was also reflected in interviews with volunteers and community members.)
- Men and women interviewed had some complaints about poor treatment by some personnel, lack of triage, long wait times, but all agreed that quality had improved.
- Observations of ANC found that the average time for an ANC visit was 24 minutes and most of this time was dedicated to paperwork

Training of HF staff

Training was carried out as planned and is summarized below.

Topic	Number trained
Natural family planning methods	40
National vaccination campaign refresher	109
EOC	43
Neonatal IMCI	60
Workshops on cultural adaptation	59

Supply of essential materials and equipment for MNC

Basic equipment and supplies have been provided to the 13 HFs and in general basic needs are met. An inventory conducted during the MTE found that all basic medications were available in the six HFs visited by the team. It was found that 5 of the 6 HFs had a dopler ultrasound provided by the project, but only one of the six facilities had the gel needed to use the ultrasound. There are future plans to do some minor remodeling of HFs to make them more culturally sensitive.

Quality Improvement (QI)

Quality improvement activities have been introduced throughout Nicaragua by the Quality Assurance Project and HCI in the past. Over time, many of the teams have ceased to function and the CSP has reactivated the QI teams and activities including the monitoring of national quality indicators in the 13 HFs in the project area. National checklists are used to ensure that correct protocols are being used. HCI has provided support to the project on QI but a gap still exists in the coordination with the SILAIS level QI team. This team has recently been revitalized but better coordination is needed.

One of the most important activities is the monitoring of the correct application of national standards and protocols in MNC. HF staff reported a number of ways this is being done including file reviews, case studies, reporting at Technical Council meetings on compliance, exit interviews for client satisfaction, continuing education and quality circles.

The majority of HFs visited conduct self-evaluations either once or twice a year that they use to provide feedback to staff, identify topics for continuing education, and to elicit agreements for making improvements. A number of examples were seen on improvements made in MNC care, including the routine use of partograms, increased use of urine exams for proteinuria during ANC, and improved privacy at HFs. A very interesting suggestion came from an interview with HF staff. **A QI self-evaluation should be conducted together with community leaders to identify ways to improve the quality of services at HFs.**

In many HFs the QI teams continue to be weak and their sustainability is questionable. The problem is that quality improvement often focuses on the weaknesses of one person, rather than on the system. The QI teams are reduced to one person, rather than making group decisions; it is seen as more authoritative than participatory. The primary problem is similar to that expressed earlier in this document; MINSA needs to take a more active role in institutionalizing QI activities and taking ownership of the process in order to maintain a sustainable improvement in the quality of MNC services.

Next Steps Planned by the Project

- Coordinate implementation of quality circles and the monitoring of quality standards with SILAIS

- Standardize the collection of information in the MWH
- Participate in MINSA Technical Councils in each municipality
- Complete user satisfaction exit interviews
- Improve reporting by Integrated Health Outreach teams
- Disseminate results of monitoring and seek solutions with municipal and departmental MINSA

Again there is an opportunity for reflection by the project as to why the QI teams and activities failed in the past- by understanding the reasons, better strategies can be developed.

Document and disseminate project experiences (Cultural adaptation, QI) within the three municipalities and promote a broader exchange of experiences as a method of replication in all municipalities.

Innovation

Innovation 2- *Improving Community Response to Maternal and Neonatal Complications* through the use of CHAs in isolated communities. At the request of SILAIS, this innovation was added during DIP development as a pilot for the introduction of a new level of volunteer health worker for isolated communities that will be given equipment and training beyond what a CHW receives.

UNAN has developed a curriculum for CHAs and it is pending approval by MINSA to establish CHAs as a national program; they would receive a diploma from the university that would be recognized by MINSA. Each CHA is responsible for 2-3 communities in an effort to expand coverage for the most isolated communities. They have received training in leadership and community mobilization, IMCI, SICO, and nutrition during pregnancy. They still need to be trained in the Birth Plan strategy, N-IMCI, and Life Saving Skills. In the future these CHAs would be able to work in Health Posts, to supplement regular MINSA staff.

The DIP contains some conflicting information about this innovation, it was decided when the DIP was finalized that OR would only be conducted for the primary innovation and not this innovation but the protocol for conducting OR for the CHA innovation was erroneously included in the DIP. One activity in the DIP workplan specified that OR would be conducted for the CHA innovation but this was included in error. **Even though no OR will be conducted for the CHA innovation, the project should develop some strategy for evaluating the introduction of this intervention.**

Contextual Factors

The project got off to a slow start as it took six months for Caritas to reach an agreement between two bishops as to the responsibilities within the project. The project area encompasses two different dioceses; a decision was finally made for the project to be managed out of the Matagalpa Diocese. Caritas staff was not hired until April of 2009; seven months after funding began, so they were not involved in baseline studies, or in the formulation of the DIP. Due to problems in obtaining exoneration of taxes, motorcycles were not available for the first four months after staff was hired, limiting field staff's ability to travel to the communities.

Other factors that influenced project implementation during the first two years, and efforts to mitigate those factors are summarized below.

Contextual Factor	Efforts to Mitigate Factors
High level of violence and political division in the zone (especially in Paiwas where there are two seats of power)	CSP works through municipal council, but this may not be the most adequate solution due to political divisions. Need to look at alternatives. Innovation is helping to mitigate problem of intra-familial violence through social pressure. Political discord will probably worsen in the next year due to presidential elections.
High levels of illiteracy	Staff needs additional technical assistance on working with low literacy audiences
Poor access and isolated communities	The innovation of CHAs will help to provide services to isolated communities. All field staff has been provided with motorcycles.
Seasonal migration of volunteers and community members limits activities during certain times of the year	The CSP has developed a network of volunteers that provide mutual support and by working as a team can continue to provide services when some volunteers are absent. This could be further strengthened by working more with community leaders to support volunteers.
Continuous rotation of MINSA staff, for example the municipal director in Rio Blanco has changed three times since the project began.	The CSP will continue to advocate with SILAIS to maintain staff that has been trained within the project area. This can be further addressed through the documentation of strategies to enhance induction of new MINSA staff.
Weak appropriation of activities by MINSA management team and lack of institutionalization of strategies such as QI.	This is perhaps the most challenging factor and will be addressed in Section F- Sustained Outcomes
CRS and Caritas are Catholic organizations but need to include Evangelical Protestants	The CSP has added credibility because it is supported by Catholic organizations within a primarily Catholic country. The CSP has taken numerous steps to involve other religious leaders which embrace a wider segment of the population. The innovation actively seeks out religious leaders to be involved as BCAs in counseling men and families
MINSA lacks sufficient budget to cover their planned activities and there is insufficient staff limiting supervision and follow-up	The CSP provides some financial support to HFs by supplying basic equipment and materials, and by covering some expenses for outreach visits and the MWH. This support is obviously not sustainable but CSP advocating for support through SILAIS and working with MWHs to develop sustainable activities.

Role of key partners

Partners	Role in Project	Results of Collaboration
Caritas, Matagalpa Diocese	Principal implementer of community activities in coordination with MINSA at the municipal level	Implementation of community activities in 100 communities, together with MINSA Implementation of the innovations of male involvement with MNC in 20 communities and CHAs in 25 communities
UNAN Leon	Institutional strengthening for MINSA staff in MNC Training for CHAs and development of a training center in Matiguas	MINSA staff training in Neonatal IMCI and EOC Formation of a specialized team of trainers in pediatrics and gynecology/obstetrics Training of 25 CHAs
NICASALUD	Provide technical assistance in the formative research and implementation of the innovation for male involvement in MNC	Qualitative studies with men and their partners completed Community strategies for advocating behavior change in men developed Development of IEC/BCC materials Training of 66 BCAs and 14 Caritas staff in behavior change methodologies

CIES UNAN Managua	Operations research on the innovation for male involvement in MNC, including a baseline, midterm and final survey	Baseline completed, midterm planned for 2011 and final in 2012
MINSA	Provide overall technical guidance and follow-up for the implementation of strategies at the community and institutional levels in coordination with CSP staff	Joint development of the DIP Follow-up on strategies with the volunteer network Implementation of a referral/counter-referral system Development of a joint annual training plan in the 3 municipalities Implementation of the strategy of humanization and cultural adaptation of birthing Tripartite alliance with UNAN and CRS for the accreditation of a training center in the HF in Matiguas
HCI	Provide technical assistance in the implementation of QI activities and cultural adaptation of childbirth	Workshops to share experiences and develop implementation plans for cultural adaptation Sharing of QI methodology and tools

CRS/Caritas Effectiveness

The principal partnership of the CSP is CRS and Caritas and the effectiveness of the two organizations can be improved in three ways:

1. The issue of CSP field staff completing what they promised to do was heard from volunteers and HF staff, and from the field staff themselves. This has been a problem due to various reasons but the main one is conflicting priorities, CRS and Caritas both manage segments of the project, but CRS has no field staff, so activities which are managed by CRS are forced to depend on Caritas field staff for implementation. This causes programming to be changed, and staff can not always meet their commitment to the communities. The top priority for both CRS and Caritas should be the fulfillment of their commitment to communities, including not changing the programming of field staff once they have communicated to communities the date of pending activities. **Improve the effectiveness of technical assistance provided by field staff to the communities and the commitment to completing all programmed visits.**

2. The relationships within CRS and within Caritas are positive; there is a weakness in the relationship between the two organizations. **It is recommended that a two-step effort be made to improve relations 1). Conduct a conflict resolution/team building exercise with CRS and Caritas to identify points of conflict and solutions, using an outside facilitator. 2). Provide an increased opportunity for sharing, mentoring and improving skills through the dedication of one day per month for CRS & Caritas to meet together for a analysis meeting to look at implementation issues, problem solving and as an opportunity to provide technical and managerial mentoring for Caritas.**

3. Most of the project activities have been shown in other contexts to be best practices and there are many experiences from other organizations that would help the CSP to more effectively implement their activities. **The project should make full use of the many opportunities of learning from previous projects, from other organizations, and technical materials that are available.**

MINSA Involvement

There is an overall weakness on the part of MINSA in project activities CRS and Caritas need to take a stronger role and be more proactive in motivating their participation. There is a weak

appropriation of activities by MINSA management team and a lack of institutionalization of strategies such as QI. A good starting point to motivate involvement would be with the involvement of MINSA in developing an action plan based on recommendations from the MTE. **Review the agreement CRS-MINSA to be more proactive in motivating their participation and to formalize commitments,** for example:

- Staff trained by the CSP should be involved in replicating the information to others
- MINSA should be involved in all project activities and the implementation of the strategies through an increased presence in the communities including community charlas
- Workshops should be co-facilitated by CSP-MINSA.

One of the points to keep in mind is that due to the continuous presence of CSP staff in the communities, they are commonly perceived as replacing the need for MINSA support in communities where the project works, this is obviously unsustainable and weakens the link between MINSA and the communities.

Some recommended strategies for encouraging the full participation of MINSA in activities are:

- CSP staff present a monthly schedule of their activities to the HF. **Planning and programming needs to be improved between MINSA and the CSP and seen as a shared activity, not just presented by CSP staff.**
- **Annual meetings with the CSP, MINSA and other partners were planned, but have not been carried out. This represents an important opportunity to share information, evaluate and plan together and these meetings should be held and added to the revised work plan.**

Municipal Involvement

The Municipal Health Councils (Consejo Municipal de Salud) are chaired by the mayor of each municipality and attended by MINSA, Ministry of Education, Ministry of Family Services, Army, Police, and NGOs. They are often conflictive due to the involvement of different political parties and are unable to move forward in decision making. These councils were formed years ago and gradually disappeared; they were reactivated by the project, then disappear, and now have been reactivated again. What has been learned from this experience? Perhaps this is not the best forum for coordination and other alternatives should be explored. **Study the lessons learned from working with Municipal Health Councils to define a clear path for reaching the objective of municipal coordination, looking at various alternatives.**

There were reports of municipal support, for example in MTE interviews with HF staff in Ubu Norte the mayor provided an ambulance and covered costs for emergency transport. The involvement of municipal authorities is critical for the sustainability of MNC activities.

Other Partners

A recommendation voiced during multiple interviews was the need to strengthen the coordination between the state and NGOs. This is obviously outside of the mandate of CRS and Caritas, but this important problem could be tackled in two ways **Advocate with the municipality and MINSA to assume a role in coordinating NGOs in the area and increase CRS and Caritas's openness to learning and sharing with other organizations to improve project implementation.**

The relationship with the university UNAN is especially positive as it lends additional credibility to the technical aspects of the project and provides for training within to the project site in a sustainable manner.

F. Discussion of Potential for Sustained Outcomes, Contribution to Scale, Global Learning, and Equity

1. Progress Toward Sustained Outcomes

The CSP did not use a sustainability design methodology during formulation of the DIP, but will develop a sustainability plan and phase-out plan during 2011; this will be added to the work plan. The CSP has developed a number of sustainable activities:

- Opening of a Training Center in conjunction with UNAN and MINSA to provide the opportunity for HF staff to receive training and mentoring within the project area, without having to travel to Matagalpa or Managua
- The project is using the protocols, standards and programs of MINSA, and many of MINSA's tools, e.g. QI checklists, census, Birth Plan, and SICO
- Development of a community network, that provides mutual support and is linked to HFs through monthly meetings

Develop a sustainability plan through a participatory process involving MINSA, municipalities, and the communities in defining their role in the future. Participants should include religious groups, non-political organizations such as Movimiento Comunal, and government programs such as AMOR. This plan should involve the Municipal Health Councils who could act as monitors to ensure completion of the plan.

Financial Sustainability
The sustainability of the MWH is the most critical issue to be resolved. This was previously discussed but will be key to maintaining institutional births.

Community
The potential for sustainability at the community levels would be enhanced by:
--Conducting integrated and effective home visits by well trained volunteers
--Providing an opportunity for families to exchange positive experiences and problem-solve during group charlas
--Continue to encourage family savings and community savings funds for health care and emergencies
--Improve involvement of community leaders as representatives to municipal authorities
--Define a clear role for community organizations, churches and teachers in motivating and supporting community volunteers
--Encourage the network of volunteers within each community to meet regularly to enhance solidarity and group problem solving

Recommended actions include:
Help communities to identify alternative methods for providing financial or in-kind support to community volunteers, especially when they attend trainings.

Link to Government Structures
Links are being strengthened between communities and MINSA through monthly meetings, integrated outreach, and referrals, but the involvement of the municipalities is very weak. Due to

political divisions this will be a perpetual problem and creative strategies need to be explored and institutionalized for sustainability.
Some potential steps to strength sustainability are:

- Advocate with the Technical Health Council of MINSA to develop a mechanism for community participation to build demand for services and influence decision-making on health services provision
- Use the Municipal Health Council to create new alliances for support to the MWH and community volunteers

Strengthen community structures and their link with municipalities.

CSP Role
Due to the staff presence in communities, there is a tendency toward dependency on the staff by both volunteers and MINSA. The CSP staff needs to make a concerted effort to motivate volunteers to provide educational activities such as to present charlas and provide counseling, independent of the CSP staff. A concerted effort is needed for the empowerment of MINSA and the communities, they need to be full partners- involved more in decision making and planning.

There are many examples of the Caritas staff's heroism and going beyond the call of duty to help a pregnant or postpartum woman obtain medical care. These stories miss the point that the CHWs and TBAs should be doing this, not depending on the staff to solve the problem. For example- the ferry in Paiwas gives free transport to women going for ANC, but this agreement with the mayor was brought about by intervention of Caritas, and needs to be renewed every three months, by Caritas, rather than by the leaders of the communities. It is very positive that the CSP staff is well accepted and respected in the communities, but they need to be behind the scene helping the community, not taking on the responsibility to solve problems. There is a lot of pressure from CRS to prove that the field staff is working, which forces them to do more activities themselves, rather than motivate the volunteers and MINSA to take a more active role (a slower, but more sustainable approach).
The CSP should reflect on how project activities contribute or hinder sustainability; for example:

- **How does the role of the field staff need to change to encourage the development of sustainable systems?**
- **What is the effect of the payment for MINSA staff to attend integrated outreach visits, and snacks for charlas and volunteer meetings have on the talks by volunteers and monthly meetings by MINSA, who are unable to provide these incentives?**

2. Contribution to Replication/Scale up and Global Learning

Replication
The CSP is using MINSA strategies, most of which have already been defined as best practices, such as Active Management of the Third Stage of Labor (AMTSL), live saving skills, and Birth Planning to mitigate delays in care seeking. Male involvement in MNC is the most notable new strategy. Many projects identify the need to involve men, but few make a concerted effort with specific strategies for them. Due to the contraction of NICASALUD and CIES for this aspect, it is being carefully documented and information will be available for distribution worldwide. Baseline, midterm and endline surveys are planned which should provide a strong evidence base. The issue is the replicability of the innovation, due to the high input of incentives.

The concept of involving men has been introduced in all project communities and is part of the humanization and cultural adaptation intervention. People attitudes have changed and HF staff now sees the advantages of having men involved. Many elements of the male involvement can be introduced without the high cost as the basic concept is replicable. There is a great deal of interest on the part of SILAIS and the USAID mission on scaling up these ideas in other municipalities. USAID has requested that NICASALUD include this aspect in their new projects. SILAIS is especially interested also in the introduction of CHAs in other areas

Advocacy

Nicaragua has a strong legal structure that supports numerous health initiatives, but lacks the practical application to operationalize the standards. For example there is a national decree for the Humanization of Births, which supports the work the project is conducting in cultural adaptation. There is less need for policy advocacy, and greater need for strategies for practical application.

CRS has a limited role in national level policy advocacy, and currently is not active on any national working groups. If there is a need to influence policy, they have two channels, through NICASALUD, which they are a founding member of, and through direct contact with ministerial authorities. Efforts in advocacy are more focus at the SILAIS level. CRS/Caritas have a good relationship at this level, but much more needs to be done to stimulate greater ownership by MINSA and the appropriation of MNC activities such as QI.

Dissemination of Experiences

The results from the OR are not yet available so little dissemination has been made of project activities. During the next two years this needs to be a project focus. The MTE team suggested the following ways in which project impact and activities could be shared:

- Contact local journalists, brief them about the project and invite them to visit project sites
- Develop a quarterly bulletin which can be shared with partners (MINSA, SILAIS, NGOs, USAID and other organizations) to increase understanding of project activities and the potential for scale-up
- Expand the experience of the involvement of men to other communities
- Contract someone with documentation experience to write up the innovation
- Include CSP experiences on the Web page of Caritas- Nicaragua and CRS
- Create a public forum for disseminating project results and strategies on a municipal level involving MINSA, Ministry of Education, and other organizations
- Invite other NGOs and USAID to visit project sites
- Establish mechanisms to share experiences through Central American networks, UNICEF, Pan American Health Organization, Episcopal Conference, Caritas of Central America, etc.

3. Attention to Equity

The CSP addresses two types of inequities; geographic and gender. The project innovations seek to mitigate the effects of these two inequities.

Innovation 1 *Engaging Men to improve Care-Seeking*

According to data cited in the project proposal, the department of Matagalpa has the highest rate of inter-family violence in Nicaragua[2]. This was one of the impetuses for the focus of the innovation on educating men and involving them more in health issues and shared decision making. Part of the OR for the innovation measures how decisions are made in the household between men and women, how roles are established, and how people perceive intra-familial violence.

Innovation 2 *Improving Community Response to MNC* through the use of CHAs in isolated communities
Health indicators are generally worse in more isolated rural areas and at the request of MINSA, the CSP added this strategy for improving emergency care, basic care, and prevention through the establishment of a new cadre of volunteer- more highly trained to be able to resolve health problems or stabilize patients for transport in isolated communities and in support of Health Posts that MINSA can not staff.

G. Conclusions and Recommendations

Project implementation is on track to achieve planned results. The project suffered from a slow start up, but major activities have been completed, with the exception of training on BF.

Some of the outstanding accomplishments of the project are:

- The majority of respondents cited examples of perceived impact; increased use of health services, institutional births, use of MWH, and ANC. A number of people mentioned a decline in maternal mortality.
- The two most frequently mentioned positive interventions were cultural adaptation of births and involvement of men in health issues including accompanying the woman to ANC visits and during childbirth.
- There has been a great deal of emphasis placed on knowledge of danger signs during pregnancy, delivery, puerperal, and newborn, with most of the volunteers being able to mention signs during pregnancy and for the newborn with less emphasis on signs during delivery and postpartum.
- Use of QI activities has helped to improve the quality of services
- The network of volunteers is active and strengthened and provides good mutual support within each community
- The emergency response system has been strengthened through recognition of danger signs, ETB, referrals, and improved emergency response at HFs.

Conclusions
One of the most of pressing problems is the dependency the project has inadvertently created in both MINSA and the volunteers. The project was designed in such a way as to provide a strong staff presence in all communities on a rotational basis. In a country with limited human resources, and limited access to transportation, it is only natural that MINSA would see the CSP staff as an extension of their own staff. It is difficult to convince them that MINSA staff needs to be involved, because the CSP staff is there doing good work.

The project has much to contribute to the Child Survival knowledge base, most notable the experience involving men in care seeking and shared decision making. Also the experience in cultural adaptation and use of MWH should be documented and disseminated.

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[2] Comision de la Mujer y la Ninez de Malagalpa, 2007.

The M&E system is cumbersome and overloads both volunteers and Caritas staff with unnecessary information, at the expense of analysis and use of information for decision making. The CSP uses the national M&E tools such as SICO. There has been more emphasis placed on the indicators from the workplan and less on the M&E plan.

The project uses two critical strategies for communicating- counseling and group talks but both need to be strengthened to be more effective for increasing knowledge and facilitating behavior change.

The various MINSA strategies that the CSP is implementing is beginning to reach its potential as an effective means of diminishing maternal/neonatal morbidity and mortality from the synergy among interventions, but the CSP continues to implement strategies as parallel programs, rather than taking a more integrated holistic approach.

There are critical questions that can be answered through qualitative methods and by providing the opportunity to understand and reflect on project implementation. For example; why do we need to keep reactivating structures such as the Municipal Health Council, QI teams, or ETB? This should not be done blindly, but an analysis needs to be made as to why they fail. Based on this analysis, a search for creative solutions needs to be made to solve the problem.

Recommendations

M&E

- Analyze the HIS to prioritize what should be collected based on project indicators and needs, in conjunction with MINSA. Simplify and decrease the number of instruments used in the collection of data at the community level and improve their quality.
- The project should begin monitoring key indicators as part of the supervision system using LQAS sampling. The project should begin monitoring key indicators as part of the supervision system using LQAS sampling as was planned to do annually in 2010, 2011 and 2012.
- All data collected in the field by CSP staff should be shared with MINSA and the communities monthly and with SILIAS quarterly so that all partners can appreciate project advances and weaknesses and be involved in decision making.
- The use of qualitative methodologies to understand the *how* and the *why* of project implementation should be included to complement quantitative methods.
- Provide a clear path for the accreditation of volunteers.

Strategies

- Supervision should be integrated, as well as counseling visits. Counseling visits should be based on the needs of the family, so counselors should be versed in a broad spectrum of health topics. Human resources can be shared effectively for example; the counselors for Birth Planning could also be the counselors for BF, as the same action is required, only the topic differs. This allows the project to strengthen the skills of a manageable sized group within the communities.

Training/Education

- Improve the quality of counseling and charlas- to make group activities not a one way "talk" but to include elements of group discussion and analysis and provide a forum for exchanging ideas and

experiences. Develop quality checklists for counseling and group education, and counseling guides to improve negotiation and clear message delivery.

- Caritas needs to be strengthened in their ability to work with low literacy populations
- Conduct training according to the needs of the volunteers to increase attendance and participation- alternatives should be explored with the volunteers for example at decentralized location, for a shorter duration, using mentoring rather than courses.
- Provide refresher training for volunteers and HF staff on project strategies.
- Use exchange visits for families, volunteers, HF staff and municipal authorities as a method to motivate and increase creativity in problem solving.

Supervision

- Develop a supervision guide and tool to support integrated supportive supervision at both the community and Caritas staff levels (staff supervision should be based on the role of each member of the management team (M&E, Training, and Coordination)) and develop a joint plan for supervising, based on a prioritization of needs.
- MINSA needs to make supervision visits on a regular basis; support them in identifying strategies to improve supervision including using integrated outreach visits as an opportunity for MINSA to supervise volunteers.
- Strengthen MINSA's volunteer meetings as a sustainable strategy for indirect supervision and continuous training.

Referral System

- Provide additional education at various levels to improve the referral system:
    - strengthen CHWs' knowledge of what constitutes an emergency,
    - educate community members to understand their rights and responsibilities in receiving a referral and subsequent care and create a demand for the counter-referral by encouraging people to ask for it
    - training for HF staff to recognize the usefulness of the counter-referral in patient follow-up

MWH

- Support the MWH to identify alternatives for funding and develop sustainable strategies (income generating activities) including the reactivation of the steering committee.

Nutrition/Breastfeeding

- A greater focus is required on weight gain during pregnancy; including reorienting HF staff as to the importance of monitoring weight gain.
- It is recommended that the Baby Friendly Health Initiative be eliminated and the CSP focus more on BF activities at the community and HF levels.
- It is recommended that the two communication methodologies of counseling and group charlas be strengthened for all topics, rather than adding the third methodology of support groups that would serve to dilute the quality of education at the community level.

Innovations

- Prioritize behaviors being introduced by the innovation for men's behavior change and omit behaviors that are not going to have a large impact on project objectives; for example whether a man changes diapers is not going to impact the health of the mother and child as much as agreeing to seek ANC.

- Provide materials for counseling and negotiation for BCAs working with the innovation for men's behavior change.
- Material incentives should be uniform for all volunteers.
- Even though no OR will be conducted for the CHA innovation, the project should develop some strategy for evaluating the introduction of this intervention.

QI

- A QI self-evaluation should be conducted together with community leaders to identify ways to improve the quality of services at HFs.

CRS/Caritas Effectiveness

- Improve the effectiveness of technical assistance provided by field staff to the communities and the commitment to completing all programmed visits.
- It is recommended that a two-step effort be made to improve relations between CRS and Caritas 1. Conduct a conflict resolution/team building exercise with CRS and Caritas to identify points of conflict and solutions, using an outside facilitator. 2. Provide an increased opportunity for sharing, mentoring and improving skills through the dedication of one day per month for CRS & Caritas to meet together for a analysis meeting to look at implementation issues, problem solving and as an opportunity to provide technical and managerial mentoring for Caritas.
- The project should make full use of the many opportunities of learning from previous projects, from other organizations, and technical materials that are available.

MOH Responsibility

- Review the agreement CRS-MINSA to be more proactive in motivating their participation and to formalize commitments.
- Planning and programming needs to be improved between MINSA and the CSP and seen as a shared activity, not just presented by CSP staff.
- Annual meetings with the CSP, MINSA and other partners were planned, but have not been carried out. This represents an important opportunity to share information, evaluate and plan together and these meetings should be held and added to the revised work plan.

Municipal Involvement

- Study the lessons learned from working with Municipal Health Councils to define a clear path for reaching the objective of municipal coordination, looking at various alternatives.
- Advocate with the municipality and MINSA to assume a role in coordinating NGOs in the area, and increase CRS and Caritas's openness to learning and sharing with other organizations to improve project implementation.

Sustainability

- Document and disseminate project experiences (Cultural adaptation, men's involvement, QI) within the three municipalities and promote a broader exchange of experiences as a method of replication in all municipalities.
- Develop a sustainability plan through a participatory process involving MINSA, municipalities, and the communities in defining their role in the future.
- Help communities to identify alternative methods for providing financial or in-kind support to community volunteers, especially when they attend trainings.

- Strengthen community structures and their link with municipalities.
- The CSP should reflect on how project activities contribute or hinder sustainability; for example:
    - How does the role of the field staff need to change to encourage the development of sustainable systems?
    - What effect does the payment for MINSA staff to attend integrated outreach visits, and snacks for charlas and volunteer meetings have on the talks by volunteers and monthly meetings by MINSA, who are unable to provide these incentives?

H. Action Plan for Responding to Evaluator Recommendations

Annex H: Action Plan for Responding to Evaluator Recommendations

General Objective: To improve CSP performance using the MTE recommendations in order to fulfill project objectives and intermediate results

Specific Objectives

1. Organize actions to develop and implement the Sustainability Plan
2. Increase involvement of the Ministry of Health as the leader of the nation's health
3. Address maternal and newborn strategies in a holistic manner

Theme	Strategy	Activites
Relationship with the Ministry of Health: Development and Joint Monitoring Strategy	Strengthen the participation of MOH in monitoring, education, analysis and planning of community and institutional activities of the Project. This is achieved through the integration of these activities with the MOH policy strategies such as MOSAFC and analysis sessions (las Jornadas de Análisis y Balance).	1. Restructuring Agreement CRS / Caritas-MINSA, based on MOSAFC Strategy and the maternal and child action plan
		2. Participation at the MoH Departamental and Municipal Technical Meetings.
		3- Meet with project management-MINSA, Municipality bimonthly and SILAIS trimonthly
		4- Join analysis sessions (las Jornadas de Análisis y Balance-JABA) and resume the process of Quality Assurance of mother-child care at the SILAIS level and in each Municipal Health Center.
		5. Program comprehensive visits to monitor volunteers and strategies between personnel of the project/SILAIS/Minsa/Municipal every six months.
		6. Develpoment of Training Curricula and plan with the Caritas-CRS-MINSA teams for the joint implementation of community and institutional capacity building.
		7. Humanization and cultural adaptation childbirth implementation in Rio Blanco.
		8. Monitoring of the Humanization of Childbirth in Cultural Adaptation Strategy in Matiguas
Training, Education and Promotion of MINSA Staff and Volunteers	MINSA coached by Caritas and CRS will conduct training in service sessions during community monitoring visits and supervisory visits to health centers.	1. Review and application of instruments and monitoring tools to ensure post training follow-up of knowledge, skills and abilities at a technical and community level.
		2. Strengthen capabilities of field technicians and community network in techniques of participatory methodologies and strengthening the strategic planning of key messages of the project.
		3. Strengthening voluntary teams by agreeing on community roles, responsibility and complementarities.
		4. Breastfeeding themes to be carried out by all MINSA staff and volunteers.
		5. Strengthening skills of technicians and volunteers in adult education methodology.
		6. Develop intervention plan for small groups (participatory talks) and home visits.
		7. Refreshing of topics based on needs.
		8. Training health personnel on issues of Obstetric and Neonatal Care (CONE).
Education of Adequate Pregnant and Child Nutrition	Implement promotional and educational sessions with small groups: The community volunteers and community women adopted new feeding practices during pregnancy and postpartum, as well as child feeding.	1. Training in breastfeeding and childbirth spacing of all volunteers.
		2. Promote weight monitoring of pregnant women by the Ministry of Health.
		3. Communicate messages about proper nutrition of child depending on their age.
		4. Ensure community messages and during antenatal care about the importance of iron of folic acid and adverse effects.
		5. Support the new nutritional behaviors of mothers and children through home visits.

Innovation	Implementation Behavior Change Communication Strategy with men	1. Development of BCC work plan for the next 2 years.
		2. Training workshop on BCC strategy and materials for health personnel, maternal waiting homes.
		3. Development of methodology for documentation and systematization of BCC strategy with men
		4. Documentation, systematization and dissemination of BCC.
		5. Support the new conduct adopted by men trough follow up visits
		6. Review and prioritization of essential behaviors for change.
		7. Include M&E indicators that measure 1.) If the husband accompanies his wife to prenatal visit and 2.) if he asks questions about the health of his wife during the prenatal visit
		8. Establish mechanism to deliver promotional and educational materials to promoters.
Referral and Counter-Referral.	Disseminate and promote the importance of the referral system, the effectiveness use of referrals and counterreferral system.	1. MINSA to establish a list with most frequent emergencies and educates communities and volunteers on it.
		2. Meeting to analyze the system of referrals and counter referrals for health units
		3. Reorient the social service personal of MINSA on the use and importance of the referral system.
		4. Project staff to monitor and track the performance the referral and counter referral system.
Maternal Waiting Houses	Promote self-sufficiency and sustainability	1.Specalized personnel to support the development of a sustainability plan for provide resources to the maternal waiting homes
		2. Strengthen Municipal Committees for the Support of maternity waiting homes involving municipal authorities.
Municipal Participation	Strengthening and unifying the leadership role of the Ministry of Health in each municipality.	1. Facilitate the mechanisms of the Ministry of Health to convene and coordinate bilateral articulation between the municipality, other organizations and MINSA.
		2. Support the organization and operation of municipal health commissions and / and organization that support the MINSA at the municipalities
Monitoring and Evaluation	All the activities of collection and analysis of information will be jointly conducted by the MOH and Caritas	1. Conduct session of information analysis, using qualitative methodologies, and facilitating the use it for the preparation of community action plans
		2. Training, follow-up, and monitoring of volunteers in communities will be conducted jointly with MINSA, comprehensive visits will be used to meet with volunteers, review their activities, transfer information and monitor their performance.
		3. Establishing of only one monitoring matrix for volunteers
		4. The monitoring plan for the project will be base on the annual project indicators, other information to be collect will be significantly reduced.
		5. Develop a plan of accreditation for community health volunteer and inform the communities of the process to encourage more participation and support.
		6. SICO will be used to assess the contribution of Community Health Agents in relation to referral, newborn checkups, and postpartum within 24 hours (home deliveries) and emergency stabilization before referring them.
		6. Monitor key indicators of the project through annual LQAS
Influence, Dissemination and Project Replicability	Once they are more tangible progress in the initiatives such as behavior change with men and the Cultural adaptation and humanization of childbirth, the project will use appropriate channels to share its impact	1. Project to deliver material to MoH National Authorities.
		2. Presentations to national and district levels.
		3. Dissemination of best experiences within the Ministry of Health.
		4. Disseminating experiences through the NICASALUD network and other networks and health forums.
		5. Present the results of the systematization at international forums (COREGroup, etc.)

Supervision	Review and application of instruments and tools to monitoring volunteers and MoH performance.	1. Improve and implement existing checklist to monitor counseling and group discussions skills
		2. Develop a methology to train in service during the monitoring and supervision visits
		3. Apply supervisory tools to assess effectiveness of the training sessions and meet regularly to analyze findings.
Efficiency and Sustainability in CRS-Caritas Partnership	Increase opportunities for discussion and dialogue focusing on more established strategies.	1. Workshop on "Effective Communication "
		2. Monthly meetings to follow-up process indicators and train in services in areas of need
		3. Standarize tools and methodologies to train and monitor community health volunteers by MoH and Caritas technicians
Sustainability	Develop a sustainability plan with the MOH, Community, Caritas and Municipalities focusing on the most consolidated strategies.	1.Conduct the consultation process with stakeholders, MOH and Community.
		2. Develop a sustainability and phase-out plan in a participatory manner with the Ministry of Health, municipalities and communities
		3. Implementation of the phase-out plan
		4. Facilitate meetings between community networks and municipalities for the purpose of strengthening coordination between them.
		4. Start the proces of phasing out of communities
		5. In a community assembly sign a agreement between MINSA- Community and lay religious leaders

GOAL: TO CONTRIBUTE TO THE REDUCTION OF MATERNAL AND NEONATAL MORBIDITY AND MORTALITY IN THE MUNICIPALITIES OF MATIGUAS, RÍO BLANCO , BOCANA DE PAIWAS AND WASLALA BY 2012.										
SO 1: Improve knowledge and behaviors for maternal and neonatal health among families and communities										
Result 1.1. Improved practices of positive health behaviors among pregnant women and mothers										
	Year 3				**Year 4**				**Responsibility**	**Comments**
Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Strategy 1 Community Mobilization										
Activity 1.1.1. Organize behavior change counselors, CHWs and TBAs for behavior change intervention	X	X							Cáritas Team	
Activity 1.1.2. Mobilize community members to participate in IEC activities during baseball games, bull riding, team saddling competitions, and calves lasso contests.		X	X	X	X	X	X	X	Cáritas Team	
Activity 1.1.3. Reorganize and revitalize the Municipal Health Commissions	X		X		X		X		Caritas/crs	Paiwas 2 comisiones, RB fortalec.
Activity 1.1.4. Advocate municipalities to provide funding for training and supervision of CHWs and TBAs			X			X			Cáritas Team	
Activity 1.1.5. Obtain support and leadership from city officials for activities targeting men									CRS/Caritas	
Activity 1.1.6. Monitor and strengthen commmunity health volunteers networks	X	X	X	X	X	X	X	X	Cáritas Team	
Activity 1.1.7. Improve CARITAs staff skills in counseling and adult education methodology	X	X	X	X	X	X	X	X	Cáritas Team	
Activity 1.1.8. Implementation of behavioral change communication strategy with men	X	X	X	X	X	X	X		Cáritas Team	
Activity 1.1.9 Strengthening teamwork of volunteers in their roles, responsibilities, and complementarities.		X	X						Caritas	
Activity 1.1.10 Supporting new nutritional behaviors of mothers and children through counseling during home visits		X	X	X	X	X	X	X	Volunteer network/Caritas/MINSA	
Activity 1.1.11 Development of methodological approach to documenting and systemization of the BCC strategy for men.		X	X						CRS/Nicasalud	
Activity 1.1.12 Support new behaviors adopted by the individual, through monitoring and support visits with promoters		X	X	X	X	X	X	X	CRS/Nicasalud/Caritas	
Activity 1.1.13 Prioritizing the essential components for BCC activities		X							Promotores de CC/CRS/Caritas	
Strategy 2 Behavior Change Communication										
Activity 1.1.14. Radio broadcast behavior change messages targeting men.	X	X	X	X	X	X	X	X	Cáritas Team	
Activity 1.1.15. Community health workers and traditional birth attendants to negotiated birth plans with pregnant women and their partners.	X	X	X	X	X	X	X		Volunteer network/Caritas/MINSA	
Activity 1.1.16. The BCC counselors to implement onsite activities with men in the town of Matiguás.	X	X	X	X	X	X	X	X	Promotors of CC/CRS/Caritas	
Activity 1.1.17. Community health workers and midwives to provide counseling to pregnant women and their partners about the importance and benefits of making decisions together.	X	X	X	X	X	X	X	X	Promotors of CC/CRS/Caritas	
Activity 1.1.18. Volunteers will reinforce the messages during the development of birth plans and during follow-up visits.			X	X	X	X	X	X	Volunteer network/Caritas/MINSA	
Activity 1.1.19. Pregnant women, mothers and their partners will receive counseling on essential newborn care and breastfeeding through home visits, community activities, and local radio spots.	X	X	X	X	X	X	X	X	Volunteer network/Caritas/MINSA	
Activity 1.1.20. Training of midwives in neonatal AIEPI	X	X							Cáritas Team	
Activity 1.1. 21 Capacity building of field technicians and community network in participatory methodologies and adult education techniques.	X	X	X	X	X				CRS/Caritas/Minsa	
Activity 1.1.23. Preparation of key messages and improve abilities to transmit matenal and neonatal care messages		X	X	X					CRS/Caritas/Minsa	
Activity 1.1.23 Developing educational intervention designs for small groups: participatory talks and home visits		X		X		X			Cáritas Team	
Activity 1.1.24 Communication of infant and young child feeding messages to families with children under 5 years.			X	X	X	X	X	X	Cáritas Team	According to the methodology and content of AIEPI
Activity 1.1.25 Ensure that community messages especially regarding pregnant women include information about the importance of taking iron tablets, folic acid tablets and warning about possible effects.	X	X	X	X	X	X	X	X	Volunteer network/Caritas/MINSA	
Activity 1.1.26 Preparation of Work Plan for BCC with men, for the next two years.		X	X						CRS/Nicasalud	
Activity 1.1.27 Workshop on transfer strategies and materials for health personnel of MOH and Maternal waiting homes on behavior change initiative with men.		X	X						CRS/Nicasalud/Caritas	
Activities 1.1. 28 documentation, systematization and dissemination of the BCC initiative with men.	X	X	X	X	X	X	X	X	CRS/NICASALUD/Caritas/MINSA	With authorization from Departmental and national MOH, NICASALUD network and other networks.

Result 1.2. Increased uptake of immediate emergency care among pregnant women and mothers with sick newborns										
Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		

Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Strategy 1 Community Mobilization										
Activity 1.2.1 Strengthen referral system.	X	X	X	X	X	X	X	X	Caritas/MINSA	
Activity 1.2.2 Pregnant women exhibiting danger signs or that have difficulty accessing health units will be referred and/or transported by the transport brigade for obstetric emergencies.	X	X	X	X	X	X	X	X	Community Transport Bridgade	
Activity 1.2.3 Refreshing training for community volunteers in birth plans.	X		X		X		X		Cáritas Team y CRS	Withe the support of MINSA
Activity 1.2.4 Community mobilization for emergency transportation and to create and implement a community saving plans for emergencies	X	X	X	X	X	X	X	X	Community Volunteers	
Strategy 2 Behavior Change Communication										
Activity 1.2.5 Community health workers and midwives will provide counseling to pregnant women and their partners about how to save money for an emergency.	X	X	X	X	X	X	X	X	Community Volunteers	
Activity 1.2.6 MINSA staff and volunteers will provide counseling to pregnant women, mothers and their peers about maternal and newborn danger signs.	X	X	X	X	X	X	X	X	MINSA and Community Volunteers	
Activity 1.2.7 Home visits by community health workers for dissemination of prevention messages and referral of cases.	X	X	X	X	X	X	X	X	Team Community Volunteers	
Strategy 3 Quality Assurance										
Activity 1.2.8 Training of volunteers in essential newborn care.			X						MINSA/Caritas	
Activity 1.2.9 Monitoring of community volunteers from the Ministry of Health	X	X	X	X	X	X	X	X	MINSA/Caritas	
Activity 1.2. 10 Training of maternity waiting houses in essential care for newborns.		X							MINSA/Caritas	
Activity 1.2. 11 Strengthening and monitoring performance of the community information system and the referral and counter-referral system				X					Cáritas Team	

Result 1.3. Improved nutritional practices among pregnant women, lactating and newborns

Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Strategy 1 Community Mobilization										
Activity 1.3.1 Training midwives and community health workers on proper nutrition for pregnant women and IYCF		X	X						Cáritas Team	
Strategy 2 Behavior Change Communication										
Activity 1.3.2 community health workers and midwives provide counseling to pregnant women and their partners regarding maternal nutrition (eat more often, to diversify the diet, intake iron and folic acid.)	X	X	X	X	X	X	X	X	Volunteer/Caritas/MINSA	
Activity 1.3.3 Pregnant women, mothers and their partners will receive counseling regarding essential newborn care and breastfeeding through home visits, community activities and local radio spots.	X	X	X	X	X	X	X	X	Volunteer/Caritas/MINSA	
Activity 1.3.4 Promote breastfeeding and educational meetings for breastfeeding mothers.	X	X	X	X	X	X	X	X	Volunteer/Caritas/MINSA	
Activity 1.3.5 Promotion of birth spacing through Lactational Amenorrhea Method (LAM)	X	X	X	X	X	X	X	X	Volunteer/Caritas/MINSA	
Strategy 3 Quality assurance										
Activity 1.3.6 The health staff to provide counseling to pregnant women about the benefits of BF, LAM and maternal nutrition.	X	X	X	X	X	X	X	X	Volunteer/Caritas/MINSA	
Activity 1.3.7 Training traditional midwives and counselors on breastfeeding									Volunteer/Caritas/MINSA	

SO 2 Increased families' access to quality maternal and neonatal service services

Result 2.1. Improved MoH staff skills during ANC, obstetric/neonatal care.

Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		

Strategy 1 Quality Assurance										
Activity 2.1.1. Train health personnel in Waslala in Maternal and Newborn Care (CONE) .		X	X						MINSA y CRS	With the support of UNAN León
Activity 2.1.2 Training of MOH staff in Neonatal IMCI Waslala (2nd Group)		X	X						MINSA y CRS	With the support of UNAN León
Activity 2.1.3 Training MOH staff in Rio Blanco in Cultural Adaption of Childbirths		X							MINSA y CRS	
Activity 2.1.4 Implementation of Humanization and Cultural Adaptation of Childbirths in Rio Blanco		X	X						MINSA/Caritas/CRS	
Activity 2.1. 5 Organize meetings between MOH and the communities to analyse the referral and counter-referral system		X		X		X		X	CRS/Caritas/MINSA/volunteers	
Activity 2.1.6 Update new staff and MoH staff (social service) to increase awareness about the importance of the referral and counter-referal system.		X	X	X	X	X	X	X	MINSA/Caritas	
Activity 2.1.7 Train ANC health personnel in counseling techniques, the importance of iron tablets, acid folic acid, DT vaccine and maternal nutrition.			X						MINSA y CRS	
Activity 2.1.8 Ensure that during ANC checkups dissemination of messages about the importance of Fe, Ac. Folic and warning about side effects.	X	X	X	X	X	X	X	X	MINSA	
Activity 2.1.9 Strengthening the logistics system for critical equipment and supplies needed for emergency obstetric and neonatal care.				X			X		MINSA y CRS	
Activity 2.1. 10 Support the MoH in the methodology to implement supportive supervisions to health posts and centers.									MINSA y CRS	
Activity 2.1. 11 Strengthen the counterreferral system of communities.	X	X	X	X	X	X	X	X	MINSA	
Activity 2.1. 12 Training and follow up for technical staff and the MOH in Exclusive Breast Feeding		X							Equipo facilitador del MINSA central	
Activity 2.1. 13 Training of new MOH staff on standards for maternal and neonatal AIEPI				X				X	MINSA y CRS	
Activity 2.1. 14 Monitoring of rapid cycles of quality improvement with regard to maternal and neonatal health.	X	X	X	X	X	X	X	X	MINSA	
Activity 2.1. 15 Refresher workshop for MOH staff on the content of health campaigns in relation to maternal and child health		X		X		X		X	MINSA y CRS	
Activity 2.1. 16 Annual meetings with departmental officials of MOH (SILAIS)				X			X		MINSA y CRS	
Activity 2:1. 17 Participation at the MoH Departamental and Municipal Technical Meetings	X	X	X	X	X	X	X	X	Caritas/CRS	At the municipal, technical, Department management team level.
Activity 2.1.18 Meetings with Project managers- MINSA	X	X	X	X	X	X	X	X	CRS/Caritas/MINSA	One time every 2 months/municipal and every 3 months/ departmental
Activity 2.1. 19 Promotion of weight monitoring of pregnant women by Ministry of Health personnel		X	X	X	X	X	X	X	MINSA	
Activity 2.1. 20 With the support of specialized staff prepare a development and resource sustainability plan for maternal waiting houses.		X	X	X					MINSA/Caritas	
Activity 2.1. 21 Strengthening the Municipal Support Committees for Maternal waiting Homes involving the municipal authorities and local population.										
Activity 2.1. 22. Methodological support of MOH to bring together and convene all the NGOs and local organizations.	X	X	X	X	X	X	X	X	MINSA/Caritas	

Result 2:2. Improved CHWs and TBAs skills in using Birth Plans, life-saving skills and neonatal AIEPI to provide care to pregnant women and newborns.

Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
Strategy 1 Community Mobilization										
Activity 2.2.1. Organize and train health workers and midwives (flip chart) in lifesaving skills.									Caritas	
Activity 2.2.2. Establish links between CHWs, TBAs and posts / health centers		X	X	X	X	X	X	X	MINSA/Caritas	
Activity 2.2.3. Coordination with maternal waiting homes in Matiguás and Paiwas and Rio Blanco	X	X	X	X	X	X	X	X	MINSA/Caritas/Voluntarios	
Activity 2.2.4. Training of TBAs and community health workers in lifesaving skills.									MINSA y CRS	
Activity 2.2.5 Workshop on methodology for systematizing and documenting BCC innovation in men.		X	X						NICASALUD/CRS/MINSA	
Strategy 3 Quality assurance										
Activity 2.2.6 Communities (25) with high risk of maternal mortality will receive supplies and equipment for emergency obstetric and newborn care.		X			X				MINSA/CRS	Ministry of Health will provide medical supplies
Activity 2.2.7 Quarterly meetings between communities and health posts.		X		X		X		X	Caritas/MINSA/voluntarios	
Activity 2.2.8 To list maternal and neonatal emergencies and disseminate this information to MINSA staff, volunteers and residents (for work references)		X	X	X	X	X	X	X	MINSA/Caritas	
Activity 2.2.9 Home visits by TBAs and community health workers for preventive health attention and referral of pregnant women before the probable date of delivery to maternity waiting homes	X	X	X	X	X	X	X	X	MINSA/Caritas/Voluntarios	

Monitoring and Evaluation										
Inquiry into reorganization and simplification of community monitoring and management systems	X	X	X						CRS/Caritas	
Volunteers and staff training in management of information system and its use		X	X	X					CRS/Caritas	
Strengthening of MINSA in SICO	X	X	X	X	X	X	X	X	Caritas/MINSA	
Sessions on monitoring indicators	X	X	X	X	X	X	X	X	CRS/Caritas	
Preparation of quarterly progress reports	X	X	X	X	X	X	X	X	CARITAS/CRS	
Preparation of POA for year III and IV	X			X	X				CRS/CARITAS/MINSA	
Mid Term Evaluation and Work Plan development	X	X							Consultora/CRS/Caritas	
Final Evaluation								X	Equipo Consultor eXt	
Annual Report				X				X	CRS y Equipo técnico	
Qualitative assessment of the BC Innovation for Men				X					CIES/CRS/Caritas	
Evaluation of Innovation I, working with men								X	CIES/CRS/Caritas	

Actions for Project Sustainability										
1. Carrying out consultation with stakeholders, MOH and communities		X	X						CRS/Caritas/MINSA	
2. Development of Sustainability Plan		X	X						CRS/Caritas/MINSA	
3. Implementation of Phase out Plan				X	X	X	X	X	CRS/Caritas/MINSA	
4. Graduation process and transfering of responsibility to the community.				X	X	X	X	X	CRS/Caritas/MINSA	
5. Agreements signed between MINSA / community / church community assemblies							X	X	CRS/Caritas/MINSA	

Improved management Activities	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4		
1.Review and update MOH-Project Agreement to include the phase out plan		X	X						CRS/Caritas/Minsa	
2. Development of Trainign Curricula with MoH to train MoH staff and community health volunteers.		X			X				CRS/Caritas/Minsa	
3. Review and implementation of instruments to ensure the supervision of training and the acquisition of abilities.		X	X						Caritas	
4. Workshop on "Effective communication" with Caritas staff and reviewing progress to strengthen the mechanisms of partnerships and complementarity		X		X		X		X	CRS/Caritas	
5. Monthly meetings with Caritas staff to follow up process indicator and training in service		X	X	X	X	X	X	X	CRS	To improve technical activities and transmission of

ANNEXES

Annex 1: Results Highlight

Annex 2: Publications and Presentations Related to the Project

Annex 3: Project Management Evaluation

Annex 4: Workplan Table

Annex 5: Rapid CATCH Table No Mid-Term KPC survey performed

Annex 6: Mid-Term KPC Report No Mid-Term KPC survey performed

Annex 7: CHW Training Matrix

Annex 8: Evaluation Team Members

Annex 9: Evaluation Assessment Methodology

Annex 10: Persons Interviewed and Contacted during the MTE

Annex 11: Project Data Form

Annex 12: Results from the Innovation (NICASALUD & CIES)

Annex 13: Recommended Modifications to Indicators

Annex 1 Results Highlight

Catholic Relief Services

BIRTH PLANS/HUMANE AND CULTURALLY APPROPRIATE CHILDBIRTH:
AN EXPERIENCE OF INCREASING INSTITUTIONAL BIRTHS

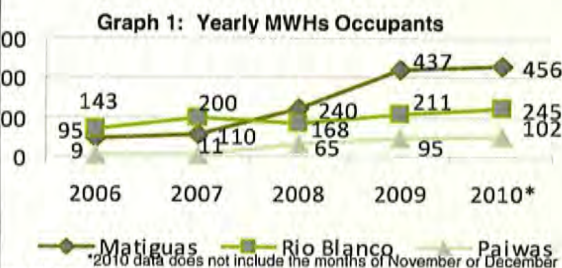
Child Survival Project Matagalpa– Nicaragua

MMARY

ce October 2008, CRS/Caritas Matagalpa in conjunction with Ministry of Health has implemented an innovative Child vival project in the municipalities of Matiguas, Rio Blanco, and ana de Paiwas, targeting a population of 113,560 people in communities. This targeted group represents 66% of the re population of those districts.

projects aim is to reduce maternal and child mortality by ting synergies between community based volunteer networks, ernity waiting homes (MWH), and institutional health centers. s has been carried out through the introduction and lementation of birth plans at the community level, nprehensive promotion of MWHs, and the implementation of umanization and cultural adaptation strategy for institutional dbirth.

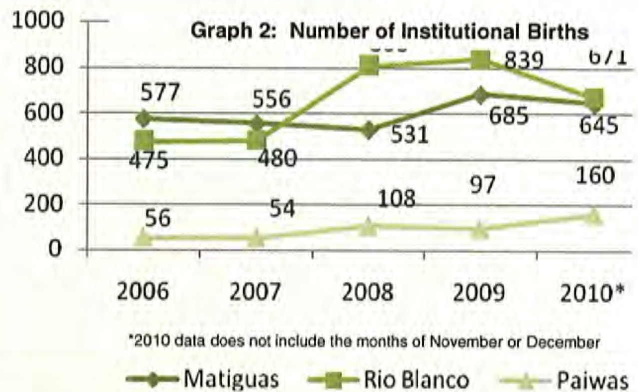
outcome has been a dramatic increase in usage of MHWs and itutional births.



CKGROUND

coverage area for this project, due to extreme poverty, high ls of illiteracy, and poor accessibility, had institutional delivery s below the reported average of 40% for the rest of Nicaragua. many of these remote communities, institutional birth was not a consideration due to cultural norms and travel time to a th facility, which averages four to eight hours.

Project, along with the Ministry of Health of Matagalpa, has lemented a comprehensive humanization and cultural ptation strategy, in order to improve institutional deliveries increase the number of women choosing institutional births home births by at least 60%. These activities have included astructure improvements, retraining of health facility onnel, promotion of best practices for safe delivery (WHO mmended), and investments in new equipment.



SYNERGY OF STRATEGIC BIRTH PLANS AND CULTURAL HUMANIZATION OF CHILDBIRTH

At the community and family level, promotion and family education about safe birthing practices and the development of individual strategic birth plans has been carried out by volunteer networks of Traditional Birth Attendants, transport brigades, and health facility personnel. The development of birth plans highlights the role of prenatal checkups and the use of MWHs. During the process of developing a birth plan, volunteers encourage pregnant women that are high risk or live in remote locations to make use of MWHs prior to delivery. This promotion is performed in collaboration with health facility staff who also advise pregnant women during prenatal checkups on the important of using the MWHs. As a result of this comprehensive promotion of birth plans and use of MWHs, the attendance at MWHs has steadily increased as demonstrated in Graph 1.

In conjunction with the community promotion for institutional births, health personnel have worked to improve delivery care by providing a culturally appropriate and more humane service. Exit interviews have indicated that mothers and families are leaving with a positive perception of institutional deliveries where they felt that they were treated with respect and their cultural traditions were taken into account. These experiences have helped to change community behavior and attitudes regarding institutional births, resulting in an increased number of institutional births. (See Graph 2)

The synergy between community and institutional activities through volunteer networks and MWHs has greatly improved participation in MWHs and coverage of institutional births.

Annex 2: Publications and Presentations Related to the Project

Dr. Elena McEwan, CRS Headquarters' backstop for this Child Survival Project has presented information about the innovation of involving men in Maternal Neonatal Care on two different occasions;

1. At the Core Group Spring meeting 2010 and

2. At a CRS HQ Brownbag session for HQ staff.

Annex 3: Project Management Evaluation

Planning

A workshop was held for the development of the DIP with 25 people attending, mainly MINSA staff and three CHWs. Due to unresolved issues, Caritas staff was not hired until after the DIP had been developed. As principal implementers, this was a gap in the development process.

The primary gap in DIP was the lack of specific activities for institutional building for the principal partner-Caritas, even though this is a routine activity for CRS projects. Even though specific activities in institutional building were not elucidated in the DIP, CRS will continue to provide capacity building support to Caritas. Another gap was the lack of sustainability and behavior change strategies. A sustainability plan will be developed in 2011.

The workplan was organized by Intermediate results (5) and subdivided into 3 strategies- Community Mobilization, BCC, and Quality Assurance. Many activities are repeated various times in the workplan making monitoring difficult. Each activity was converted into an indicator for a total of 99 indicators. The CSP team has been overwhelmed with tracking these 99 indicators. Many of the activities did not have a specific time frame designated in the DIP workplan. The workplan will be revised based on recommendations from the MTE.

An important lesson learned is that the DIP should be written by someone who can spend a substantial amount of time in-country to facilitate communication and revisions.

Supervision of Project Staff

There is a deficiency in the system for Caritas staff supervision. The following recommendation from the MTE addresses this weakness.

Develop a supervision guide and tool to support integrated supportive supervision at both the community and Caritas staff levels (staff supervision should be based on the role of each member of the management team (M&E, Training, and Coordination)) and develop a joint plan for supervising, based on a prioritization of needs.

Human Resources and Staff Management

Staff turnover has been very low; all of the CRS staff started with the CSP in September of 2008 and continue with the project, with the exception of the M&E Coordinator who started in September 2009 and left in August 2010. The majority of Caritas staff was hired in April 2009 and continues working with the project. There has been some replacement of field staff and an increase in their numbers to cover the innovation activities. In July 2010 Caritas contracted an M&E Supervisor (who was previously a field technician). There are currently 11 field staff, an M&E Supervisor, Training Supervisor and Project Coordinator.

CRS has clear personnel policies and the manual is currently under revision. CRS has an annual personnel evaluation system based on Management by Objectives supported by a training plan. Caritas has a weakness in personnel management in terms of having a written manual of policies and regular staff evaluations. As no activities were defined in the DIP for strengthening Caritas, no specific work has been done in the area of Human Resource management.

The relationships within CRS and within Caritas are positive; the weakness is the relationship between the two organizations. There is an environment of division due to the way the project is being implemented (some parts by CRS and some by Caritas). It is recommended that a two-step effort be made to improve relations 1. Conduct a conflict resolution/team building exercise with CRS and Caritas to identify points of conflict and solutions, using an outside facilitator. 2. Dedicate one day per month for an analysis meeting with CRS and Caritas to look at implementation issues, problem solving and as an opportunity to provide technical and managerial mentoring for Caritas.

Financial Management

There were no problems identified with the flow of funds or having adequate funds for project activities. Both CRS and Caritas have years of experience with budgeting and accounting with USAID and other donors. The relationship and support between CRS and Caritas accountants is very positive.

Logistics

The main logistical limitation was in the beginning of the project, field staff did not have motorcycles, and so had no way to get to the communities for about four months, due to problems with exoneration of taxes. This caused the project to get off to a slow start, after an initial delay of six months to formalize the Caritas leadership agreement.

Information Management

See Section C. Data Quality

Technical and Administrative Support

There were two visits made by the headquarters' backstop to provide technical assistance to the project; in December 2008 and April 2010. The first visit was to plan for project startup and the baseline activities. The backstop helped in the planning and implementation of the KPC Survey and focus groups discussions. She also helped with negotiations and coordination with NICASALUD, National MINSA, HCI, and USAID.

In April 2010, field visits were made to Caritas, MINSA, partners and communities. A visit was made to USAID in Managua to present project accomplishments. Assistance was provided on developing the Terms of Reference for the MTE.

In addition to the field visits, at headquarters the backstop also:

- Wrote the DIP in Spanish and edited the English translation, and modified the DIP based on recommendations from USAID.
- Wrote the OR protocol and worked with Chile Survival Technical Support staff to modify the protocol based on their suggestions for approval
- Provided support in preparing the annual reports

Caritas requested technical support “to strengthen the abilities of field technicians” in their annual report but no specific topic was mentioned. Follow-up is needed to identify technical assistance needs of Caritas.

Management Lessons Learned

The process for developing the DIP is enhanced when the principal author is in-country for a significant amount of time to streamline inputs, discussion and modifications.

Annex 4: Workplan Table

Activity	Progress to Date
Result1.1: Improved practices of positive health behaviors among pregnant women and mothers	
Strategy 1 Community Mobilization	
1.1.1. Organize behavior change counselors, CHWs and TBAs	All 100 communities have a network of volunteers (CHWs and TBAs) organized. BCAs have been organized in the 20 communities where the innovation Hill take place
1.1.2. Mobilize community members to participate in baseball games, horse saddling competitions, races carrying saddling equipment, and calf roping contests.	This activity Hill only take place in the 20 communities where the innovation Hill be implemented. The BCAs have been trained, equipment purchased and some activities have begun.
1.1.3. Reorganize and revitalize the Municipal Health Commissions	The commissions have been reorganized in Matiguas and Rio Blanco. In Paiwas due to political conflicts the commission is still not functioning. MTE suggests looking at other alternatives. Commissions have been involved in supporting MWH and BCC activities for men.
1.1.4. Advocate for funds to support training and supervision of CHWs, TBAs	This activity is behind schedule
1.1.5. Garner support and leadership from municipal officials for activities targeting men	Completed in Matiguas, where authorities designated staff to work with innovation on involving men. Not completed in other 2 municipalities.
1.1.6. Organize CHWs and TBAs, birth plan, BF support groups.	Basically same activity as 1.1.1. Omit support groups
1.1.7. Training Technical Team in Community organization and mobilization	Caritas staff trained in mobilization and organization
1.1.8. Training Behavioral change and adult education methodology	Training completed for technical team and MINSA. Also BCAs trained in BCC
1.1.9. Implementation of BCC strategy	The strategy of the innovation being implemented, no formal strategy developed for the rest of the project.
Strategy 2 Behavior Change Communication	
1.1.10. Broadcast radio messages, work with men, and conduct operational research with male partners of pregnant women.	First stage of OR completed, radio programs and working with men ongoing
1.1.11. The community health workers and traditional birth attendant will negotiate birth plans with pregnant women and their partners.	CHWs and TBAs trained and completing birth plans. Quality of this activity needs to be improved
1.1.12. BCAs will implement the face to face activities with men in the municipality of Matiguas.	This has not yet been started. BCAs are trained.
1.1.13. The CHWs and TBAs will provide counseling to pregnant women and their partners about the importance and advantages of joint decision making.	This is being done and is ongoing
1.1.14. Safe motherhood groups counselors will reinforce the messages received during the development and follow-up of the birth.	MTE recommends deleting this activity, this action will be done through counseling and group charlas
1.1.15. Pregnant women and mothers actively participate in breastfeeding support groups.	MTE recommends deleting this activity
1.1.16. Pregnant women, mothers and their partners will receive counseling on essential newborn care, LAM through home visits, community activities and local radio spots	Not yet completed, CHWs recently trained in neonatal IMCI and not yet trained in BF
1.1.17. Training of TBAs in neonatal IMCI	Not yet completed, but CHWs have been trained
1.1.18. Workshop on methodology for documenting the community public health workers	Not yet completed

Activity	Progress to Date
Result1.2: Increased uptake of immediate emergency care among pregnant women and mothers with sick newborns	
Strategy 1 Community Mobilization	
1.2.1. Organize and equip Emergency Transport	Completed in 100 communities
1.2.2. Establish a referral system.	Established and functioning, quality needs to be improved, especially on counter-referrals
1.2.3. Pregnant women with danger signs will be referred and/or transported by the obstetric emergency transport.	This is an ongoing activity but system is being used in all communities
1.2.4. Training of technical team, TBAs and community health workers and community health agents on the birth plan	Completed
1.2.5. Organization, training and equip Obstetric Emergency Transport and birth plan	System in place and people trained in all communities
1.2.6. Mobilization of the community for emergency transportation plans and medical funds	All 100 communities have a functioning system and about 80 have community savings plans in place
1.2.7. Formation and training of BCAs to work with men	Completed
Strategy 2 Behavior Change Communication	
1.2.8. The CHWs and TBAs will counsel the pregnant women and their partners about the importance of making decisions together.	This is an ongoing activity, CHWs and TBAs have been trained.
1.2.9. The CHWs and TBAs will counsel pregnant women and their partners about how to save money for an emergency.	This is an ongoing activity, CHWs and TBAs have been trained.
1.2.10. Health care personnel and CHWs and TBAs will counsel pregnant women and their partners regarding danger signs.	This is an ongoing activity, CHWs and TBAs have been trained.
1.2.11. The safe motherhood support groups will reinforce messages during the development of and follow-up on the birth plan.	MTE recommends deleting this activity, this action will be done through counseling and group charlas
1.2.12. During home visits, community activities and on the local radio stations, mothers and their partners will receive counseling on the importance of joint decision making and on danger signs in the newborn.	This is an ongoing activity, CHWs and TBAs have been trained, radio programs are being broadcast.
1.2.13. Implementation of BCC activities (promotion and education activities with mothers and men)	The strategy of the innovation being implemented, no formal strategy developed for the rest of the project.
1.2.14. Home visits by CHAs for prevention and referral of cases	This is an ongoing activity, CHAs have been trained.
Strategy 3 Quality Assurance	
1.2.15. Train CHAs in birth plan, counseling, danger signs for pregnant women and newborns; essential newborn care.	CHAs trained in counseling, danger signs. Neonatal IMCI, still need training in Birth Plan.
1.2.16. Monitoring of community volunteers.	This activity has not been completed
1.2.17. Train staff from maternity waiting homes in counseling, danger signs for pregnant women and newborns; essential newborn care.	MWH staff trained in counseling, danger signs, essential newborn care (Birth plan, Neonatal IMCI, Life Saving Skills)
1.2.18. Training of technical and MOH personnel in birth plan	Completed for technical team and MINSA in 3 municipalities
1.2.19.Establishment of a community information system and a referrals and counter-referral system	Systems functioning, but quality needs to be improved.
1.2.20. Restructuring and training of the Municipal Health Commissions	Commissions restructured in Matiguás and Rio Blanco. In Rio Blanco trained in BCC.
Result1.3 Improved nutritional practices among pregnant, lactating women and newborns.	
Strategy 1 Community Mobilization	
1.3.1.Organize support group counselors	MTE recommends deleting this activity
1.3.2. Organization of safe motherhood and breastfeeding support groups.	MTE recommends deleting this activity
1.3.3. Mobilize pregnant women to participate in the safe motherhood and breastfeeding support groups	MTE recommends deleting this activity

Activity	Progress to Date
1.3.4. Capacitación de TBAs y CHAs in alimentación adecuada para las embarazadas y los niños menores de 5 a. según edad.	TBAs and CHAs trained in nutrition during pregnancy
Strategy 2 Behavior Change Communication	
1.3.5. The CHWs and TBAs will provide counseling to pregnant women and their partners about maternal nutrition (eat more often, diversify diet, iron and folate salts intake.)	This is an ongoing activity, CHWs and TBAs have been trained
1.3.6. Safe motherhood group's counselors will facilitate support group sessions to reinforce the messages received during the development and follow-up of the birth plans.	MTE recommends deleting this activity, this action will be done through counseling and group charlas
1.3.7. Pregnant women and mothers actively participate in safe motherhood/ BF support groups.	MTE recommends deleting this activity
1.3.8. Pregnant women, mothers and their partners will receive counseling on essential newborn care, LAM through home visits, community activities and local radio spots.	This is an ongoing activity; CHWs have been trained in Neonatal IMCI. Training in IMCI for TBAs and for CHWs and TBAs in BF will be held in 2011.
1.3.9. Breastfeeding promotion and education meetings for the breastfeeding mothers' support club.	MTE recommends deleting this activity
1.3.10. Promociòn del espaciamiento de los embarazos a travès de la lactancia exclusiva (MELA)	This activity has not yet been completed. BF training in 2011
1.3.11. Conduct operational research with male partners of pregnant women	Initial steps have been taken; this will be completed in 2012.
Strategy 3 Quality Assurance	
1.3.12. Re-accreditation of health centers and post in Baby Friendly Initiative (baby friendly units)	MTE recommends deleting this activity
1.3.13. Health staff will counsel pregnant women about the benefits of BF, LAM and maternal nutrition.	This activity has not been completed, BF training in 2011
1.3.14. Training of TBAs in breastfeeding and preparation of volunteer counselors on breastfeeding	This activity has not been completed, BF training in 2011
1.3.15. Re-accreditation of health centers and post in mother friendly initiative (mother friendly units)	MTE recommends deleting this activity
Result 2.1: Improved MOH staff skills during ANC obstetric/neonatal care.	
Strategy 3 Quality Assurance	
2.1.1. Train health personnel in Essential Maternal and Newborn Care (EMNC) skills.	Completed
2.1.1.1. Health care personnel have skills in managing obstetrical complications.	Completed in the 3 municipalities
2.1.1.2. Health care personnel have skills in immediate care of the newborn.	Completed, staff trained in Neonatal IMCI
2.1.1.3. Health care personnel have skills in the cultural adaptation of institutional deliveries.	Completed in Matiguás and Paiwas. In Rio Blanco still in process.
2.1.2. Train health care personnel in techniques for prenatal counseling for pregnant women about the importance of iron and folic acid tablets and the DT vaccine and maternal nutrition.	This activity has not been completed
2.1.3. Strengthen the logistic system for critical supplies and equipment needed for obstetric and neonatal emergencies.	MTE recommends deleting this activity, according to DIP only responsible for providing essential equipment and supplies, which has been completed.
2.1.4. Implement regular supportive supervision in the health posts and centers.	The CSP has reinforced the monitoring of quality indicators in HFs
2.1.5.Provide supportive supervisions for health staff and conduct and operation research for improving community response to maternal and newborn complications	MTE recommends deleting this activity. These activities were deleted in the final version of the DIP
2.1.6. Establish a counter-referral system.	Completed
2.1.7. Training of MOH personnel in facility neonatal IMCI and Community Neonatal IMCI	MINSA staff trained in clinical Neonatal IMCI

Activity	Progress to Date
2.1.8. Training and replication technical personnel and the MOH in breastfeeding and baby friendly units initiative	MTE recommends deleting this activity.
2.1.9. Training new MOH personnel on standards of maternal and newborn care. neonatal IMCI	New MINSA staff trained in clinical Neonatal IMCI
2.1.10. Training and establishment and monitoring of rapid cycles of quality improvement for technical and MOH personnel	Ongoing activity that has been established, but needs further strengthening
2.1.11. Training and Implementation of monitoring and supervision system of quality of neonatal care in health centers	Implemented in the 3 municipalities
2.1.12. Training of technical and MOH personnel in life saving skills	Training completed for MINSA staff
2.1.13. Refresher workshop for MOH personnel on content of health campaigns.	Completed
2.1.14. Provincial meetings of health units.	Various meetings held
2.1.15. Workshop and replication on Emergency Maternal and Neonatal Care (EMNC) and clinical IMCI for project and MOH technical personnel.	Activity not completed
Result 2.2: Improved CHWs and TBAs skills in using birth plan, home-based life saving skills and Neonatal IMCI to provide care to pregnant women and newborns	
Strategy 1 Community Mobilization	
2.2.1. Organize TBAs and CHWs in life saving skills, monitor community volunteers.	In process, a workshop has been held for facilitators in Life Saving Skills
2.2.2. Establish linkages among CHWs, TBAs and health posts/centers	Linkages established through regular meetings. MTE suggests strengthening MINSA meetings
2.2.3. Training of TBAs and community health workers in community neonatal IMCI	CHWs and CHAs trained, TBAs have not been trained
2.2.4. Training of TBAs and CHAs in life saving skills and abilities	In process, a workshop has been held for facilitators in Life Saving Skills. TBAs will not be trained in full curriculum.
2.2.5. Training of male leaders in education for dialogue	BCAs trained
2.2.6. Training of leaders or lay religious leaders in education for dialogue	Same as BCAs
2.2.7. Coordination with MWH in MATIGUAS, RIO BLANCO and PAIWAS	Completed
2.2.8. Coordination with maternity waiting home in WASLALA	Completed
2.2.9. Training of TBAs and CHAs in life saving skills	Same as activity 2.2.1 and 2.2.4
2.2.10. Workshop on methodology for documenting the innovation on men.	This activity has not been completed
Strategy 2 Behavior Change Communication	
2.2.11. Formation and training of BCAs to work with men	Completed
Strategy 3 Quality Assurance	
2.2.12. CHWs and TBAs will be trained in the birth plan and life saving skills.	Same as previous activities
2.2.13. The communities at high risk of maternal mortality will receive supplies and equipment to attend obstetric and newborn emergencies.	Emergency Transport Brigades have been equipped
2.2.14. Communities and health posts and centers will establish a referral system.	Referral system established between communities and HFs
2.2.15. The communities will be monitored monthly by the health posts and centers.	Activity in process, MINSA supervision is weak MTE suggests strengthening MINSA meetings as strategy for monitoring
2.2.16. Establish a referral and counter-referral system.	Completed
2.2.17. Training of technical and MOH personnel in EMNC and clinical IMCI	Technical staff and MINSA trained in EMNC and clinical IMCI

Activity	Progress to Date
2.2.18. Home visits by TBAs and CHAs for preventive health care and referral of pregnant women before probable date of delivery to the MWH	In process
2.2.19. Establishment and implementation of rapid cycles for quality improvement in health units for technical and MOH personnel	In process but needs to be reinforced
2.2.20. Strengthening of Municipal Health Commissions	Same as previous activities
Monitoreo y evaluación	
Training M & E technical team and CHWs	Have received various training opportunities
Línea de base	Completed
Evaluación Intermedia	Completed
Evaluación Final	Scheduled for 2012
Informe annual	Completed 2009, 2010, scheduled for 2011
Línea de base de Innovación I, trabajo con hombres	Completed
Evaluación de Innovación I, trabajo con hombres	Scheduled for 2012

Activity	Progress to Date
2.2.18. Home visits by TBAs and CHAs for preventive health care and referral of pregnant women before probable date of delivery to the MWH	In process
2.2.19. Establishment and implementation of rapid cycles for quality improvement in health units for technical and MOH personnel	In process but needs to be reinforced
2.2.20. Strengthening of Municipal Health Commissions	Same as previous activities
Monitoreo y evaluación	
Training M & E technical team and CHWs	Have received various training opportunities
Línea de base	Completed
Evaluación Intermedia	Completed
Evaluación Final	Scheduled for 2012
Informe annual	Completed 2009, 2010, scheduled for 2011
Línea de base de Innovación I, trabajo con hombres	Completed
Evaluación de Innovación I, trabajo con hombres	Scheduled for 2012

Annex 5: Rapid CATCH Table No Mid-Term KPC survey performed

Indicator	Baseline KPC (%)		
	Matiguas	Paiwas & Rio Blanco	Total
Adequate Child Spacing- knowledge of	45.7	40.3	43.0
Antenatal Care 4 or more visits	41.0	53.4	47.2
Maternal TT Vaccination	55.3	43.6	48.2
Skilled Birth Attendant	71.9	81.5	77.7
Current Contraceptive Use Among Mothers of Young Children	64.2	62.1	63.2
Post-Natal Visit to Newborn Within First 2 Days After Birth	50.3	44.6	47.5
Exclusive Breastfeeding	34.5	26.6	29.7
Infant and Young Child Feeding	42.2	37.3	39.2
Vitamin A Supplementation in the Last 6 Months	25.2	29.9	28.1
Measles Vaccination	60.8	58.2	64.5
Access to Immunization Services	76.0	74.0	74.8
Health System Performance Regarding Immunization Services	67.2	59.0	62.3
Treatment of Fever in Malarious Zones	NA	NA	NA
ORT Use	63.2	65.5	64.6
Appropriate Care Seeking for Pneumonia	58.3	55.6	56.7
Point of Use (POU) Water Treatment	29.5	25.2	26.9
Appropriate Hand Washing Practices	75.5	63.1	68.0
Child Sleeps Under an Insecticide-Treated Bednet	NA	NA	NA
Underweight	7.3	7.0	7.1

Annex 6: Mid-Term KPC Report No Mid-Term KPC survey performed

Annex 7: CHW Training Matrix

Project Area (name of district or community)	Type of CHW	Government CHW or Grantee developed cadre	Paid or Volunteer	Number Trained over life of project	Focus of Training
Matiguas Municipality	CHW Brigadista	Grantee-developed cadre	Volunteer	95	Community IMCI-Neonatal, SICO
	CHA Salubrista	Grantee-developed cadre	Volunteer	12	IMCI-Neonatal, SICO, Nutrition during pregnancy, leadership and community management
	TBA Partera	Grantee-developed cadre	Volunteer	50	Birth Plan, use of flipchart, SICO, Nutrition during pregnancy
	BCA BCC Promotor	Grantee-developed cadre	Volunteer	33	Behavior change strategies for men
Rio Blanco Municipality	CHW Brigadista	Grantee-developed cadre	Volunteer	58	Community IMCI-Neonatal, SICO
	CHA Salubrista	Grantee-developed cadre	Volunteer	7	IMCI-Neonatal, SICO, Nutrition during pregnancy, leadership and community management
	TBA Partera	Grantee-developed cadre	Volunteer	30	Birth Plan, use of flipchart, SICO, Nutrition during pregnancy
	BCA BCC Promotor	Grantee-developed cadre	Volunteer	18	Behavior change strategies for men
Bocanas de Paiwas Municipality	CHW Brigadista	Grantee-developed cadre	Volunteer	20	Community IMCI-Neonatal, SICO
	CHA Salubrista	Grantee-developed cadre	Volunteer	5	IMCI-Neonatal, SICO, Nutrition during pregnancy, leadership and community management
	TBA Partera	Grantee-developed cadre	Volunteer	20	Birth Plan, use of flipchart, SICO, Nutrition during pregnancy
	BCA BCC Promotor	Grantee-developed cadre	Volunteer	15	Behavior change strategies for men

Annex 8: Evaluation Team Members

Name	Position	Organization
Team # 1 Matiguas Municipality		
Julio Alberto Valerio*	Institutional Strengthening	CRS
Alcides Jiménez	M&E Supervisor	Caritas
Gleydis Selva	Field Technician	Caritas
Juan Gonzáles	Community Supervisor	MINSA- Matiguas
Agustín Herrera	Training Supervisor	Caritas
Manuel Quintanilla	Field Technician	Caritas
Guillermo Rayo	Field Technician	Caritas
Team # 2 Rio Blanco Municipality		
Oscar Boza*	CSP Director	CRS
Nelson López	Field Technician	Caritas
Héctor Montoya	Field Technician	Caritas
Gisela Rojas	Field Technician	Caritas
Nancy Hernández	Field Technician	Caritas
Team # 3 Bocanas de Paiwas Municipality		
Roberto Cisneros*	CSP Coordinator	Caritas
Carlos Mejía	Field Technician	Caritas
José Manuel Rodríguez	Field Technician	Caritas
Dalia Pérez	Field Technician	Caritas
Julio Blandón	Field Technician	Caritas
Rotated on all teams		
Renee Charleston	External Evaluator	Consultant
Patrick Gallic	CRS Fellow	CRS
Jose Mendieta	Food Security Director	CRS

*Team Coordinator

Annex 9: Evaluation Assessment Methodology

I. OBJECTIVES OF THE EVALUATION

The objectives of the Midterm Evaluation were to;

1. Assess progress in implementing the DIP;
2. Assess progress towards achievement of objectives or yearly benchmarks;
3. Assess if interventions are sufficient to reach desired outcomes,
4. Identify barriers to achievement of objectives, and
5. To provide recommended actions to guide the program staff through the last half of the program.

The evaluation was carried out in accordance with USAID/GH/HIDN/CSGHP MTE guidelines 2010 and the evaluation report follows the suggested format.

II. COMPOSITION OF EVALUATION TEAM

The team was composed of CRS and Caritas staff, MINSA staff, plus an external consultant who served as team leader. The team leader was responsible for coordinating all evaluation activities, supervision of the team, meeting all specified objectives, collaborating with CRS and Caritas, and submitting a draft and a final report according to the defined timeline. Three team coordinators functioned as the coordinators of the teams for field data collection, including overall coordination, planning and logistical support of the team.

III. METHODOLOGY

Using both a participatory approach and participatory methodologies, a multi-disciplinary term of key project stakeholders examined the implementation of CS activities using a variety of qualitative methodologies. Field visits allowed project participants and community volunteers to provide their inputs and suggestions to the evaluation process. The evaluation focused on the process of activities including; capacity building, communication for behavior change, planning, HIS, community participation, coordination with partners, and sustainability. The methodologies used to obtain information for the evaluation included:

- Document Review
- Key Informant Interviews with Health Center/Health Post Staff, MWH staff, and others listed in Annex D.
- Group Interviews with women, men, CHWs, CHAs, TBAs, BCA, Emergency Transportation Brigades, Municipal Health Team and Municipal Health Council
- Exit interviews at health posts and centers and with prenatal and postnatal women at the MWH
- Observations of Prenatal Care
- Knowledge review of TBAs, CHWs, CHAs, BCAs
- Inventory of basic supplies and drugs

Field Activities

Date	Activities
Thursday November 4	9:00 am Interview with MINSA municipal teams 11: 00am Interview with representatives of the municipal health councils (only 1 conducted) 2 Pm Group Interviews with ETB
Friday November 5	9 am Interviews with the staff of the MWH and pre and post natal women at the facilities 2 pm Group Interview with CHWs
Monday November 8	9: 00 am Visits to Health Centers San José Center- Matiguas Denis Gutiérrez Center-Rio Blanco Emiliano Pérez Center-Paiwas • ANC Observations • Exit Interview- User satisfaction • Inventory of materials and supplies • Interviews with staff 2: 00pm Group Interviews with TBAs and counselor on the Birth Plan
Tuesday November 9	9:00 am Visits to Health Posts El Jobo- Matiguas San Andres- Rio Blanco Ubu Norte- Paiwas • ANC Observations • Exit Interview- User satisfaction • Inventory of materials and supplies • Interviews with staff 2 pm Group Interviews (4) with women and men participating in the innovation, BCAs and CHAs (all 3 teams participated together)

The three teams interviewed the following people during evaluation activities:

25 Exit Interviews for Client Satisfaction
33 CHWs
34 TBAs
10 CHAs
3 Emergency Transportation Brigades with 23 Volunteers
3 MWH with 6 staff and 20 prenatal and 3 postnatal women
6 Health Facilities with 15 staff
18 PNC Observations
1 Municipal Health Council with 6 Members
3 Municipal Health Team3 with 12 people
8 BCAs
7 Women involved in the innovation
8 Men involved in the innovation
70 Tests of Health Knowledge

IV. EVALUATION PLAN

The evaluation was divided into four phases:
Phase I Planning

- Preplanning (Formation of team, logistics, document review)
- Planning Workshop (Content, methodologies, development of instruments)

Phase II Data Collection

- Field Work visits
- Other interviews
- Document review

Phase III Data Analysis

- Team members summarized and organized information collected in the field
- Analysis of information by the evaluation team and other stakeholders (2 day Analysis Workshop)

Phase IV Presentation

- Written report in English
- Formal presentation and action plan is scheduled for after the report is finalized

The evaluation team was divided into 3 small groups, one for each municipality, to collect information from the field. Each team consisted of 5-7 people. The teams were in the field for 4 days to visit 6 Health Centers/Posts, 3 MWHs, and interviews with volunteers and community members previously selected for visits.

November 2010

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1 Planning meeting with CRS/Caritas Interviews with partners; CIES, UNAN, HCI, NICASALUD	2 Interview with MINSA-SILAIS Planning Workshop	3 Planning Workshop	4 Field Work	5 Field Work	6 Interviews with CRS and Caritas Staff
8 Field Work	9 Field Work	10 Preparation of Information	11 Analysis Workshop	12 Analysis Workshop	13 Document Review
15 Meeting with CRS Director, Asst. Director Meeting with USAID	16 Travel				

A one and a half-day Planning Workshop was held for all team members to review the content of the evaluation and to develop methodologies for collecting information through interactive field visits to communities, MWHs, and health facilities.

A two-day Analysis Workshop was held for all team members to present the results of the field work and to formulate recommendations for improving project implementation during the second half of the project.

Evaluation of the Process

Eighteen evaluation team members completed an evaluation of the MTE process, during the Analysis Workshop. The results from the questionnaires were:

- 9/18 (50%) of participants felt that the process used was very effective, and 9/18 (50)% that it was effective. A scale from 1-4 was used giving an average of 3.5.
- What people liked best about the process was the participatory nature of the evaluations, the involvement of staff, and the opportunity to listen to, and respect, the opinions of many different people involved in the project. People also like the opportunity to see the work being done in different municipalities. Many people felt the methodology was simple and non-confrontational but effective in providing a clear path in the future.
- Some people thought that what was missing from the evaluation was the participation of MINSA, visits to the communities, and the presentation of the results. Several people mentioned an analysis of the relationship between CRS and Caritas was missing to provide greater unification in their work.
- The negative aspects of the evaluation were the venue for the workshop and that the amount of time was inadequate.
- 7/18 (39%) felt the content of the evaluation was adequate for evaluating the project. 11/18 (61%) felt the content was very adequate. A scale from 1-4 was used giving an average of 3.6.

Annex 10: Persons Interviewed and Contacted during the MTE

Name	Position	Organization
Dr. Valverde	Project Officer	USAID-Nicaragua
Hugh Aprile	Country Representative	CRS
Kristin Rosenow	Director of Programs	CRS
Elena McEwan	Senior Health Technical Advisor	CRS HQ
Claudia Carcache	Accountant	CRS
Veronica Alvarez	Human Resources Director	CRS
Jose Mendieta	Food Security Director	CRS
Julio Valerio	Institutional Strengthening Coordinator	CRS-CSP
Oscar Boza	CSP Director	CRS-CSP
Juan Gonzáles	Community Educator	MINSA-Matiguas
Erasmo Jarquin	Director SILAIS	MINSA-Matagalpa
Roberto Cisneros	CSP Coordinator	Caritas
Miriam Herrera	Accountant	Caritas
Alcides Jiménez	M&E Supervisor	Caritas
Agustín Herrera	Training Supervisor	Caritas
Nelson López	Field Technician	Caritas
Héctor Montoya	Field Technician	Caritas
Gisela Rojas	Field Technician	Caritas
Nancy Hernández	Field Technician	Caritas
Carlos Mejía	Field Technician	Caritas
José Manuel Rodríguez	Field Technician	Caritas
Dalia Pérez	Field Technician	Caritas
Julio Blandón	Field Technician	Caritas
Guillermo Rayo	Field Technician	Caritas
Manuel Quintanilla	Field Technician	Caritas
Gleydis Selva	Field Technician	Caritas
Dr. Francisco Bustamante	Coordinator of Community Health Program	UNAN
Dra. Aura Vanessa Paredes	Professor of Community Health	UNAN
Gertrudis Medrano	Behavior Change Specialist	Nicasalud
Josefina Bonilla	Executive Director	Nicasalud
Cesar Rodríguez	QI Advisor	HCI/URC
Miguel Ángel Orozco	Executive Director	CIES/UNAN

In addition to the above people who were interview, see Annex 9 for details on interviews conducted during field work.

Annex 11: Project Data Form

Child Survival and Health Grants Program Project Summary

Dec-10-2010

Catholic Relief Services (Nicaragua)

General Project Information

Cooperative Agreement Number:	GHN-A-00-08-00007-00
CRS Headquarters Technical Backstop:	Elena McEwan
CRS Headquarters Technical Backstop Backup:	
Field Program Manager:	Oscar Boza
Midterm Evaluator:	Renee Charleston
Final Evaluator:	
Headquarter Financial Contact:	
Project Dates:	10/1/2008 - 9/30/2012 (FY08)
Project Type:	Innovation
USAID Mission Contact:	Chris Barrett
Project Web Site:	

Field Program Manager

Name:	Oscar Boza (Dr. Oscar Boza)
Address:	Hotel Intercontinental Metrocentro 1 cuadra al oeste, 1 al norte 1/2 al oeste Managua Nicaragua
Phone:	(505) 713-3109
Fax:	
E-mail:	boza@crs.org.ni
Skype Name:	

Alternate Field Contact

Name:	Jose Mendieta (Dr. Oscar Boza)
Address:	Managua Nicaragua
Phone:	
Fax:	
E-mail:	health@crs.org.ni
Skype Name:	

Grant Funding Information

USAID Funding: $1,600,000 **PVO Match:** $537,939

General Project Description

Mid Term Evaluation Report:

Catholic Relief Services (CRS) received funding from USAID for the implementation of a four year Child Survival Project in Nicaragua (October 2008-September 2012). Goal: Contribute to the reduction of maternal and neonatal morbidity and mortality in the municipalities of Matiguas, Río Blanco, Paiwas and Waslala of the Matagalpa SILAIS by 2012 . There are 125 target communities and 13 Ministry of Health (MINSA) facilities. The project is being implemented by three principal partners; CRS is leading efforts in institutional strengthening for MINSA facilities under Objective 2: Increased families' access to quality maternal and neonatal services and Caritas Matagalpa Diocese is implementing community activities in coordination with MINSA under Objective 1: Improved knowledge and behaviors for maternal and neonatal health among families and communities.

The overall project plan is to implement with MINSA a complete "package" of household, community and health facility (HF) activities to strengthen maternal neonatal care. These include: Neonatal IMCI at both clinical and community levels, Birth Planning , Live Saving Skills, Nutrition During Pregnancy, Breastfeeding, Institutional Strengthening for MINSA (Training, equipment, Quality Improvement). The main implementation strategy for working at community level is the formation, training and support to a network of volunteers in activities specific to improving maternal newborn care (70% level of effort) and nutrition (30% level of effort). At the community level volunteers counsel families, provide group education, and monitor and refer women for required services.

The CSP includes two innovations:

Innovation № 1: Engaging Men to improve Care-Seeking in 20 communities where 60 Behavior Change volunteers have been trained. Qualitative research was conducted to understand the situation and opinions of men, to identify barriers and facilitators, and negotiate new behaviors. This methodology is being implemented by NICASALUD, and Center for Health Research and Studies is measuring impact through a series of surveys.

*Innovation № 2 Improving Community Response to Maternal and Neonatal Complications*to increase access to emergency health services in 25 isolated rural communities by use of a higher level volunteer trained in lifesaving skills, emergency care, neonatal IMCI. They have been equipped with essential supplies and materials for emergencies and are monitored monthly by the Caritas staff. There is no operations research planned for this innovation.

Project implementation is on track to achieve planned results. The majority of planned activities have been completed, the project suffered from a slow start up and some activities are slightly behind schedule. Positive aspects evident during the MTE include:

o Respondents cited perceived impact; increased use of health services, Maternity Waiting Homes, institutional births, and antenatal care and a decline in maternal mortality.

o Two especially positive interventions were cultural adaptation of births and involvement of men in health including accompanying the woman to antenatal care and during childbirth.

o Use of Quality Improvement activities has helped to improve the quality of services

o Network of volunteers is active and strengthened and has improved links with MINSA

o Emergency response has been strengthened through recognition of danger signs, Emergency Transport Brigade, referrals, and improved emergency response at facilities

o Basic medicines and equipment are available for MNC

Conclusions

One of the most of pressing problems is the dependency the project has inadvertently created in both MINSA and the volunteers. The project was designed in such a way as to provide a strong staff presence in all communities. In a country with limited human resources it is only natural that MINSA would see project staff as an extension of their staff.

The project has much to contribute to the Child Survival knowledge base, most notable the experience involving men in care seeking and shared decision making. Also the experience in cultural adaptation and use of waiting homes should be documented and disseminated.

The M&E system is cumbersome and overloads both volunteers and Caritas staff with unnecessary information, at the expense of analysis and use of information for decision making. There has been more emphasis placed on the indicators from the workplan and less on the M&E plan.

The various MINSA strategies that the project is implementing is beginning to reach its potential as an effective means of diminishing maternal/neonatal morbidity and mortality from the synergy among interventions, but the CSP continues to implement strategies as parallel programs, rather than taking a more integrated holistic approach.

Recommendations

- All data collected in the field by CSP staff should be shared so that all partners can appreciate project advances and weaknesses and be involved in decision making.

- The use of qualitative methodologies to understand the *how* and the *why* of project implementation should be included to complement quantitative methods.

- Supervision and counseling should be integrated. Counseling visits should be based on the needs of the family, so counselors should be versed in a broad spectrum of health topics.

- Conduct training according to the needs of the volunteers; alternatives should be explored with the volunteers decentralized location, shorter duration, using mentoring not courses.

- Develop a supervision guide and tool to support integrated supportive supervision at both the community and Caritas staff levels and develop a joint plan for supervising.

- Strengthen MINSA's volunteer meetings as a sustainable strategy for indirect supervision and continuous training.

- Support the maternity waiting homes to identify alternatives for funding and develop sustainable financial strategies including the reactivation of the steering committee.

- The two communication methodologies of counseling and group charlas should be strengthened through the development of quality checklists and counseling guides.

- Improve the effectiveness of technical assistance provided by field staff to the communities and the commitment to completing all programmed visits.

- Annual meetings with the CSP, MINSA and other partners should be held as they are an important opportunity to share information, evaluate and plan together.

- Develop a sustainability plan through a participatory process involving MINSA, municipalities, and the communities in defining their role in the future.

- Help communities to identify alternative methods for providing financial or in-kind support to community volunteers, especially when they attend trainings.

Project Location

Latitude: 12.95	**Longitude:** -85.44
Project Location Types:	(None Selected)
Levels of Intervention:	(None Selected)
Province(s):	--
District(s):	4 municipalities in Matagalpa Department, Southern Atlantic Autonomous Region (RAAS) and the Northern Atlantic Autonomous Region (RAAN) in central and eastern Nicaragua

Sub-District(s): --

Operations Research Information

OR Project Title: Engaging Men to Improve Care-Seeking

Cost of OR Activities: $46,782

Research Partner(s): NicaSalud and CIES

OR Project Description:

The focus group discussions confirmed the existence of a pervasive cultural norm, based on male need for control that women must have permission from their husbands or partners to leave home for any reason. The man who heads the household often also makes the decision about from whom or where to go to seek health care. Over the years, in Nicaragua, virtually all government and NGO health education efforts have targeted only the women.

The CSP, in partnership with NicaSalud and CIES, propose the following phases to develop Operations Research in selected communities of the municipality of Matiguás: a phase one will be a formative research. This phase will be aimed at understanding how decisions are made at the household level and how this may contribute to the first barrier in recognizing and deciding to access timely obstetric and neonatal emergency care. The formative research will focus on better understanding men's attitudes about their perceived role, their perception of authority and of family well-being. Results will be used to develop the BBC strategy.

Phase I – Formative Research

Formative Research General Objective:

To develop the content for a comprehensive intervention strategy to promote joint decision making, increased male engagement, and male support for early and appropriate care seeking for maternal and newborn health care.

The FR specific objectives are:

1. To identify key factors, perceived benefits, barriers that influence men behaviors regarding joint decisions to seeking care and their involvement in their wives and children health care, and to ascertain their willingness to adopt new behaviours and how liable they are to practice them.

2. To develop an approach to implement and monitor the BCC interventions to promote behaviors and develop draft BCC materials

3. To carry out a small-scale pilot testing of the intervention, including assessment reaction to draft BCC materials

Overview of phases of the formative research

The methodology proposed to carry out the formative research rests on multiple techniques transferred and modified from the areas of research, social marketing, participatory planning, IEC, educational communications, and many complementary disciplines. It is built upon a detailed process to comprehensively approach the target population and on the selection of key behaviors based on prior research and other the implementation of activities that are specifically designed to eliminate or decrease resistance and barriers that present obstacles to these behaviors.

The formative research will be developed in three phases. The principal group identified for behavior change is rural men whose wives are either pregnant, post partum or have children under two years old. The implementation phases are as follows:

Phase 1: To identify key factors, perceived benefits, barriers that influence men behaviors regarding making joint decisions to seeking care and their involvement in their wives and children health, and to ascertain their willingness to adopt new behaviors and how liable they are to practice them.

This phase aims to look at the world through the lens that men use, to understand without judging the situation from their perspective. The research questions for each objective will be developed during the design workshop, but illustrative examples of the research questions are as follows:

Objective one: To identify key factors, perceived benefits, barriers that influence men behaviors regarding making joint decisions to seeking care and their involvement in their wives and children health, and to ascertain their willingness to adopt new behaviors and how liable they are to practice them

Desired Behavior	Perceived consequences	Self-efficacy	Social norm
1. Men make joint decision with wives regarding seeking care for her or their children.	*1. What do you see as the advantages or good things that would happen if you decide with your wife regarding seeking care for her or your children?* *2. What do you see as the disadvantages or bad things that would happen if you decide with your wife regarding seeking care for her or your children?*	*1. What makes it difficult or impossible for you to make joint decisions with your wife regarding seeking care for her or your children?* *2. What makes it easier for you to make joint decisions with your wife regarding seeking care for her or your children?*	*1. Who (individuals or groups) do you think would object or disapprove if you make joint decisions with your wife?* *2. Who (individual or groups) do you think would approve if you make joint decisions with your wife?*

The Formative Research will use group and in-depth interviews with men to give us a better understanding of men feelings, beliefs, gender lens, social and cultural behaviors towards their families and relationship with their wives during pregnancy. It will also help us to better understand the barriers and enablers that influence those behaviors (why they behave the way they do) and identify feasible enablers for the desired new behaviors.

Using in-depth interviews will help us find answers to pending questions about the situation and to better understand the results from the baseline described above regarding how decisions are made at the household level. This methodology aims to identify key factors that influence current behaviors, and to understand the benefits they perceive from the current behaviors and the barriers they face to practice the proposed new behaviors. Simultaneously, this methodology will help us ascertain their willingness to adopt new behaviors, how liable they are to practice them. Refer to form I-IV to record the information.

Phase 2: To develop an approach to implement and monitor the BCC interventions to promote behaviors and develop draft BCC materials.

The phase two involves the development of draft BCC materials, including assessment reaction to draft BCC materials. In this phase the CSP will select male community members who will become BCC counselors. These volunteers would have worked on health, community committees or any other activity and have gained respect from their communities. Once the promoters are selected by their communities, they will be trained in counseling skills and the content of specific behaviors. The BCC counselors will receive materials and supplies to implement the activities. This phase will be conducted until all the promoters are trained.

Community strategies will also be designed to support men in behavior modification. In addition, the project

will negotiate with community members regarding the feasibility of the proposed strategies to be implemented, to define channels of communication, to perform a training needs assessment, and to develop processes and monitoring and evaluation tools. In order to monitor and evaluate the BCC activities a M&E system based at the community level will be developed by adapting the guidelines developed by NicaSalud. This system includes matrix and checklists to record the data, as well as the process to compile and analyze the information. The information will be used to field test the innovation and evaluate its effectiveness in changing behaviors; the results will be used to adjust the strategy and improve it. Refer to the forms V- VIII to record the information

Phase 3: To carry out a small-scale pilot testing of the intervention, including assessment reaction to draft BCC materials

The CSP will work with the men in negotiating and probing specific behaviors. This methodology helps to identify enablers for and barriers against the desired behavior. While men are at home, they will be asked to record situations when they could or could not practice the desired behavior and how they felt. During home visits, CRS staff and Caritas Technicians will review whether men have practiced the desired behavior and in subsequent visits they will discuss their experience in probing the new behavior. The following questions will be used to record the acceptability, feasibility, affordability of the behavioral recommendations and their self-efficacy in practicing the new behavior:

1. Could you practice the behavior?
2. Are you willing to continue practicing the new behavior?
3. Why do you think you could continue practicing the new behavior? (See forms V-VIII to record the information)

Phase II: Summative Research:

The CSP, in partnership with CIES, proposes the following methodology to develop a Summative Research (SR) in 20 selected communities of the municipality of Matiguás, Rio Blanco and Paiwas. This SR will be aimed at measuring if behavior change activities with men may contribute to decreasing the first barrier in recognizing and deciding to access timely obstetric and neonatal emergency care and secondly to better understand men's attitudes about their perceived role, their perception of authority and of family well-being.

On the providers' side, the CSP will strengthen the services by providing MoH staff new skills to diagnose and treat obstetric and newborn emergencies, by re-structuring the health services to become more culturally sensitive, and by including new indicators in the MoH health's information system to record the number of pregnant women seeking care with their partners and the number of men who asked questions regarding their wives' health during care. The CSP will also improve the coordination between health units and community structures to improve timely referrals.

- **Objectives and hypothesis:**

1. **Ultimate objective:** Contribute to the reduction of maternal and neonatal morbidity and mortality in 20 targeted isolated rural communities in the municipalities of Matiguas, Rio Blanco and Paiwas by decreasing fundamental barriers in recognizing danger signs and encouraging pregnant women and their partners to make joint decisions vis a vis seeking prompt maternal and new born care.

2. **Immediate objectives :**

a) To assess men's knowledge in recognizing danger signs during pregnancy, labor and delivery, post partum and new born periods.

b) To determine if participating men change their behaviors concerning health care seeking decisions and taking care of their family's health.

c) To document the innovation process; and

d) To measure health outcomes in increasing maternal and newborn care.

3. **Hypothesis**

Increasing awareness among men in regards to recognizing danger signs during pregnancy and new born periods, and by motivating them to make joint decisions with their wives will result in boosting seeking care during obstetric and newborn emergencies in a timely manner and an increase in ANC, institutional deliveries; therefore improving maternal and newborn health.

4. **Expected outcome:**

Healthier pregnancies and healthier newborns by increased timely demand to maternal and neonatal heath care. It is expected to increase the percentage of ANC, institutional deliveries, postpartum and

new born care.

5. **Variables affecting outcome**

This innovation will form part of a comprehensive project which will also include other community BCC activities, birth planning, supporting CHWs in promoting care-seeking, exclusive breastfeeding (EBF), adequate maternal nutrition, community emergency transport plans and medical emergency funds and health system strengthening by improving the quality of ANC, institutional deliveries and newborn care.

o **Intervention description**

1. **Intervention sites.** The intervention sites will be chosen in 20 communities in the municipalities of Matiguás, Rio Blanco and Paiwas.

2. **Activities:**

Strategy Launching and Implementation : Trained BCC counselor and lay and religious leaders will implement this phase in twenty targeted communities in the three municipalities from April 2010 to April 2012.

o **Study methodology**

The CSP carried out two types of surveys as part of the baseline: KPC and qualitative surveys. This information was used to prioritize seeking care indicators the project wants to increase (see Quantitative Analysis Matrix).

o Study population: Rural men and their partners (pregnant, post partum or with children under age two).

o Inclusion criteria: Rural men whose wives are pregnant, post partum or have children under two years old and their wives.

o Sampling methodology: For monitoring purpose the CSP will include all men and their partners that fits the criteria described above participating in the BCC activities

Monitoring of the BCC activities:

A community information system will also be put in place to monitor process indicators. The community information system (SICO) developed by the MoH will be adapted to include the process indicators to monitor the BCC activities. It includes matrix and checklists to record the data, as well as the process to compile and analyze the information. The information will be used to document the implementation and evaluate its effectiveness in changing behaviors; the results will be used to adjust the strategy and improve it. The counselors and religious leaders will be monitored by the MoH Municipal Educators and Caritas technicians.

At the end of April 2011 the annual evaluation and documentation of the process will commence. Depending on results of the annual evaluation the CSP and MoH will determine if it will be feasible to start transferring some of the BCC activities to neighboring communities in Matiguás, Rio Blanco and Paiwas Municipalities. The final evaluation will take place at the end of the second year. Due to time constraints the CSP will not be able to roll out the innovation to all the project communities, but will document and share the innovation with the MoH and other partners at district and national level for them to adapt and scale.

The methodology for the quantitative assessment that will be used for the annual and final evaluation will be defined with CSTS.

Qualitative assessment: To complement the quantitative survey, the CSP will also carry out a qualitative study documentationusing focus group discussions and in-depth interview techniques. In both, targeted communities and control group communities the CSP will conduct five FGD with men whose wives are pregnant, post partum or who have children under two years of age, and five FGD with pregnant women, post partum or women who have children under two years old, and five in-depth interviews in each group.

o **Use or not of control group:** Men from 20 neighboring communities whose wives are pregnant, post partum of have children under two. These communities will be participating in all the CSP activities but the ones referring to the BCC described in the innovation *Engaging men to improve care- seeking.*

- **Limitation of the study:**

a) Two years is an insufficient amount of time to sustain these behavioral changes as they involve profound cultural behaviors that could be difficult to adjust.

b) The qualitative emphasis of the intervention methodologies focuses the results on the intervention site, rather than the whole project area.

c) The health care environment does not include men's participation as a standard to evaluate quality of maternal and child care at the health posts and centers.

- Internal Review Board (IRB) compliance

CIES will give formal IRB approval.

- Description of mechanisms to share evidence and utilize lessons with key stakeholders to inform replication and scale up of innovation

To show the potential for scaling up, the CSP will first implement and refine the strategy in the municipality of Matiguás. The project will share the experience and methodology with the MoH, specifically through the community organization specialists of the SILAIS, lending them technical support to implement the same strategy through health facility staff in the municipalities of Paiwas and Río Blanco. CRS, Caritas Matagalpa and the SILAIS staff will monitor the MoH efforts, including challenges and successes in order to jointly document a process for a concrete approach for reaching men to scale up in other provinces. CRS and Caritas will look for opportunities to promote the concept and approach for male involvement in health through their work in other sectors and other municipalities and parishes, in the belief th

Partners

Caritas Matagalpa (Subgrantee)	$317,779
SILAIS Matagalpa (MOH) (Collaborating Partner)	$0

Strategies

Social and Behavioral Change Strategies:	Group interventions Interpersonal Communication Mass media and small media
Health Services Access Strategies:	Emergency Transport Planning/Financing Addressing social barriers (i.e. gender, socio-cultural, etc) Implementation with a sub-population that the government has identified as poor and underserved Implementation in a geographic area that the government has identified as poor and underserved
Health Systems Strengthening:	Quality Assurance Conducting capacity assessment of local partners Supportive Supervision Task Shifting Developing/Helping to develop clinical protocols, procedures, case management guidelines Developing/Helping to develop job aids Monitoring health facility worker adherence with evidence-based guidelines Providing feedback on health worker performance Monitoring CHW adherence with evidence-based guidelines Referral-counterreferral system development for CHWs Community role in supervision of CHWs Review of clinical records (for quality assessment/feedback) Coordinating existing HMIS with community level data Community input on quality improvement
Strategies for Enabling Environment:	Create/Update national guidelines/protocols Advocacy for revisions to national guidelines/protocols Building capacity of communities/CBOs to advocate to leaders for health
Tools/Methodologies:	BEHAVE Framework Rapid Health Facility Assessment Community-based Monitoring of Vital Events LQAS MAMAN Framework

Capacity Building

Local Partners:	Local Non-Government Organization (NGO) Dist. Health System Health Facility Staff Other National Ministry TBAs Faith-Based Organizations (FBOs)

Interventions & Components

Childhood Injury	IMCI Integration	CHW Training HF Training
Control of Diarrheal Diseases	IMCI Integration	CHW Training HF Training
HIV/AIDS		CHW Training HF Training
Immunizations	IMCI Integration	CHW Training HF Training
Infant & Young Child Feeding - Maternal Nutrition - Peer support - Promote Excl. BF to 6 Months - Intro. or promotion of LAM - Support baby friendly hospital	IMCI Integration	CHW Training HF Training
Malaria	IMCI Integration	CHW Training HF Training
Maternal & Newborn Care (60%) - Emergency Obstetric Care - Neonatal Tetanus - Recognition of Danger signs - Newborn Care - Post partum Care - Normal Delivery Care - Birth Plans - Home Based LSS - Control of post-partum bleeding - Emergency Transport	IMCI Integration	CHW Training HF Training
Pneumonia Case Management	IMCI Integration	CHW Training HF Training
Tuberculosis	IMCI Integration	CHW Training HF Training

Vitamin A and Micronutrients	IMCI Integration	CHW Training HF Training

Operational Plan Indicators

Number of People Trained in Maternal/Newborn Health			
Gender	**Year**	**Target**	**Actual**
Female	2010	186	
Female	2010		383
Male	2010		720
Male	2010	517	
Female	2011	320	
Male	2011	450	
Female	2012	300	
Male	2012	450	
Number of People Trained in Child Health & Nutrition			
Gender	**Year**	**Target**	**Actual**
Female	2010	263	
Female	2010		308
Male	2010		270
Male	2010	246	
Female	2011	369	
Male	2011	220	
Female	2012	320	
Male	2012	130	
Number of People Trained in Malaria Treatment or Prevention			
Gender	**Year**	**Target**	**Actual**
Female	2010		0
Female	2010	0	
Male	2010		0
Male	2010	0	
Female	2011	0	
Male	2011	0	
Female	2012	0	
Male	2012	0	

Locations & Sub-Areas

Matiguas	44,971
Paiwas y Rio Blanco	68,589
Total Population:	113,560

Target Beneficiaries

	Matiguas	Paiwas y Rio Blanco	Total
Children 0-59 months	5,958	10,391	16,349
Women 15-49 years	11,124	16,646	27,770
Beneficiaries Total	17,082	27,037	44,119

Rapid Catch Indicators: DIP Submission

Sample Type: 30 Cluster

Antenatal Care

Description -- Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child

Numerator: Enter the number of mothers with children age 0-23 months who had at least four antenatal visits while pregnant with their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	124	302	41.1%	9.1
Paiwas y Rio Blanco	159	298	53.4%	10.0

Maternal TT Vaccination

Description -- Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	167	302	55.3%	10.1
Paiwas y Rio Blanco	130	298	43.6%	9.4

Skilled Birth Attendant

Description -- Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	217	302	71.9%	10.8
Paiwas y Rio Blanco	243	298	81.5%	11.2

Current Contraceptive Use Among Mothers of Young Children

Description -- Percentage of mothers of children age 0-23 months who are using a modern contraceptive method

Numerator: Enter the number of mothers with children age 0-23 months who are using a modern contraceptive method

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	194	302	64.2%	10.5
Paiwas y Rio Blanco	185	298	62.1%	10.5

Post-Natal Visit to Check on Newborn Within the First 2 Days After Birth

Description -- Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within two days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	152	302	50.3%	9.8
Paiwas y Rio Blanco	133	298	44.6%	9.5

Exclusive Breastfeeding

Description -- Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	29	84	34.5%	16.2
Paiwas y Rio Blanco	25	94	26.6%	13.7

Infant and Young Child Feeding

Description -- Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	92	218	42.2%	10.8
Paiwas y Rio Blanco	76	204	37.3%	10.7

Vitamin A Supplementation in the Last 6 Months

Description -- Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother's recall or card verified)

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	55	218	25.2%	8.8
Paiwas y Rio Blanco	61	204	29.9%	9.8

Measles Vaccination

Description -- Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	76	125	60.8%	16.1
Paiwas y Rio Blanco	85	127	66.9%	16.4

Access to Immunization Services

Description -- Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received a DTP1 at the time of the survey according to the vaccination card/child health booklet or mother's recall

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	95	125	76.0%	17.0
Paiwas y Rio Blanco	94	127	74.0%	16.8

Health System Performance Regarding Immunization Services

Description -- Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	84	125	67.2%	16.6
Paiwas y Rio Blanco	75	127	59.1%	15.9

Treatment of Fever in Malarious Zones

Description -- Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began

Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug

Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	0	0	0.0%	0.0
Paiwas y Rio Blanco	0	0	0.0%	0.0

ORT Use

Description -- Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids

Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids

Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	48	76	63.2%	20.9
Paiwas y Rio Blanco	74	113	65.5%	17.3

Appropriate Care Seeking for Pneumonia

Description -- Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Numerator: Enter the number of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	49	84	58.3%	19.4
Paiwas y Rio Blanco	74	133	55.6%	15.2

Point of Use (POU)

Description -- **Percentage of households of children age 0-23 months that treat water effectively**
Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively
Denominator: Enter the total number of households of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	89	302	29.5%	8.0
Paiwas y Rio Blanco	75	298	25.2%	7.5

Appropriate Hand Washing Practices

Description -- **Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing**
Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing
Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	228	302	75.5%	10.9
Paiwas y Rio Blanco	188	298	63.1%	10.6

Child Sleeps Under an Insecticide-Treated Bednet

Description -- **Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night**
Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night
Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	0	0	0.0%	0.0
Paiwas y Rio Blanco	0	0	0.0%	0.0

Underweight

Description -- **Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)**
Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population
Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas	22	302	7.3%	4.2
Paiwas y Rio Blanco	21	298	7.0%	4.2

Rapid Catch Indicators: Mid-term

Sample Type:

Antenatal Care

Description -- Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child

Numerator: Enter the number of mothers with children age 0-23 months who had at least four antenatal visits while pregnant with their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Maternal TT Vaccination

Description -- Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Skilled Birth Attendant

Description -- Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Current Contraceptive Use Among Mothers of Young Children

Description -- Percentage of mothers of children age 0-23 months who are using a modern contraceptive method

Numerator: Enter the number of mothers with children age 0-23 months who are using a modern contraceptive method

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Post-Natal Visit to Check on Newborn Within the First 2 Days After Birth

Description -- Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within two days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Exclusive Breastfeeding

Description -- Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Infant and Young Child Feeding

Description -- Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Vitamin A Supplementation in the Last 6 Months

Description -- Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother's recall or card verified)

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Measles Vaccination

Description -- Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Access to Immunization Services

Description -- Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received a DTP1 at the time of the survey according to the vaccination card/child health booklet or mother's recall

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Health System Performance Regarding Immunization Services

Description -- Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Treatment of Fever in Malarious Zones

Description -- Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began

Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug

Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

ORT Use

Description -- Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids

Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids

Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Appropriate Care Seeking for Pneumonia

Description -- Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Numerator: Enter the number of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Point of Use (POU)

Description -- Percentage of households of children age 0-23 months that treat water effectively
Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively
Denominator: Enter the total number of households of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Appropriate Hand Washing Practices

Description -- Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing
Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing
Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Child Sleeps Under an Insecticide-Treated Bednet

Description -- Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night
Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night
Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Underweight

Description -- Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)
Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population
Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Rapid Catch Indicators: Final Evaluation

Sample Type:

Antenatal Care

Description -- Percentage of mothers of children age 0-23 months who had four or more antenatal visits when they were pregnant with the youngest child

Numerator: Enter the number of mothers with children age 0-23 months who had at least four antenatal visits while pregnant with their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Maternal TT Vaccination

Description -- Percentage of mothers with children age 0-23 months who received at least two Tetanus toxoid vaccinations before the birth of their youngest child

Numerator: Enter the number of mothers with children age 0-23 months who received at least two tetanus toxoid vaccinations before the birth of their youngest child

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Skilled Birth Attendant

Description -- Percentage of children age 0-23 months whose births were attended by skilled personnel

Numerator: Enter the number of children age 0-23 months whose birth was attended by a doctor, nurse, midwife, auxiliary midwife, or other personnel with midwifery skills

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Current Contraceptive Use Among Mothers of Young Children

Description -- Percentage of mothers of children age 0-23 months who are using a modern contraceptive method

Numerator: Enter the number of mothers with children age 0-23 months who are using a modern contraceptive method

Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Post-Natal Visit to Check on Newborn Within the First 2 Days After Birth

Description -- Percentage of children age 0-23 months who received a post-natal visit from an appropriately trained health worker within two days after birth

Numerator: Enter the number of children age 0-23 months who received a post-natal visit within two days after birth by an appropriate health worker

Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Exclusive Breastfeeding

Description -- Percentage of children age 0-5 months who were exclusively breastfed during the last 24 hours

Numerator: Enter the number of children age 0-5 months who drank breast milk in the previous 24 hours AND did not drink any other liquids in the previous 24 hours AND was not given any other foods or liquids in the previous 24 hours

Denominator: Enter the total number of children age 0-5 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Infant and Young Child Feeding

Description -- Percentage of infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Numerator: Enter the number infants and young children age 6-23 months fed according to a minimum of appropriate feeding practices

Denominator: Enter the total number of children age 6-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Vitamin A Supplementation in the Last 6 Months

Description -- Percentage of children age 6-23 months who received a dose of Vitamin A in the last 6 months: card verified or mother's recall

Numerator: Enter the number of children age 6-23 months who received a dose of Vitamin A in the last 6 months (mother's recall or card verified)

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Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Measles Vaccination

Description -- Percentage of children age 12-23 months who received a measles vaccination

Numerator: Enter the number of children age 12-23 months who received a measles vaccination by the time of the interview as seen on the card or recalled by the mother

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Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Access to Immunization Services

Description -- Percentage of children age 12-23 months who received DTP1 according to the vaccination card or mother's recall by the time of the survey

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Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Health System Performance Regarding Immunization Services

Description -- Percentage of children age 12-23 months who received DTP3 according to the vaccination card or mother's recall by the time of the survey

Numerator: Enter the number of children age 12-23 months who received DTP3 at the time of the survey according to the vaccination card/child health booklet or mother's recall

Denominator: Enter the total number of children age 12-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Treatment of Fever in Malarious Zones

Description -- Percentage of children age 0-23 months with a febrile episode during the last two weeks who were treated with an effective anti-malarial drug within 24 hours after the fever began

Numerator: Enter the number of children age 0-23 months with a febrile episode in the last two weeks AND whose mother/caretaker sought treatment for the child within 24 hours AND who were treated with an appropriate anti-malarial drug

Denominator: Enter the total number of children age 0-23 months with a febrile episode in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

ORT Use

Description -- Percentage of children age 0-23 months with diarrhea in the last two weeks who received oral rehydration solution (ORS) and/or recommended home fluids

Numerator: Enter the number of children age 0-23 months with diarrhea in the last two weeks AND who received oral rehydration solution (ORS) and/or recommended home fluids

Denominator: Enter the total number of children age 0-23 months who had diarrhea in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Appropriate Care Seeking for Pneumonia

Description -- Percentage of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Numerator: Enter the number of children age 0-23 months with chest-related cough and fast and/or difficult breathing in the last two weeks who were taken to an appropriate health provider

Denominator: Enter the total number of children with chest-related cough and fast and /or difficult breathing in the last two weeks

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Point of Use (POU)

Description -- Percentage of households of children age 0-23 months that treat water effectively
Numerator: Enter the number of households of mothers of children 0-23 months that treat water effectively
Denominator: Enter the total number of households of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Appropriate Hand Washing Practices

Description -- Percentage of mothers of children age 0-23 months who live in households with soap at the place for hand washing
Numerator: Enter the number of mothers with children age 0-23 months who live in households with soap at the place for hand washing
Denominator: Enter the total number of mothers of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Child Sleeps Under an Insecticide-Treated Bednet

Description -- Percentage of children age 0-23 months who slept under an insecticide-treated bednet (in malaria risk areas, where bednet use is effective) the previous night
Numerator: Enter the number of children age 0-23 months who slept under an insecticide-treated bednet the previous night
Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Underweight

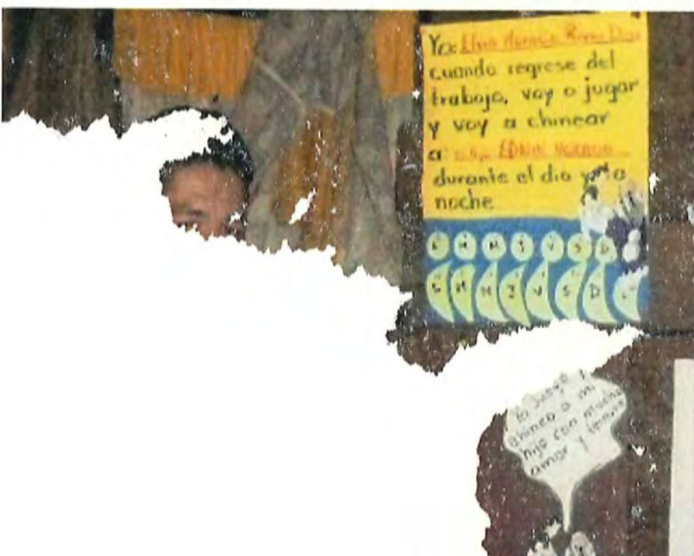
Description -- Percentage of children 0-23 months who are underweight (-2 SD for the median weight for age, according to the WHO/NCHS reference population)
Numerator: Enter the number of children 0-23 months with weight/age -2 SD for the median weight for age, according to the WHO/NCHS reference population
Denominator: Enter the total number of children age 0-23 months in the survey

Sub Area Name	Numerator	Denominator	Percent(calculate)	Confidence Limits
Matiguas			%	
Paiwas y Rio Blanco			%	

Rapid Catch Indicator Comments

Birth spacing not collected during KPC. Malaria indicators N/A

Annex 12: Results from the Innovation (NICASALUD & CIES)



Innovation in work with men for their involvement in the health care of their partners during pregnancy, birth and the postpartum period as well as the care of the newborn.

on Results in the Application of the Phases of the Methodology for Changes in Men's Behavior
-Cáritas, NicaSalud and the Ministry of Health

NicaSalud

Network Federation

September 2010

EXECUTIVE SUMMARY

In the framework of the Child Survival Project and the United Families for Health Project (FamiSalud), both financed by the United States Agency for International Development (USAID), innovations for changes in the behavior of men have been developed to involve them in the care of their partners during pregnancy, birth and the postpartum period, as well as in the care of the newborn. This innovation is being implemented by Catholic Relief Services (CRS), Cáritas and the Ministry of Health (MOH) in 20 communities in the municipalities of Matiguas, Río Blanco and Paiwas, through a collaboration agreement between CRS and the NicaSalud Network Federation.

This initiative endeavors to generate a community intervention strategy that captures the interest, commitment and responsibility of the men, actively involving them in seeking timely care of their partners during pregnancy, birth and the postpartum period and of their newborns. The initiative has been guided by the application of two research protocols: the protocol for formative research that NicaSalud undertakes and the protocol for summative research applied by the Center for Health Research and Studies (CIES) of the National Autonomous University of Nicaragua (UNAN) to evaluate and certify the results generated by the innovation.

The formative research protocol developed by NicaSalud involves the application of the methodology on behavioral changes containing six phases of implementation; however, for the preparation of the innovation, the protocol grouped the activities from these six phases of the methodology into three application phases as follows:

- Phase 1: To identify key factors, perceived benefits, barriers that influence men's behaviors regarding joint decision-making to seek care and their involvement in their wives' and children's health, and to ascertain their willingness to adopt new behaviors and the likelihood that they will practice them.
- Phase 2: To develop an approach to implement and monitor the Behavioral Change Communication (BCC) interventions to promote behaviors and develop draft BCC materials.
- Phase 3: To carry out a small-scale pilot test of the intervention, including assessment of the reaction to the draft BCC materials.

This report addresses the application of the phases of the methodology and the results of the process implemented according to the three phases of the formative research protocol.

In Phase 1, a qualitative formative research process was developed with the participation of 80 husbands of pregnant women, 36 fathers of children older than 40 days of age and less than two years of age, 16 husbands of postpartum women and 16 postpartum women (couples) in the 42-day period following birth. This process was applied through discussion groups and in-depth interviews with participation by a technical team from the project and from the Ministry of Health in the field work.

The information obtained made it possible to identify a list of current behaviors, barriers and resistance or obstacles to the proposed change in behavior. That process brought the men, women and communities closer to learn about their experiences and to understand their perceptions regarding their socially practiced and culturally accepted family role for decision-making with their partners, seeking timely care and being involved during pregnancy, birth and the postpartum period of their wives and in the care of the newborn.

Phase 2 reexamined the information researched with the men to decide upon the type of strategy to promote and the communications materials to use and to select and train the volunteer promoters from the community to foster the behavioral changes. To define and decide what to do and how to do it, a consultation process was conducted at the community level (eight workshops) and at the municipal level (four working sessions) to reach consensus regarding the community strategies, training and

communications that included the development of materials that were validated. During this same phase, 61 community promoters were selected and trained and the intervention methodology was developed along with the monitoring and follow-up instruments to be used during the implementation of the community strategies.

Phase 3 involves the implementation of a trial intervention, including the evaluation reaction to the communication materials. Lastly, this phase includes the launch of the innovation and the beginning of implementation of the community activities with the men. This report summarizes the important aspects of the results from the phases applied to prepare this innovation, including current behaviors, barriers, resistance and motivations for change. Furthermore, it presents the results of the small scale trial that tested 10 behaviors with men in the intervention communities. The community promoter training results are also summarized, as are the community launches and the beginning of community strategy implementation.

COMMENTS AND REFLECTIONS

The comments below are not intended to be final conclusions regarding this common effort that has been developed over the past year. For the moment, it is a sharing of the results attained with the possibility of becoming measurable achievements of this intervention in the short and long term. The launching of this joint initiative among CRS, Cáritas and the Ministry of Health to promote behavioral changes among men adds to the experience of these organizations and has facilitated sharing among them and particularly with the people in the community that signed up to be promoters.

The efforts to undertake such an important initiative require recognition of those who have, with great dedication, made available their skills, knowledge and, especially, a mentality directed at change. Developing ideas to jointly build and weave, in a participatory fashion, an initiative to generate and produce changes in behavior was a challenge and the road taken has had many indications and signs that will need to be reexamined together in the implementation of this initiative. In general, the results obtained in each phase reveal that it is possible to put the intervention methodology and strategies that have been generated into practice efficaciously in the modeling of behavioral changes.

To achieve the intended results of this initiative, personal and institutional commitment will be vital, among both the organizations and institutions that support the initiative as well as the community leaders and promoters. With the completion of the training and planning phases, the foundation is laid for the start-up and harmonization of efforts. Nevertheless, it is necessary to continue to refine the strategies and methodologies, and to strengthen the organizational and community management capacities.

NicaSalud will continue to provide technical assistance in following up on this initiative to further strengthen these local capacities and to document and systematize the experience. One of the aspects of the phases that is still being finalized is the monitoring and evaluation system for the initiative, specifically related to the follow-up mechanisms, information flow and the use of the information by the community, the MOH and the project. Although the forms are available, they must be harmonized with the project information system and the Ministry of Health System.

The arenas for coordination and mechanisms for the optimization of resources and common efforts are key elements for more efficiently and efficaciously developing the processes that will continue for the implementation of this initiative. The enthusiasm and commitment shown by the community should continue to sustainably contribute to the attainment of the expected results of this investment and effort.

MINISTRY OF HEALTH OF NICARAGUA

LOCAL INTEGRATED HEALTH CARE SYSTEM (SILAIS) MATAGALPA

CATHOLIC RELIEF SERVICES (CRS) / CARITAS OF MATAGALPA

"BASELINE STUDY AND EVALUATION SYSTEM FOR THE INITIATIVE: BEHAVIORAL CHANGES IN MEN TO IMPROVE SEEKING OF HEALTH CARE FOR WOMEN AND CHILDREN IN THE COMMUNITIES OF THE MUNICIPALITIES OF MATIGUÁS, RIO BLANCO AND PAIWAS, PROVINCE OF MATAGALPA. NICARAGUA"

FINAL REPORT (PHASE 1)

Document Prepared by: Center for Health Research and Studies
(CIES – UNAN Managua)

Managua, September 30, 2010

Executive Summary

The Ministry of Health, with the support of international assistance, develops and implements actions to comprehensively address maternal mortality and maternal disability, seeking to reduce damage through the detection of problems, their causes and possible solutions. These actions are based on the causal chain that links maternal deaths with program activities. For this purpose, the model of the three delays has been implemented, based on the premise that any delay that prevents a pregnant woman from receiving treatment can cost her her life.

In the strategic framework mentioned, Catholic Relief Services (CRS) and Caritas Matagalpa, in coordination with the Ministry of Health and the Local Integrated Health Care System (SILAIS) in Matagalpa, conducted an initial investigation as a point of departure for the design and implementation of an evaluation methodology to facilitate the progress and results of the initiative for Behavioral Changes in Men to Improve Seeking of Health Care to contribute to a:

i. Decrease in the first delay through recognition and the decision to seek and access emergency obstetric and neonatal care in a timely fashion.
ii. Better understanding of the attitudes of men regarding their perceived role, their perception of authority and the well-being of their families.
iii. Documentation of the degree of participation recorded by community agents and health care personnel regarding the incorporation of men into the initiative.

The objectives of the baseline study were:

1. Evaluate the knowledge of the men and their wives in recognizing the danger signs during pregnancy, birth, the postpartum period and for newborns.
2. Determine whether men participating in the innovation change their behavior regarding decisions for seeking health care and regarding the health care of their families.
3. Measure health results in the increase in maternal and neonatal care through the implementation of evaluation processes.

The baseline study for the initiative on Behavioral Changes in Men to Improve Seeking of Health Care for Women and Children was conducted between July 1 and September 13, 2010, with the participation of the Ministry of Health (MOH), CRS, Cáritas Matagalpa and the CIES – UNAN Managua. It was a transversal study in which quantitative techniques were applied in three municipalities of the Matagalpa SILAIS.

The geographic areas of the study were the municipalities of Matiguás, Río Blanco and Bocana de Paiwas that are administratively under the political divisions of the province of Matagalpa and the South Atlantic Autonomous Region (RAAS) located in the Central and Caribbean sub-regions of the country.

There was broad participation in the study by the meta-benefited groups, community leaders and the Ministry of Health. Procedures were applied to learn information about people based on previously identified determinant variables and using official data from the MOH.

The universe for the study was:

- 388 men and their wives or partners that live in rural areas and who are pregnant, in the postpartum period or who have children younger than 12 months of age.
- 40 community stakeholders (counselors, midwives, community health volunteers/brigadistas or others) that support health actions and the incorporation of men into the activities of the pregnant women and mothers of children under 12 months of age.
- Three MOH first level health care units located in the municipal seats that provide services and record information on prenatal, birthing, postpartum and newborn care in the communities where the innovation activities will be developed.

The quantitative data collected is captured and processed through Epi-Info 3.5.1 software. The tabulation and analysis of the data will be performed in Microsoft Office (Word – Excel).

Results Encountered

Some 8.7% of all women in Nicaragua of childbearing age (15 to 49 years of age) are concentrated in Matagalpa. The municipality of Matiguás has 8.8% (41,127) of the total beneficiary population while Río Blanco has 6.6% (30,785); and 31,762 people live in the municipality of Paiwas in the RAAS.

The maternal child health indicators reveal that these municipalities present low coverage of institutional birth and postpartum care, given the rural conditions of the areas. The municipalities also present nutritional deficiency in children under 5 years of age.

The data was collected through surveys of men and women that investigated general information related to age, civil status, academic level and occupation. It was found that most of the women and men were under 29 years of age (71.4% and 53.0% respectively), living in a common law marriage (62.4% women – 57.2% men), who had not finished primary school or who had had no schooling (48.5% - 20.1% for women / 49.5% - 31.4% men). The women work in the care of the home (97.4%) and the men work in agriculture (66.5%).

Some 90.2% of the women report that prenatal care was provided to them during their last pregnancy – including those that are currently in the gestational period – of these, 46.3% received more than four prenatal care sessions, 17.1% had four sessions and 36.6% had between one and three prenatal sessions. The concentration of prenatal care is important as more frequent care makes it possible to assess progress and detect problems in a timely fashion. The low concentration in certain areas is generally related to difficulties in accessing health services and a greater risk of complications and maternal and perinatal death.

The men were asked if they had helped their partners in daily activities during their last pregnancy; 89.7% responded that they had, while 81.9% of the women stated that they had received help during that time.

Most of the couples make joint decisions about how to use money for the diet of the pregnant woman (78.4% women – 86.1% men).

Some 77.3% of the women and 86.1% of the men stated that they save to face the costs of the birth, hospitalization, and the needs and care of the newborn.

Most of the women felt appreciated by their partner during their last pregnancy, mainly manifested through affectionate words and finding her attractive. These responses are related to the low frequency of physical or verbal abuse of her and children.

In the baseline study, the women and men were asked about making joint decisions regarding seeking timely care during and after pregnancy. In this case, 91.8% of the women and 94.8% of the men responded that they do make these decisions as a couple. Similar results were obtained regarding the decision on medical care for the birth, during the postpartum period, care of the newborn or in emergency situations.

Some 45.4% of the women responded that they decided together with their partner to go to the nearest *Casa Materna* (maternity house) two weeks prior to the birth in order to have health services available in case of emergency; a higher number of men (56.2%) stated likewise.

Some 61.3% of the women and 73.7% of the men responded that they decided together how many children to have; furthermore, 59.3% of the women and 75.3% of the men state that they agreed upon when to have children. Some 67.5% of the women and 76.3% of the men considered the significance of the risk when the interval between pregnancies is very short.

Approximately one of every three men accompanied his partner during her last birth, according to the men and the women. Likewise, 37.6% of the women reported that their husbands were present at their last birth whether at home or in a health facility, although only 18.0% participated in the birthing process.

The results clearly express traditional cultural attitudes and practices regarding couple relationships in seeking care, where the defined mother-infant priority and the availability of health services contribute to the promotion of models that "exclude" the participation of men.

Regarding the knowledge of men and women about danger signs during birth that encourage them to seek medical assistance, both mentioned hemorrhaging with the greatest frequency (46.4% men – 52.0% women), followed by headache and fever. The total percentage of those surveyed (43.3% men – 34.5% women) that reported no knowledge about this issue is significant given the repercussions of this.

All community volunteers have received training and record the births that they attend (82.5%) as part of their regular activities, with 51.5% using the Community Information System (SICO), although they also use their own notebooks or the card that the Ministry of Health provides to them. Some 90.8% have recorded between two and ten pregnant women and 97.0% of these have developed a birth plan; 72.7% of these plans include the participation of the husbands or partners of the pregnant women. Some 72.5% of the volunteers stated that their activities include referral of pregnant women to health care facilities.

4.6 Evaluation Indicators

Table 19: Baseline Indicators by Municipality 2010 – 2012

Variable	Definition	Indicator	Definition of Indicator	Matiguás	Río Blanco	Paiwas	Total
1. Protective factors during the cycle of pregnancy, birth and the postpartum period	Preventive behaviors that protect the health of women and newborns during pregnancy, labor, birth and the postpartum period	1.1 Percentage of mothers with children < 12 months that had four or more prenatal care sessions during the pregnancy with their youngest child.	Number of mothers with children < 12 months of age and pregnant that had at least four prenatal care sessions during the pregnancy with their youngest child. ________ x 100 Number of women with children < 12 months of age in the survey	66.1%	47.2%	45.0%	58.1%
		1.2 Percentage of mothers with children < 12 months of age that received a postpartum visit from an appropriate trained health worker in the two days following the birth of their youngest child.	Number of mothers with children < 12 months of age that received a postpartum visit from an appropriate trained health worker in the two days following the birth of their youngest child. ________ x 100 Number of women with children < 12 months of age in the survey	NA	NA	NA	NA
		1.3 Percentage of children < 12 months of age whose birth was attended by trained personnel.	Number of children < 12 months of age whose birth was attended by a doctor, nurse, midwife, auxiliary nurse or other health care worker with birthing skills. ________ x 100 Number of women with children < 12 months of age in the survey	NA	NA	NA	NA
		1.4 Percentage of men whose wives have children <12 months of age that report having helped with housework during the pregnancy of postpartum period of their wife.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	91.3%	91.7%	83.7%	89.7%
		1.5 Percentage of men whose wives have children < 12 months of age that report having had money for food for their wives during pregnancy or the postpartum period.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	87.8%	86.1%	81.4%	86.1%
		1.6 Percentage of pregnant women or women with children < 12 months of age that report feeling appreciated and respected by their husbands.	Number of women that responded positively to the question. ________ x 100 Number of women surveyed	91.3%	94.9%	80.0%	89.7%
		1.7 Percentage of women with children < 12 months of age that reported not having sex until after the 40-day postpartum period.	Number of women that responded positively to the question. ________ x 100 Number of women surveyed	58.3%	74.4%	70.0%	63.9%
		1.8 Percentage of women with children < 12 months of age that reported that they had agreed with their partners on the number of children they would have and the spacing of the pregnancies.	Number of women that responded positively to the question. ________ x 100 Number of women surveyed	63.5%	59.0%	57.5%	61.3%

Source: Survey of men and women. Instrument 1 and 2. CRS Cáritas Matagalpa. August 2010.

Variable	Definition	Indicator	Definition of Indicator	Matiguás	Río Blanco	Paiwas	Total
2. Decision to seek health assistance	A person that makes a joint decision with his/her partner to seek health assistance	2.1 Percentage of men with children < 12 months that responded that the decision to seek assistance during pregnancy was made with their wives.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	97.4%	94.9%	87.5%	94.8%
		2.2 Percentage of men with children < 12 months that responded that the decision to seek assistance regarding the newborn was made jointly with their wives.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	97.4%	94.9%	87.5%	94.8%

Source: Survey of men and women. Instrument 1 and 2. CRS Cáritas Matagalpa. August 2010.

Variable	Definition	Indicator	Definition of Indicator	Matiguás	Río Blanco	Paiwas	Total
3. Responsibility of the man in taking care of his family	A person who is actively involved in the care of his wife during her pregnancy, birth and postpartum period as well as in the care of the newborn	3.1 Percentage of pregnant women that sought care in the company of their husbands.	Number of pregnant women that responded positively to the question. ________ x 100 Number of women surveyed	33.0%	43.6%	40.0%	36.6%
		3.2 Percentage of men who asked questions about their wives during the prenatal care session.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	NA	NA	NA	NA
		3.3 Percentage of men who went with their wives to seek assistance for their newborn children.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	64.3%	82.1%	65.0%	68.6%
		3.4 Percentage of men who were in the room during the birth.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	39.7%	69.2%	50.0%	47.9%
		3.5 Percentage of men who asked questions about their wives during the postpartum period.	Number of men that responded positively to the question. ________ x 100 Number of men surveyed	NA	NA	NA	NA

Source: 3.1 Survey of men and women. Instrument 1 and 2. / 3.2 to 3.5 Ministry of Health Recordkeeping System – Counselors and Community Health Volunteers Information System. CRS – Cáritas Matagalpa. August 2010.

CHAPTER V: CONCLUSIONS

Population Surveyed

1. Most of the men and women surveyed are between the ages of 20 and 29 years, and their civil status is common law marriage. Almost fifty percent of the individuals surveyed had not completed primary school. The most common occupation of the women is homemaker and the men are farmers.

2. Ninety percent of the women had received prenatal care during their last pregnancy and a little less than half of these had more than four prenatal sessions.

3. Some 58.1% of the mothers surveyed had at least four prenatal sessions during the pregnancy with their child who is less than 12 months of age.

4. Most of the men and women stated that they had helped and received help, respectively, in daily household activities during pregnancy and the postpartum period, most frequently on a daily basis.

5. A small percentage of men help their partners in household activities.

6. A great part of the couples jointly saved for the expenses of the birth and postpartum period as well as the care of the newborn.

7. A high percentage of the women felt appreciated by their husbands during the pregnancy; the men responded likewise.

8. A small percentage of women stated that they had been abused. A very small number of the men responded that they have abused their partner during pregnancy or that they have abused their child.

9. A high percentage of both groups surveyed make joint decisions about seeking medical care during pregnancy, birth and the postpartum period and for the newborn, and make joint decisions about the number and spacing of children.

10. Some 38.7% of the mothers with children under 12 months of age have not agreed with their partners about the number of children that they wish to have and the spacing of the pregnancies.

11. The percentage of men who accompany their partners when they go to a health facility to seek care at the time of the birth and to participate in the birth is low. However the percentage is not low for seeking specialized care for their children younger than 12 months of age; that figure represents more than half of those surveyed.

12. The danger signs during pregnancy are widely recognized in both groups of those surveyed, mainly vaginal bleeding and headache. The most recognized danger signs during birth or contractions are hemorrhage and fever. Furthermore, the most recognized danger signs during the postpartum period are vaginal bleeding, fever and headache.

13. There is high recognition of danger signs in the newborn by both groups. The most frequently mentioned were fever, difficulty breathing and no interest in breastfeeding.

14. The recognition of at least two danger signs during pregnancy, birth, the postpartum period and in the newborn is low among both men and women. The range of knowledge in the four moments is between 11.3% and 31.5%.

Community Leaders

15. The community leaders interviewed were mostly men with a smaller proportion of women. Most of them are older than 50 years of age and almost half had not finished primary school.

16. More than half stated that they are community health volunteers/brigadistas, followed by midwives and community leaders. Two thirds expressed that they have been working in these capacities in their communities for more than 10 years.

17. All of them have received training on health issues.

18. Most of them keep a written record of the pregnancies in their communities, mainly using the community recordkeeping system.

19. Of the pregnant women who are registered, only a small percentage does not have a birth plan. Most of this majority that have a birth plan developed it in conjunction with their partners (men).

20. Almost two thirds have referred pregnant women to the health unit. One third of these women who have been referred were not accompanied by their partners to the health facility.

21. A minority of these leaders have a record of the men who are participating in behavioral change activities in their communities. There are between one and five men participating in almost half of the communities.

22. More than half of those surveyed stated that on some men encourage their wives to go to a health facility in the first trimester of their pregnancies.

23. Three quarters of them know men in their communities that respond correctly to dangerous situations with their wives or children under 12 months of age. And a little more than half expressed that only some men correctly respond to dangerous situations with their wives or newborns and return to the health facility.

Municipal Ministry of Health Recordkeeping System

24. The statistical recordkeeping system of the Ministry of Health is insufficient and does not collect the data necessary for proper follow-up on and evaluation of the innovation.

VI. RECOMMENDATIONS

1. CRS – Cáritas Matagalpa must conduct a more in-depth review of the information that originates at the community level and in the health care facilities in order to plan processes based on the reality.

2. CRS – Cáritas Matagalpa must design a management information system that ensures monitoring of the activities and the review of relevance of some indicators.

3. CRS – Cáritas must jointly strengthen the MOH information system linking it with the community information system to make necessary data available for monitoring the innovation.

4. It is vitally important that there be a plan to strengthen the institutional and community capacities through the development of training plans for health personnel, counselors, community health volunteers and midwives.

5. Community-based information, education and communication (IEC) plans must be designed and must adhere to the times established for the implementation of the innovation. The CIES technical team believes that the project implementation time is short considering that changes in knowledge, attitudes and practices in the population require significant investment of time and resources.

6. The conditions of the MOH health services should be analyzed to offer care to the population groups benefiting from the innovation that contribute to the expected results.

7. During the implementation of the innovation, CRS and Cáritas Matagalpa must pay more attention to the development of the following indicators:

   1.1 Percentage of mothers with children < 12 months of age that had four or more prenatal care sessions during the pregnancy with their youngest child.

   1.8 Percentage of women with children < 12 months of age that responded that they had agreed with their partners on the number of children to have and the spacing of pregnancies.

   The five indicators related to Variable 3: Responsibility of the man for the care of his family. There are no data available from the beginning for Indicators 3.2 and 3.5; therefore they must be established at the local level.

   Finally, the project must focus its actions on improving the indicators related to knowledge of the danger signs during pregnancy, birth and the postpartum period, as well as for the newborn.

Annex 13: Recommended Modifications to Indicators

Project currently has 36 indicators, it is suggested that 6 be omitted, for the reasons stated below and 13 be modified.

Current Project Indicators	Data Source	Suggested Change
Objective 1: Improved knowledge and behaviors for maternal and neonatal health among families and communities		
1.1.2: Mothers with child age 0-23m reported taking iron and folic acid supplements during the first trimester of pregnancy.	KPC BL/ final survey	Differs from what measured in KPC suggest "taking 90 days or more of iron and folic acid during her last pregnancy" instead of first trimester
1.1.9: Mothers with child age 0-23m who completed the birth plan card.	KPC BL/ final	This is defined in the KPC as having taken 2 or more actions of planning (savings, made some arrangement for birth) not that they completed a birth card
1.1.11: Newborns who received an examination within 48 hours of delivery	KPC BL/ final	Omit this indicator duplicate with 2.1.6
1.2.1: Mothers with child age 0-23ms who sought care within 24 hours in the health center when their newborns were sick.	KPC BL/ final survey	This indicator was not included in the baseline KPC-omit, can not be measured - Omit
1.3.1: Newborns who were put to the breast within 1 hour of delivery and did not receive any pre-breastfeeding foods.	KPC BL/ final survey	This was measured in the baseline KPC as only early BF- element of no prelacteal foods was not measured
1.3.3 % Mothers with child 0 – 23m report eating more than normal during the last pregnancy and lactation.	KPC BL/ final survey	This indicator was not included in the baseline KPC-omit, can not be measured - Omit
Objective 2: Increased families' access to quality maternal and neonatal services.		
2.1.1: % Neonatal consultations provided according to the neonatal IMCI guides.	BL/ Final HFA/ IMCI checklist	Change to *% newborns that were adequately treated according to standard protocols for immediate attention, routine care and discharge* with data source as chart review
2.1.2: % Mothers with child 0-23m receive counseling by health workers on breastfeeding.	HFA/ IMCI checklist	Change to *% of pregnant women who had a clinical history filled out include the registration and interpretation of the 13 standard activities according to ANC protocol* with data source as chart review
2.1.3: % MOH personnel who have received supervision using the neonatal IMCI supervision guides.	BL/ Final HFA/ IMCI checklist	Change to *% patients with an obstetric emergency who received treatment according to MINSA protocols* with data source as chart review
2.1.5: Mothers with child age 0-23m who delivered their youngest child in a health unit.	KPC BL/ final Project HIS	In baseline KPC actually measured as "were delivered by a trained health worker (doctor, nurse or auxiliary nurse)" Percentage of children age 0-23 months whose births were attended by skilled personnel
2.1.6: Children 0-23m received a post-natal visit by a properly trained health worker within 3 days of delivery.	KPC BL/ final Project HIS	In KPC actually measured as within 2 days Rapid CATCH indicator is also 2 days % children age 0-23 who received a post-natal visit from an appropriate trained health worker within two days after birth
2.1.8: Mothers with child age 0-23m who received a postpartum visit from a properly trained health worker within three days of the delivery of their youngest child.	KPC BL/ final survey Project HIS	In KPC actually measured as within 2 days. Rapid CATCH indicator is also 2 days
2.1.10: Public health facilities in the 4 project municipalities certified as child friendly.	Certification by the MOH	MTE recommends omitting this indicator and activity
2.2.1: Communities who have benefited from a transport plan for emergency obstetric running.	KPC BL/ final Project HIS	Omit this indicator as project working to prevent emergencies and an increased use of emergency system is not desired

Current Project Indicators	Data Source	Suggested Change
2.2.3: % CHWs and TBAs from remote communities with skills in neonatal resuscitation and/or emergency obstetrical first aid.	KPC BL/ final survey	This should specify CHA only, TBAs will not be trained Source of data is not KPC, but Project HIS
2.2.4: % Communities who have a functioning SICO	Project HIS	Project needs to define "functioning"
2.2.7: % of CHWs who are trained in neonatal IMCI	Project HIS	This indicator should also include TBAs
2.2.8: % of CHWs who have been trained in behavioral change and in adult education methods.	Project HIS	This should specify for BCA, not all volunteers
2.2.9: % Communities who have a support group for breastfeeding and safe motherhood	KPC BL/ final survey	MTE recommends omitting this indicator and activity